

400 SERIES



*2020 Andersen brand survey of U.S. contractors.

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For warranty information, visit **andersenwindows.com/warranty**.



Andersen Corporation, including its subsidiaries, has been named a 2021 ENERGY STAR Partner of the Year – Sustained Excellence Award winner, the highest honor given by ENERGY STAR, for continued leadership in protecting the environment through superior energy efficiency achievements.





You want to give your customers a home they love, and we're here to make that easy for you. That's why we're proud to offer you products that rate #1 in quality and performance," and to be the #1 trusted and recommended window and door brand" by pros.

400 SERIES PRODUCTS

Our most popular choice with homeowners and the windows contractors trust the most! Easy to install, low maintenance and with fewer callbacks, the 400 Series can be your go-to for pretty much any project.

*2020 Andersen brand surveys of U.S. contractors, builders and realtors.

**2020 Andersen brand surveys of U.S. contractors, builders and architects.

†2020 Andersen brand survey of U.S. contractors.

RELIABLE & ENERGY EFFICIENT

As our best-selling products, the 400 Series product line offers a distinct blend of design, reliability and trade confidence.

Designed for easy installation for replacement, remodel or new construction projects, 400 Series products feature our Perma-Shield® exterior cladding that revolutionized the window industry. They're also backed by our renowned limited warranty and the largest service network in the industry.

ENERGY-SAVING GLASS FOR ANY CLIMATE

Andersen makes windows and patio doors with options that make them ENERGY STAR® v. 6.0 certified throughout the United States.

Visit andersenwindows.com/energystar for more information and to verify that the product with your glass option is certified in your area.



RIGOROUSLY TESTED

The exclusive Andersen Perma-Shield system gives our windows and doors a tough, protective shell that safeguards the wood inside. It repels water, resists dents* and stays beautiful for years.

LOW MAINTENANCE, NEVER NEEDS PAINTING

The Perma-Shield exteriors on Andersen 400 Series windows and doors offer superior weather resistance and are virtually maintenance free.



OPTIONS FOR THE HARSHEST WEATHER

400 Series windows with Stormwatch®
Protection meet building code
requirements in coastal areas.** Products
with Stormwatch Protection are energy
efficient, resist the effects of salt water,
and stand up to hurricane-force winds
and wind-borne debris.** For details, visit
andersenwindows.com/coastal.



QUALITY SO SOLID, THE WARRANTY IS TRANSFERABLE

Many other window and door warranties end when a home is sold, but our coverage – 20 years on glass, 10 years on non-glass parts – transfers from each owner to the next. And because it's not prorated, the coverage offers full benefits year after year, owner after owner. So it can add real value when you decide to sell your home.



BUILT FOR YEARS TO COME*

Our products are built strong to last long.*
We use the right materials in the right places, including solid wood, fiberglass and our own Fibrex® composite material.
These give our windows and doors superior strength, stability and long-term beauty.

KEEPS THE WEATHER OUT

Our weather-resistant construction and careful selection of weatherstrip by product type seals out drafts, wind and water whatever the weather.

REPLACEMENT SOLUTIONS

Homeowners and realtors agree that Andersen products increase the value of a home by at least 10%. So you're not just replacing their windows, you're upgrading their home.

INSERT WINDOWS



400 Series Woodwright® Double-Hung Insert Windows

The classic, traditional style of Woodwright full-frame windows in a time-saving insert.



400 Series Tilt-Wash Double-Hung Insert Windows

Our best-selling double-hung windows in an insert for easy replacement.

REPLACEMENT WINDOWS



400 Series Replacement Casement & Awning Windows

Available without an installation flange for easy window replacement from inside or outside. Feature predrilled, through-the-jamb installation holes for quick installation.

Our insert and replacement windows include flat self-hanging shims, backer rod, installation screws and complete instructions.



CUSTOM-SIZE FULL-FRAME WINDOWS

When the existing window frame is rotted or deteriorated, or you're modifying the size or shape of the existing window opening, our full-frame double-hung, casement, awning and specialty windows are available in custom sizes to fit your project.





CUSTOM-SIZE PATIO DOORS

Whether you need a hinged or gliding patio door for replacement, Andersen has a number of custom-size options to fit your project.



^{*2020} Andersen brand surveys of U.S. realtors and homeowners.



PRODUCT OVERVIEW



Double-Hung Windows

Choose Woodwright® double-hung windows that replicate the look of traditional architecture or our best-selling tilt-wash double-hung windows that are extremely energy efficient. Both are available as full-frame or insert windows, and can be part of bay window combinations. Coordinating picture and transom windows are also available.



Specialty Windows

A collection of stylish shapes to help distinguish a home's style or create a delicate accent.



Woodwright full-frame windows come in a variety of shapes.



Our Narroline® double-hung window conversion kit can upgrade Andersen® Narroline double-hung windows to tilt-wash windows.



Complementary specialty windows offer 35 additional shapes and custom sizes.



Casement & Awning Windows

Casement and awning windows are energy efficient, and are built with our low-maintenance Perma-Shield® cladding. Available for new construction or replacement, as integral twin or triple units, or as part of bay or bow window combinations. Coordinating picture and transom windows are also available.



Gliding Windows

Superior energy efficiency, reliable performance and uncommon beauty.

Both sash on our gliding windows open for improved ventilation.





Frame any Frenchwood patio door with Frenchwood patio door sidelights and transoms.

Frenchwood® Gliding & Hinged Inswing Patio Doors

Wide wood profiles provide the authentic craftsmanship of traditional French doors, and our Perma-Shield exterior cladding protects the unit and offers low maintenance. Add blinds-between-the-glass to conveniently control light and privacy. To learn more about other traditional- and contemporary-style Andersen door options, visit andersenwindows.com/doors.



Complementary curved top patio doors, including Springline™ and arch hinged doors, are handcrafted and complement our 400 Series products.



EXTERIOR & INTERIOR OPTIONS

Our Perma-Shield® exterior cladding system, a time-tested Andersen innovation, offers low maintenance and durability while also providing an attractive appearance. The interiors of all 400 Series windows and patio doors are available in unfinished stain-grade pine or with a long-lasting, low-maintenance white finish. Select windows are also available with a dark bronze or black finish. 400 Series Woodwright® windows and Frenchwood® patio doors are also available with unfinished maple or oak interiors.

EXTERIOR COLORS**



INTERIOR OPTIONS"

Maple

Pine





Design your window at andersenwindows.com/design-tool

EXTERIOR TRIM SYSTEM

Add curb appeal with Andersen® exterior trim. Our trim is made with Fibrex® composite material, an environmentally smart composite that contains 40% pre-consumer reclaimed wood fiber by weight. For details, see page 175.



Visit andersenwindows.com/exteriortrim to learn more.

EXTERIOR COLORS



WINDOW HARDWARE

Window hardware* enhances the overall design of a window and harmonizes with a home's décor. That's why we offer a broad range of hardware styles and finishes.

HARDWARE FINISHES



^{*}Hardware is sold separately, except standard lock and keeper for double-hung windows.

Printing limitations prevent exact replication of finishes. See your Andersen supplier for actual finish samples.

Distressed bronze and oil rubbed bronze are "living" finishes that will change with time and use.



Casement & Awning Windows



CONTEMPORARY FOLDING

Black | Bright Brass | Gold Dust | Oil Rubbed Bronze
Satin Nickel | Stone | White



Folding handles avoid interference with window treatments.



TRADITIONAL FOLDING

Antique Brass | Black | Bright Brass | **Distressed Bronze**Distressed Nickel | Gold Dust | Oil Rubbed Bronze
Satin Nickel | Stone | White



ESTATE™

Antique Brass | Bright Brass | Brushed Chrome

Distressed Bronze | Distressed Nickel | Oil Rubbed Bronze

Polished Chrome | Satin Nickel

Gliding Windows



Antique Brass | Black | Bright Brass **Brushed Chrome** | Distressed Bronze Distressed Nickel | Oil Rubbed Bronze Polished Chrome | Satin Nickel Stone | White

Bold name denotes finish shown.

Woodwright® Double-Hung Windows



Standard Lock & Keeper

Antique Brass | **Black** | Bright Brass | Brushed Chrome | Distressed Bronze
Distressed Nickel | Gold Dust | Oil Rubbed Bronze | Polished Chrome
Satin Nickel | Stone | White

Tilt-Wash Double-Hung Windows



Standard Lock & Keeper

Black | Gold Dust | Stone | White

Stone is standard with natural interior units.
White comes with prefinished white interiors.
Other finishes optional.



Optional Lock & Keeper

ESTATE™

Antique Brass | **Bright Brass**Brushed Chrome | Distressed Bronze
Distressed Nickel | Oil Rubbed Bronze
Polished Chrome | Satin Nickel

Optional Estate lock and keeper is available only for 400 Series tilt-wash double-hung windows.

Estate lock and keeper reduces the clear opening height by 19/32" (15). Check with local building code officials to determine compliance with egress requirements.

Optional sash lifts shown on page 48 for Woodwright windows and page 76 for tilt-wash windows.

Hardware is sold separately, except standard lock and keeper for double-hung windows.

Dimensions in parentheses are in millimeters.

Printing limitations prevent exact replication of finishes. See your Andersen supplier for actual finish samples.

Distressed bronze and oil rubbed bronze are "living" finishes that will change with time and use.

PATIO DOOR HARDWARE

Patio door hardware* is available in a variety of designs to match virtually any style. Anvers, "Yuma," Newbury, "Covington, "Encino and Whitmore hardware options feature solid drop-forged brass for added strength, while Albany and Tribeca hardware options are made of diecast zinc with durable powder-coated finishes. Also, look for additional hardware options such as exterior keyed locks and matching hinge finishes in the detailed product sections for each individual patio door.



ANVERS®

Bright Brass | Oil Rubbed Bronze
Satin Nickel

Bold name denotes finish shown.



YUMA®

Distressed Bronze

Distressed Nickel



Antique Brass | Bright Brass Brushed Chrome | **Oil Rubbed Bronze** Polished Chrome | Satin Nickel



ALBANY

Black | Gold Dust

Stone | White

HARDWARE FINISHES



*Hardware sold separately.

Matching hinges available for inswing patio doors; excludes FSB® hardware.

Mix-and-match interior and exterior style and finish options are available.

Bright brass and satin nickel finishes feature a 10-year limited warranty

Printing limitations prevent exact replication of finishes. See your Andersen supplier for actual finish samples.

Distressed bronze and oil rubbed bronze are "living" finishes that will change with time and use.



Antique Brass | **Bright Brass**Oil Rubbed Bronze



ENCINO®

Distressed Bronze

Distressed Nickel



Antique Brass | Bright Brass Oil Rubbed Bronze | Satin Nickel



Black | Stone | White

FSB® HINGED PATIO DOOR HARDWARE

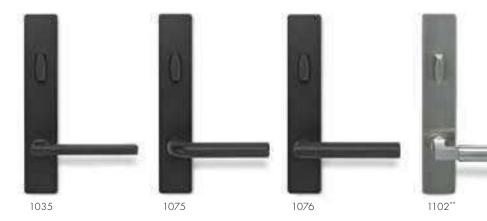
Durable stainless steel FSB hinged door hardware* features clean lines and a sleek satin finish for a thoroughly modern look. Choose from four styles and two finishes.



Black Anodized Aluminum



Satin Stainless Steel



 $^{{}^{\}star} Hardware\ sold\ separately.\ {}^{\star\star} FSB\ style\ 1102\ is\ not\ available\ in\ black\ anodized\ aluminum.$

[&]quot;FSB" is a registered trademark of Franz Schneider Brakel GmbH $\&\,\text{Co.}$

GLASS OPTIONS

Andersen has the glass you need to get the performance you want. From SmartSun™ glass with HeatLock® coating that's ENERGY STAR® certified in all climate zones* to PassiveSun® glass that helps heat homes in northern areas, there's an option for every climate, project and customer. Check with your supplier for selections that meet ENERGY STAR requirements in your area.

		ENE	RGY	LIGHT							
GLASS		U-Factor How well a product prevents heat from escaping.	Solar Heat Gain Coefficient How well a product blocks heat caused by sunlight.	Visible Light Transmittance How much visible light comes through a product.	UV Protection How well a product blocks ultraviolet rays.						
Low-E4®	Outstanding overall performance for climates where both heating and cooling costs are a concern.	• • • 0	• • • •	• • • •	• • • •						
Low-E4 with HeatLock® Coating	Applied to the room-side surface, it reflects heat back into the home and improves U-Factor values.	• • • •	• • • •	• • • •	• • • •						
SmartSun™	Thermal control similar to tinted glass, with visible light transmittance similar to Low-E4 glass.	• • • •	• • • •	• • • •	• • • •						
SmartSun with HeatLock Coating	Applied to the room-side surface, it reflects heat back into the home and improves U-Factor values.	• • • 0	• • • •	• • • •	• • • •						
Sun	Outstanding thermal control in southern climates where less solar heat gain is desired.	• • • •	• • • •	• 0 0 0	• • • •						
PassiveSun®	Ideal for northern, passive solar construction applications where solar heat gain is desired.	• • • •	• • • •	• • • •	• • • •						
PassiveSun with HeatLock Coating	Applied to the room-side surface, it reflects heat back into the home and improves U-Factor values.	• • • 0	• • • •	• • • •	• • • •						
Clear Dual-Pane	High visibility with basic thermal performance.	• 0 0 0	0000	• • • •	0000						

Center of glass performance only. Ratings based on glass options as of May 2021. Visit andersenwindows.com/energystar for ENERGY STAR map and NFRC total unit performance data.

HEATLOCK TECHNOLOGY

Applied to the room-side glass surface, HeatLock coating reflects heat back into the home for improved performance.

STORMWATCH® PROTECTION

Most Andersen 400 Series windows are available with impact-resistant glass and structural upgrades to meet the tough building codes of hurricane-prone coastal areas. See your local code official for specific requirements.



ADDITIONAL GLASS OPTIONS

Tempered safety glass is standard on patio doors and required for larger window sizes.

Laminated glass is available for added strength, enhanced security and sound control.

Patterned glass lets in light while obscuring vision and adds a unique, decorative touch.

Cascade and Reed patterns can be ordered with either a vertical or horizontal orientation.



Satin Etch

Reed

ART GLASS

With art glass panels from Andersen, you can add interest, create focal points and make your work stand out. See page 173 or visit andersenwindows.com/artglass

for more information.

TIME-SAVING FILM

We protect our products during delivery and construction with translucent film on the glass that peels away for a virtually spotless window.

For more details on our glass options, visit andersenwindows.com/glass.





BLINDS-BETWEEN-THE-GLASS

Conveniently located between the panes of insulated glass, and protected from dust and damage for long-lasting protection, blinds-between-the-glass is available on 400 Series Frenchwood® gliding or hinged inswing patio doors. Available in white, and can be ordered with any exterior door color with a pine or prefinished white interior.





GLASS SPACER OPTIONS

Black or white glass spacers are now available as a standard offering on select products, in addition to stainless steel glass spacers, to provide more ways to customize project designs and achieve a contemporary style. Colored glass spacers blend in with the color of the window or door for a sleek design, or serve as a shadow line.

Add full divided light grilles, and the grille spacer bar between the glass will match the selected glass spacer color.





GRILLE OPTIONS

Grille patterns are available in widths and configurations to fit any architectural style or the taste of any customer. We can match virtually any existing grille pattern, and we'll even work with you and your customers to create custom patterns.



FULL DIVIDED LIGHT

Permanently applied to the interior and exterior of the window, with a spacer between the glass.



Permanent exterior Permanent interior



Permanent exterior Removable interior

SIMULATED DIVIDED LIGHT

Permanent grilles on the exterior and interior, with no spacer between the glass. We also offer permanent exterior grilles with removable interior grilles.



Removable interior

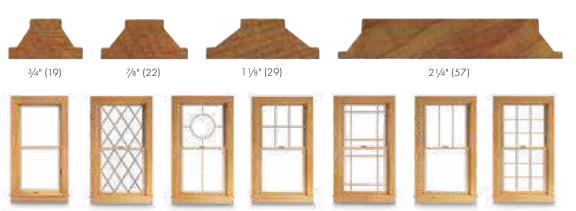


Finelight grillesbetweenthe-glass*

CONVENIENT CLEANING OPTIONS

Removable interior grilles come off for easy cleaning. Finelight[™] grilles-between-the-glass are installed between the glass panes, and feature a contoured profile in 1" (25) and 3/4" (19) widths.

Grille Bar Widths & Patterns



Actual width shown.

Our 21/4" (57) width grille can be positioned horizontally across the center of a casement window to simulate the look of a double-hung window.

To see all of the standard patterns available for a specific window or door, refer to the detailed product sections in this product guide.

INSECT SCREEN OPTIONS

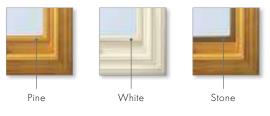
Andersen® TruScene® insect screens provide more than 50% greater clarity than conventional Andersen insect screens for a beautifully unobstructed view. They let in 25% more fresh air; all while keeping out unwanted small insects.





TRUSCENE INSECT SCREENS

For casement and awning windows, TruScene insect screen frames are available in stone, white, dark bronze, black and natural pine veneer that can be stained to match the window. Insect screen frames for all other windows are installed on the exterior of the window and match the unit's exterior color.



Pine | White | Stone | Dark Bronze | Black

CONVENTIONAL INSECT SCREENS

Conventional insect screen frames are available in white, stone, dark bronze and black for casement and awning windows. Insect screen frames for all other windows and doors are installed on the exterior of the window or door and match the unit's exterior color.

INSECT SCREEN CONFIGURATIONS

Windows



Full insect screens

are available for
Andersen venting
windows. Half insect
screens are also
available for the lower
sash of our Woodwright®
and tilt-wash doublehung windows.

Gliding Patio Doors



Gliding insect

available for twoand four-panel doors.



Retractable insect

screens are installed on the exterior and opens side to side across the width of the opening. When not in use, it neatly retracts into a small canister. Available for two-panel doors.

Hinged Inswing Patio Doors



Hinged insect

available for single-panel doors.



Double-hinged

insect screens
are available
for two-panel
active-passive
doors.



Gliding insect

available for all two- and threepanel doors.

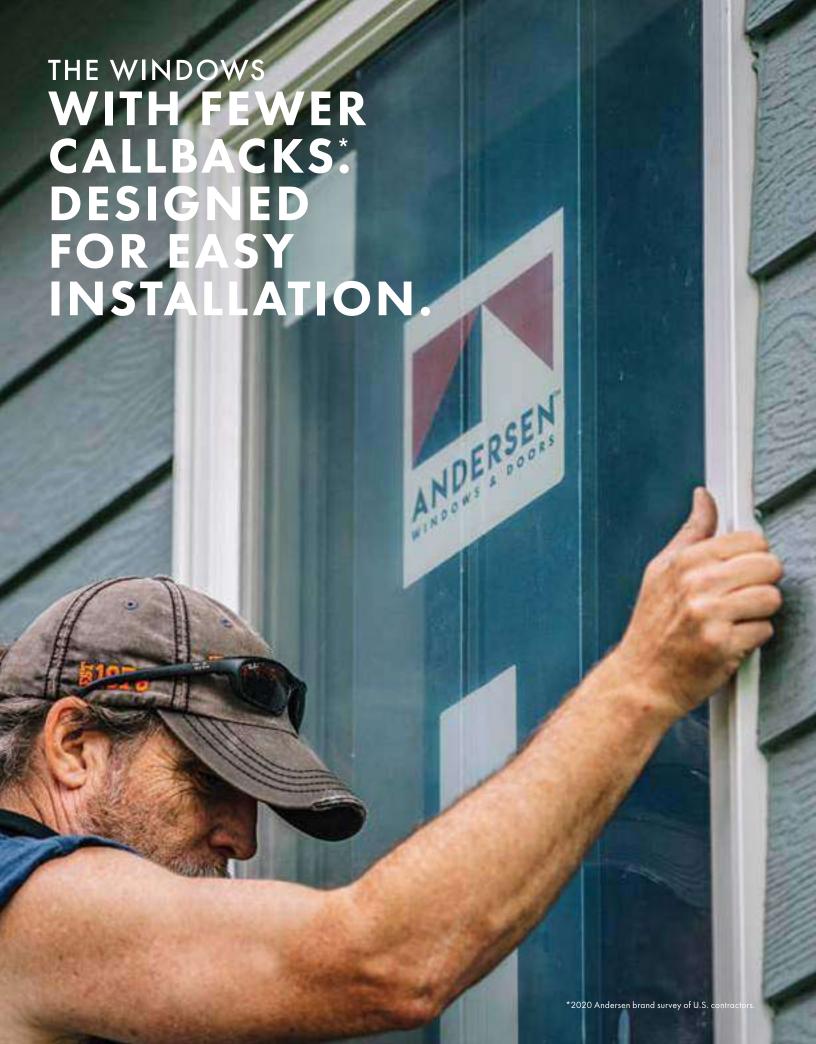
^{*}TruScene insect screens let in over 25% more fresh air than standard Andersen fiberglass insect screens.



COMPARISON CHART

Use the quick reference chart below to decide which Andersen® 400 Series products best fit your project needs.

			PATIO DOORS								
FEATURES		Woodwrighte Double-Hung	Woodwright Double-Hung Insert	Tilt-Wash Double-Hung Full-Frame	Till-Wash Double-Hung	Narroline « Double-Hung Conversion re	Casement	Awning	Gliding	Frenchwood®	Frenchwood Hinged Inswing
Low-Maintenance Ex	teriors										
White		•	•	•	•	•	•	•	•	•	•
Canvas		•	•	•	•		•	•	•		
Sandtor	ne	•	•	•	•	•	•	•	•	•	•
Terrator	ie	•	•	•	•	•	•	•	•	•	•
Dark Bro	onze	•	•	•	•		•	•	•		
Forest G	Preen	•	•	•	•		•	•	•	•	•
Black		•	•	•	•		•	•	•		
Interiors											
Pine		•	•	•	•	•	•	•	•	•	•
Maple		•	•							•	•
Oak		•	•							•	•
White		•	•	•	•	•	•	•	•	•	•
Sandtor	ne								•		
Dark Bro	onze			•	•		•	•	•		
Black				•	•		•	•	•		
Easy Cleaning											
Tilt-to-Clean Sash		•	•	•	•	•					
Grilles & Blinds											
Full Divided Light		•	•	•	•	•	•	•	•	•	•
Simulated Divided Lig	ht	•	•	•	•	•	•	•	•	•	•
Finelight™ Grilles-Betv	veen-the-Glass	•	•	•	•	•	•	•	•	•	•
Removable Interior G	rilles	•	•	•	•	•	•	•	•	•	•
Blinds-Between-the-C	Blass									•	•
High-Performance G	lass Additional glass	options are avo	ailable. See p	page 12 for de	tails. For pat	io doors, all gl	ass options ar	e tempered.			
Low-E4®		•	•	•	•	•	•	•	•	•	•
Low-E4 SmartSun™		•	•	•	•	•	•	•	•	•	•
Low-E4 Sun		•	•	•	•	•	•	•	•	•	•
Low-E4 PassiveSun		•	•	•	•	•	•	•	•	•	•
Clear Dual-Pane							•	•			
HeatLock® Coating		•	•	•	•	•	•	•	•	•	•
Performance Option											
Stormwatch® Protection	on	PG upgrade		•			•	•			
Glass Spacers											
Stainless Steel		•	•	•	•	•	•	•	•	•	•
Black or White		•	•	•	•	•	•	•	•	•	•
Standard Sizes						,					
Minimum Width		1'-95/8"	1'-4 1/2"	1'-9 5/8"	1'-9 ¼"	Fits	1'-5"	2'-0 1/8"	2'-11 ¼"	4'-11 ¼"	2'-6 1/8"
Maximum Width		3'-9 5/8"	3'-9 5/8"	3'-95/8"	3'-8 %"	Narroline double-hung	2'-11 ¹⁵ /16"	5'-11 %"	5'-11 1/4"	15'-9"	8'-11 1/8"
Minimum Height		3'-0%"	2'-3 ¾"	3'-07/8"	3'-0 %"	windows made after	2'-0 1/8"	1'-5"	1'-10 ¼"	6'-7 1/2"	6'-7 1/2"
Maximum Height		6'-47/8"	6'-5"	7'-8 %"	7'-65/8"	1967	5'-11 %"	4'-0"	4'-11 1/4"	7'-11 ½"	7'-11 ½"
Custom Sizes		•	•	•	•		•	•		•	•







FEATURES

FRAME

- ♠ A seamless one-piece, rigid vinyl frame cover is secured to the exterior of the frame to protect the wood frame from moisture and maintain an attractive appearance while minimizing maintenance.
- The seamless rigid vinyl cover extends 1 3/8" (35) around the perimeter of the unit, creating a flange to help seal the unit to the structure.
- **©** Wood frame members are treated with a water-repellent preservative for long-lasting protection and performance.
- Interior stops are unfinished pine. Low-maintenance prefinished white, dark bronze and black** interiors are also available.

SASH

- **3** Rigid vinyl encases the entire sash a vinyl weld protects each sash corner for superior weathertightness. It maintains an attractive appearance and minimizes maintenance.
- Wood core members provide excellent structural stability and energy efficiency.
- **6** Vinyl closed-cell foam weatherstrip is factory installed on the perimeter of the sash.

GLASS

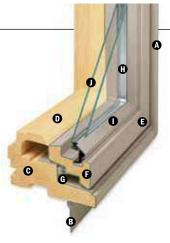
- ① In addition to stainless steel glass spacers, black or white glass spacers are now available to allow the spacer to blend in with the unit color.
- A glazing bead and silicone provide superior weathertightness and durability.
- High-Performance options include:
- Low-E4® glass
- Low-E4 HeatLock® glass
- Low-E4 SmartSun™ glass
- Low-E4 SmartSun HeatLock glass
- · Low-E4 Sun glass

Tempered and other glass options are available. Contact your Andersen supplier.

A removable translucent film helps shield the glass from damage during delivery and construction, and simplifies finishing at the job site.

Patterned Glass

Patterned glass options are available. See page 12 for more details.



HARDWARE

Smooth Control Hardware System



The smooth control hardware system employs a worm gear drive for easy operation. Units with a wash mode have hinges that move the sash away from the frame to provide easier glass

cleaning. CXW15, CXW155, CXW16 and CXW25 sizes not available with wash mode. Hardware option and finish must be specified. Operator handle and cover sold separately.

Single-Actuation Casement Lock



On casement windows, a singleactuation lock easily releases all locking points on the casement sash while the reach-out action eliminates binding when closing. The lock handle is offered in finishes that coordinate with your specified hardware option.

Awning Sash Locks



Awning sash locks provide an added measure of security and weathertightness. Hardware style and finish options are compatible with Andersen® casement windows to ensure consistency in appearance when used in window combination designs.

Dimensions in parentheses are in millimeters.

Printing limitations prevent exact replication of colors and finishes. See your Andersen supplier for actual color and finish samples.

Stormwatch

400 Series casement and awning windows are available with Stormwatch® Protection. For more details, visit andersenwindows.com/coastal.

Performance Grade (PG) Upgrades

Performance upgrades are available for select sizes of standard, non-impact casement and awning windows, allowing these units to achieve higher performance ratings. Performance Grade (PG) ratings are more comprehensive than Design Pressure (DP) ratings for measuring product performance. Visit andersenwindows.com for up-to-date performance information of individual products. Contact your Andersen supplier for availability.

EXTERIOR & INTERIOR OPTIONS

EXTERIOR COLORS



INTERIOR OPTIONS



HARDWARE OPTIONS Sold Separately



CONTEMPORARY FOLDING

Black | Bright Brass | Gold Dust Oil Rubbed Bronze | **Satin Nickel** Stone | White



TRADITIONAL FOLDING

Antique Brass | Black | Bright Brass

Distressed Bronze | Distressed Nickel

Gold Dust | Oil Rubbed Bronze

Satin Nickel | Stone | White

Folding handles avoid interference with window treatments



Stone | White

Bold name denotes finish shown.



ESTATE™

Antique Brass | Bright Brass
Brushed Chrome | Distressed Bronze
Distressed Nickel | Oil Rubbed Bronze
Polished Chrome | Satin Nickel

HARDWARE FINISHES



Naturally occurring variations in grain, color and texture of wood make each window one of a kind. All wood interiors are unfinished unless a finish is specified.

Distressed bronze and oil rubbed bronze are "living" finishes that will change with time and use.

^{*}Visit andersenwindows.com/warranty for details.

^{**}Products with dark bronze and black interiors have matching exteriors.



ACCESSORIES Sold Separately

FRAME

Extension Jambs





Standard jamb depth is 27/s" (73). Extension jambs are available in unfinished pine or prefinished white, dark bronze and black. Some sizes may be veneered.

Factory-applied and non-applied interior extension jambs are available in ½6" (1.5) increments between 4 %6" (116) and 7 ½8" (181). Extension jambs can be factory applied to either three sides (stool and apron application) or four sides (picture frame casing).

Thick Replacement Extension Jambs

To help preserve original alignment of trim and paint lines in replacement situations, special $1\frac{1}{6}$ " (29) thick replacement extension jambs are available. Factory-applied and non-applied extension jambs are available in $\frac{1}{6}$ " (1.5) increments between $4\frac{9}{16}$ " (116) and $7\frac{1}{6}$ " (181). Non-applied extension jambs are available in 12' (3658) lineals. Detail on page 34.

Drywall Return Bead



A drywall return bead is available in a narrow or wide dimension with unfinished pine or prefinished white, dark bronze and black interiors. Can be ordered factory applied or in nonapplied lineals. Detail on page 34.

HARDWARE

Corrosion-Resistant Components



Corrosion-resistant hinge and operator arm hardware is designed for applications in harsh and corrosive environments such as heavy industrial or coastal areas.*

Window Opening Control Device



A window opening control device is available, which limits sash travel to less than 4" (102) when the window is first opened. Available factory applied, or as a field-applied kit in white, stone and black.

Power Operator for Awning Windows



Awning windows can be ordered with an operator enhanced by PowerAssist technology that opens and closes the window with the touch of a button. Easy to install, the 24-volt system features a concealed window power drive, battery backup in case of a power outage and a moisture sensor that automatically closes the window when it rains. A wireless remote control is available (sold separately).

The PowerAssist system is controlled by a wall-mounted console, which includes a power box, battery, touch pad and mounting bracket. Windows can be ordered factory prepped to save time, or they can be ordered as a field kit. Power driver requires field installation. PowerAssist technology eliminates the need for sash locks. Available for windows up to 5' (1524) wide. Not available for units with Stormwatch® Protection or performance upgrades.

SPECIAL USE OPERATOR HANDLES

Available in Classic Series[™] design only.

Compact Operator Handle



Specially designed for use in situations where blinds or other window treatments interfere with standard operator handle. Available in white or stone finish.

Easy-Grip Handle

Larger knob
makes it
easier to grip
and operate.
Available in white
or stone finish.

Operator Spline Cover



An operator spline cover is an attractive cap that covers the roto operator stud when the handle has been removed to control access or operation of the window. The operator spline cover should not be used on any window designated or intended for emergency escape or rescue. Please consult your local building code official for local egress code requirements.

Metal T-Handle





Our smallest operator handle, the metal T-handle, may make it more difficult for young children (5 and under) to open the window. For more information on child safety, write:

Andersen Corporation
LookOut For Kids® Program
100 Fourth Avenue North
Bayport, MN 55003
Call 800-313-8889 or email
lofk@andersencorp.com.

GLASS

Andersen® Art Glass

Andersen art glass panels come in a variety of original patterns. See art glass section starting on page 173 for more information or visit andersenwindows.com/artalass.

INSECT SCREENS

TruScene® Insect Screens



Andersen TruScene insect screens let in over 25% more fresh air** and provide 50% greater clarity than conventional Andersen insect screens, all while keeping out unwanted small insects. For casement and awning windows, frames are available in white, stone, dark bronze and black, or with pine veneer frame interiors to blend with the wood interior of the window.

Conventional Insect Screens

Conventional insect screens have charcoal powder-coated aluminum screen mesh. Available with frames in white, stone, dark bronze and black.

GRILLES

Grilles are available in a variety of configurations and widths. For casement and awning window grille patterns, see page 34.

EXTERIOR TRIM

Available with Andersen exterior trim. See exterior trim section starting on page 175.

CAUTION:

- Painting and staining may cause damage to rigid vinyl.
- 400 Series windows in Terratone color may be painted any color lighter than Terratone color using quality oil-based or latex paint.
- Do not paint 400 Series windows in white, canvas, Sandtone, dark bronze, forest green or black exterior colors.

 Andersen does not warrant the adhesion or
- performance of homeowner-applied paint over vinyl or other factory-coated surfaces.
- For vinyl painting instructions and preparation, contact your Andersen supplier.
- Do not paint weatherstrip
- Creosote-based stains should not come in contact with Andersen products.
- Abrasive cleaners or solutions containing corrosive solvents should not be used on Andersen products.

^{*}Visit andersenwindows.com/warranty for details.

^{**}TruScene insect screens let in over 25% more fresh air than standard Andersen fiberglass insect screens. Dimensions in parentheses are in millimeters.

Alignment Grid for Standard-Size Casement, Awning, Picture, Transom, Half Circle, Quarter Circle and Arch Windows

Angillione	1'-5"	1'-8 ¹ /2"	2'-0 ½8"	2'-43/8"	2'-7 ¹ /2"	2'-9 ³ /4"	turo, munison	1, Half Circle, 2'-11 ¹⁵ /16"	Quui t	3'-43/4"	3'-4 ¹³ /16"	4'-0"	
Specialty See the specialty window section starting on page 117 for these and other specialty	(432)	(521)	(613)	(721) AFCW106 AFCW11 CTQCW1	(800) CTQCX1	(857)		(913) AFCP3006 AFCP301 CTQA3		(1035)	(1037)	(1219) AFC206 AFC21	
shapes and sizes.			CTC1	CTCW1	CTCX1			CTCXW1				CTC2	
Transom													
1'-0" (305)	CTR1510	CTR1810	CTR2010	CTR2410	CTR2810	CTR2910	CTR3010	PTR3010		CTR3410 CTR21810	PTR3510	CTR4010 PTR401	10
Awning												• • • • • • • • • • • • • • • • • • •	
1'-5" (432) 1'-8 ¹ / ₂ " (521) 2'-0 ¹ / ₈ " (613)			AR21 AN21 AN21 A21	AR251 AN251 AN251 A251	AR281 AN281 AN281 A281			AR31 AN31 AN31 A31			AR351 AN351 AN351 A351	AR41 AR22 AN41 AN22 AN41 AN22 AN41 AN22 AN41 AN22	1
2'-4 ³ / ₈ " (721) 2'-7 ¹ / ₂ "			AW21	AW251	AW281			AW 31			AW351	AW41 AW22	1
(800)				AX 251	AX281			AX 31			AX351	AX 41	
2'-11 ¹⁵ / ₁₆ " (913)					AXW281			AXW31			AXW351	AXW41	
3'-4 ³ / ₄ " (1035)					AK11201			A 335			A3535	AMI-1	
Casement, Awn	ing and P	icture						A 333			A 3333		
2'-0 ¹ /8" (613)	CR12	CN12	C 12	CW 12						CN22		C 22	
2'-4 ³ /8" (721)	CR125	CN125	C125	CW125	CX125					CN225		C 2225	
2'-11 ¹⁵ / ₁₆ " (913)													
3'-4 ¹³ / ₁₆ " (1037)	CR13	CN13	C 13	CW 13	CX13	CR23	CXW13		P 3030	CN23	P3530	C 23	P4030
4'-0" (1219)	CR135	CN135	C135	CW135	CX135	CR235	CXW135		P 3035	CN235	P3535	C 235	P4035
4'-4 ¹³ / ₁₆ " (1341)	CR14	CN14	C14 A212	CW14	CX14	CR24	CXW14 A312	AP32V	P 3040	CN24	AP352V P3540	C24 AP42V	P 4040
4'-11 ⁷ /8" (1521)	CR145	CN145	C145	CW145	CX145	CR245	CXW145		P3045	CN245	P3545	C245	P4045
5'-4 ¹³ / ₁₆ " (1646)	CR15	CN15	C15	CW15	CX15	CR25	CXW15 PA3050*		P3050		PA3550* P3550	C25	P4050
5'-11 ⁷ /8" (1826)	CR155	CN155	C155 C16 A213	CW155	CX155	CR255	CXW155 CXW16 PA3060 A	AXW312** A313	P3055	CN255	P3555 P3555 P3555 P3560	C255	P4060

^{*} Dimensions in parentheses are in millimeters. *Actual height of 4'-11 13 /1e" (1519). **Actual height of 5'-11 5 /e" (1819).



4'-4 ¹³ / ₁₆ " (1341)	4'-81/2" (1435) AFCW206	4'-11 ⁷ /8" (1521)	5'-1" (1549)	5'-2 ³ /4" (1594)	5'-4 ¹³ / ₁₆ " (1646)	5'-11 ⁵ /8" (1819)	5'-11 7/6" (1826)	7'-05%" (2149)
	CTCW2			CTCX2			стсз	
PTR 4510	CTR4810 CTR22410	PTR5010	CTR5110 CTR31810	CTR5210 CTR22810	PTR5510	CTR51110 CTR23010	CTR6010 PTR6010 CTR32010	CTR7010 CTR32410
AR451 AN451 A451 AW451 AXW451	AR2251 AN2251 AN2251 AV2251 AW2251 AW2251	AR51 AN51 AS51 AW51 AXW51		AR281 AN2281 A2281 A2281 AW2281 AW2281 AW2281	AR551 AN551 AS51 AW551 AW551 AXW551	AR231 AN231 AN231 AN231 AN231 AN231 AN231 AN231	AR61 AR321 AR61 AR321 AR61 AR321 AR61 AR321 AR61 AR321 AR61 AR61 AR321 AR61 AR61 AR321	AR3251 AN3251 A3251
	CW22 CW225		CN325				C32 C32 C325	CW325
P4530 P4535	CW23 CW235	P5030 P5035	CN335	CX23 CX235	P5535	CXW23 CXW235	C335 P6035	CW33 CW335
P4540 P4545	CW245	P5040 P5045	CN345	CX24 CX245	P5540 P5545	CXW24 CXW245	C34 P6040 C34 P6045	CW34 CW345
P4550 P4555 P4560	CW25 CW255 CW265	P5055 P5060	CN35	CX25	P5550	CXW25	C35 P6050	CW 35

[•] Dimensions in parentheses are in millimeters.

Similar jamb profiles enable these standard-size windows to be combined in multiple combinations. Custom-size windows are also available.

Window widths and heights shown. See individual size charts for additional dimensions.

In addition to venting configurations shown, other standard configurations are available.

Table of Casement and Transom Window Sizes

Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96

Scale 48 (3) = 1-0 (303) — 1	.90								
Window Dimension	1'-5"	1'-8 1/2" (521)	2'-0 1/8"	2'-43/8" (721)	2'-7 ¹ /2" (800)	2'-11 ¹⁵ / ₁₆ " (913)	2'-9 ³ / ₄ " (857)	3'-43/4" (1035)	4'-0" (1219)	4'-8 ¹ / ₂ " (1435)
Minimum Rough Opening	1'-5 ¹ /2" (445)	1'-9" (533)	2'-0 ⁵ /8" (625)	2'-4 ⁷ /8" (733)	2'-8" (813)	3'-0 ¹ /2" (927)	2'-10 ¹ / ₄ " (870)	3'-5 ¹ /4" (1048)	4'-0 ¹ /2" (1232)	4'-9" (1448)
Unobstructed Glass (casement, single sash only)	12 ⁵ /8" (321)	16 ½" (410)	19 ³ / ₄ " (502)	24" (610)	27 ¹ / ₈ " (689)	31 ⁹ / ₁₆ " (802)	12 ⁵ /8" (321)	16 ½" (410)	19 ³ / ₄ " (502)	24" (610)
Unobstructed Glass (transom, single sash only)	12 3/16"	15 11/16" (398)	19 ⁵ /16" (491)	23 ⁹ /16" (599)	26 ¹¹ / ₁₆ " (678)	31 ¹ /8" (791)	28 ¹⁵ / ₁₆ " (735)	35 ¹⁵ / ₁₆ " (913)	43 ³ / ₁₆ " (1097)	51 ¹¹ / ₁₆ " (1313)
1'-0" (305) 1'-0 1/2" (318) 7 3/16" (183)		WIDTHS — 1 CTR1810	7" to 84 5/8" CTR2010	CTR2410	CTR2810	CTR3010	CTR2910	CTR3410	CTR4010	CTR4810
1'-0" (305) 1'-0 1/2" (318) 7 3/16" (183)								CTR21810	CTR22010	CTR22410
	CUSTOM	WIDTHS – 1	7" to 35 ¹⁵ /16	ş''						
2'-01/8" (613) 2'-05/8" (625) 195/16" (491)	CR12	CN12	C 12	CW12*				CN22	C 22	CW 22*
2'-43/8" 2'-0.1/8' (721) (613) 2'-47/8" 2'-05/8' (733) (625) 233/6" (491) -241/8" to 717/8"	CP1 25	CN125	C 125	CW 125*	CV125			CN 225	C 225	CW 225*
2:1115/16" (913) 3:0.12" (927) 31.1/6" (791)	CR125 CR13	CN125	C125	CW125*	CX 125 CX 13	CXW 13	CR23	CN223	C 223	CW225
3-4 ¹³ / ₁₆ " (1037) 3-5 ³ / ₈ " (1051) 36" (914)	CR135	CN135	C 135	CW1350*	CX 135°	CXW 135°	CR235	CN235	C2 35	CW235**
4'.0" (1219) 4-0 1/2" (1232) 43 3/16" (1097)	CR14	CN14	C 14	CW14**	CX14 ⁰	CXW14 ⁶	CR24	CN24	C 24	CW24 ⁰ *
4-413/16" (1341) 4-53/8" (1356) 48" (1219)	CR145	CN145	C 145	CW1450*	CX 145°	CXW145°	CR245	CN245	C24 5	CW245 ⁶ *
4-1176" (1521) 5-036" (1534) 55 1/16" (1399)	CR15	CN15	C 15	CW 15 [◊] *	CX15°	CXW150**	CR25	CN25	C 25	CW25 ⁶ *
5-4 13/16" (1646) 5-5 3/8" (1660) 60" (1524)	CR155	CN155	C 155	CW155 ⁰ *	CX155 ⁶	CXW1550**	CR255	CN255	C 255	CW2550*
5-11 7/8" (1826) 6-0.3/8" (1838) 67 1/6" (1703)	CR 16	CN 16	C 16	CW 16 0 *	CX16°	CXW16 ⁰ **	CR26	CN26	C 26	CW26**

^{• &}quot;Window Dimension" always refers to outside frame-to-frame dimension.
• "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 210-211 for more details.

[•] Dimensions in parentheses are in millimeters.

^{*}Meet clear opening width of 20" (508) using hinge with wash mode and control bracket (bracket can be pivoted for cleaning position) and meet clear opening width of 22" (559) using hinge for widest clear opening.

*Available with straight-arm operators (hinged for widest clear opening) only.



5'-2 3/4" (1594) 5'-3 1/4" (1607) 27 1/8" (689) 57 15/16" (1472) CTR5210	5'-115/6" (1819) 6'-01/6" (1832) 319/16" (802) 6613/16" (1697) CTR51110	5'-1" (1549) 5'-1 ½" (1562) 16 ½" (410) 56 ¾6" (1427) CTR5110	5'-117/8" (1826) 6'-03/8" (1838) 193/4" (502) 671/16" (1703) CTR6010	7'-0 5/8" (2149) 7'-1 1/8" (2162) 24" (610) 79 13/16" (2027)	Custom-size windows are available in ¹ /8" (3) increments. Windows can also be custom sized to match standard sizes ending in a sixteenth of an inch. Single windows only. See page 33
CTR 22810	CTR23010	CTR 31810	CTR32010	CTR32410	for custom sizes and specifications.
		CN32 CN325	c 322	CW325*	Left Right Stationary
CX23	CXW23	CN33	c 33	CW 33*	Choose left, right or stationary as viewed from the exterior. In addition to venting shown in table,
CX235°	CXW235°	CN335	C335	CW335 ⁶ *	other standard configurations are available for single, twin and triple windows. Transom (CTR) windows are stationary only.
					Twin and triple windows shown have one continuous outer frame.
CX24 ⁶	CXW24 ⁶ CXW245 ⁶	CN34 CN345	C 34	CW345*	Transom (CTR) windows can be used over casement or awning windows, and may be rotated 90° and used as a sidelight with casement, awning or picture windows.
					Grille patterns shown on page 34.

^{. &}quot;Window Dimension" always refers to outside frame-to-frame dimension.

^{**}Minimum Rough Opening* dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 210-211 for more details.

[•] Dimensions in parentheses are in millimeters.

Meet or exceed clear opening area of 5.7 sq. ft. or 0.53 m², clear opening width of 20" (508) and clear opening height of 24" (610) with appropriate hinge specified. See tables on pages 29-30.

*Meet clear opening width of 20" (508) using hinge with wash mode and control bracket (bracket can be pivoted for cleaning position) and meet clear opening width of 22" (559) using hinge for widest clear opening.

**Available with straight-arm operators (hinged for widest clear opening) only.

Table of Awning Window Sizes Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96

00010 78 (0) 1 0	(303) - 1.90								
Window Dimension			2'-11 ¹⁵ / ₁₆ " (913)	3'-4 13/16" (1037)	4'-0" (1219)	4'-4 ¹³ / ₁₆ " (1341)	4'-11 ⁷ /8" (1521)	5'-4 ¹³ / ₁₆ " (1646)	5'-11 ⁷ /8" (1819)
Minimum Rough Opening			3'-0 ¹ /2" (927)	3'-5 ³ /8" (1051)	4'-0 ¹ /2" (1232)	4'-5 ³ /8" (1356)	5'-0 ³ /8" (1534)	5'-5 ³ /8" (1660)	6'-0 ³ /8" (1832)
Unobstructed Glass (single sash only)		 	31 1/8"	36" (914)	43 3/16" (1097)	48" (1219)	55 ½1/16" (1399)	60" (1524)	67 ¹ / ₁₆ " (1703)
		6 - 24 ¹/8" to	71 ⁷ /8"						
1'-5" (432) 1'-51/2" (445) 12 5/8" (321)	Color Colo								
1'-81/2' (521) 1'-9" (533) 16 1/8" (410)	10 10 2 2 2 2 2 2 2 2 2								
2'-0 1/8" (613) 2-0 5/8" (625) 19 3/4" (502)	1976 1976								
78" 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	19 19 19 19 19 19 19 19								
2'-4 3/8" (721) 2'-4 7/8" (733) 24" (610)	Column C								
(800) 2'-7 1/2" (813) 27 1/8" (689)									
4 4 4	AX 25	1 AX 281	AX 31	AX 351	AX 41	AX 451	AX 51	AX 551	AX 61
									7/8" to 71 7/8" stationary only
2'-11 ¹⁵ / ₁₆ ' (913) 3'-0 ¹ / ₂ " (927) 31 ⁹ / ₁₆ " (802)		143 24 187 27 187 27 187 27 187 27 187 27 187 27 187 27 187 27 187 28 18 187 28 18 187 28 18 187 28 18 18 18 18 18 18 18 18 18 18 18 18 18							
NI THE	CUSTOM WIDTH				AXW41	AXW 451	AXW 51	AXW551	AXW61
		0 - 24 - 78 (0 ·	46 Venting of	illy				5 15/16	
31-4 3/4" (1035) 31-5 1/4" (1048) 36 3/8" (924)	THE STATE OF THE S								
	### 12 CLUSTON WIDTHS = 24 Fab to 647								
	### 27-14 27								
4'-0" (1219) 4'-01/2" (1232) 43 5/8" (1108)	2 2 0 0 2 2 4 3 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1								
4.0" (1219) 4.012" (1232) 435/8" (1108)									
4'-0" (1219) 4'-012" (1232) (1332) (1108)	2'-0 1/8" 2'-11 1			AP352V	6" 3'-4 ¹³ /16"			2'-11 ¹⁵ /16"	
Window Dimension Minimum	1939 1939								
Window Dimension Minimum Rough Opening	1889 1889								
Window Dimension Minimum Rough Opening	Common C								
Window Dimension Minimum Rough Opening									
Window Dimension Minimum Rough Opening (1532) (1532)	Permitting 20 60 74 72 72 72 72 72 72 72								
Window Dimension Minimum Rough Opening (1535) (1535)	2'-0 ½" 2'-11 ½ (91 2'-0 5/8" 3'-0 (92 2'-0 5/8" 3'-0 (92 2'-0 5/8" 3'-0 (92 2'-0 5/8" 3'-0 (92 2'-0 5/8" 3'-0 (92 2'-0 5/8" 3'-0 (92 2'-0 5/8" 3'-0 (92 2'-0 5/8" 3'-0 (92 2'-0 5/8" 3'-0 (92 2'-0 5/8" 3'-0 (92 2'-0 5/8" 3'-0 5/8" 3'-0 (92 2'-0 5/8" 3'-0 5/8" 3'-0 (92 2'-0 5/8" 3'-0 5/8" 3'-0 (92 2'-0 5/8" 3'-0 5/8" 3'-0 (92 2'-0 5/8" 3'-0 5/8" 3'-0 (92 2'-0 5/8" 3'-0 5/8" 3'-0 (92 2'-0 5/8" 3'	3)		2'-11 ¹⁵ / ₁ (913) 3'-0 ¹ / ₂ (927)	3'-4 ¹³ / ₁₆ " (1037) 3'-5 ³ / ₈ " (1051)	(1219) 4'-0 ¹ /2"	(613) 2'-0 ⁵ /8"	2'-11 ¹⁵ / ₁₆ " (913) 3'-0 ¹ / ₂ "	
Window Dimension Minimum Rough Opening (1532) (1532)	2'-0 ½" 2'-11 ½ (91 2'-0 5/8" 3'-0 (92 2'-0 5/8" 3'-0 (92 2'-0 5/8" 3'-0 (92 2'-0 5/8" 3'-0 (92 2'-0 5/8" 3'-0 (92 2'-0 5/8" 3'-0 (92 2'-0 5/8" 3'-0 (92 2'-0 5/8" 3'-0 (92 2'-0 5/8" 3'-0 (92 2'-0 5/8" 3'-0 (92 2'-0 5/8" 3'-0 5/8" 3'-0 (92 2'-0 5/8" 3'-0 5/8" 3'-0 (92 2'-0 5/8" 3'-0 5/8" 3'-0 (92 2'-0 5/8" 3'-0 5/8" 3'-0 (92 2'-0 5/8" 3'-0 5/8" 3'-0 (92 2'-0 5/8" 3'-0 5/8" 3'-0 (92 2'-0 5/8" 3'	3)		AP352V 2'-11 15/1 (913) 3'-0 1/2' (927) A312 (A31/A31) PA3056	3'-4 13/16" (1037) 3'-5 3/8" (1051)	(1219) 4'-0 ¹ /2"	(613) 2'-0 ⁵ /8"	2'-11 ¹⁵ / ₁₆ " (913) 3'-0 ¹ / ₂ "	
Minimum Rough Opening 61.219 7-0.3% (1232) (1232) (1233) (1233)	2'-0 1/8" 2'-111 (613) (91 2'-0 5/8" 3'-0 (625) (92 A212 (A21/A21)	3)	AP32V	AP352V 2'-11 15/1 (913) 3'-0 1/2 (927) A312 (A31/A31) PA3055 (AWW31/A3	3'-4 13/16" (1037) 3'-5 3/8" (1051)	(1219) 4'-0 ¹ /2"	(613) 2'-0 ⁵ /8"	2'-11 ¹⁵ / ₁₆ " (913) 3'-0 ¹ / ₂ "	
Minimum Rough Opening 61.219 7-0.3% (1232) (1232) (1233) (1233)	2'-0 1/8" 2'-111 (613) (91 2'-0 5/8" 3'-0 (625) (92 A212 (A21/A21)	3)	AP32V	AP352V 2'-11 15/1 (913) 3'-0 1/2 (927) A312 (A31/A31) PA3055 (AWW31/A3	3'-4 13/16" (1037) 3'-5 3/8" (1051)	(1219) 4'-0 ¹ /2"	(613) 2'-0 ⁵ /8"	2'-11 ¹⁵ / ₁₆ " (913) 3'-0 ¹ / ₂ "	
Minimum Rough Opening 61.219 7-0.3% (1232) (1232) (1233) (1233)	2'-0 1/8" 2'-111 (613) (91 2'-0 5/8" 3'-0 (625) (92 A212 (A21/A21)	3)	AP32V	AP352V 2'-11 15/1 (913) 3'-0 1/2' (927) A312 (A31/A31) PA3056 (AW/31/A3	3'-4 13/16" (1037) 3'-5 3/8" (1051) PA3550 (AXW351/A351) PA3560	(1219) 4'-0 1/2" (1232) (1232)	(613) 2'-0 5/e" (625)	2'-11 15/16" (913) 3'-0 1/2" (927)	

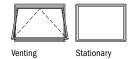
^{• &}quot;Window Dimension" always refers to outside frame-to-frame dimension.
• "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 210-211 for more details.
• Dimensions in parentheses are in millimeters.



4'-0"	4'-8 1/2"	5'-2 3/4"	5'-11 5/8"	5'-11 7/8"	7'-0 5/8"
(1219)	(1435)	(1594)	(1826)	(1826)	(2149)
4'-0 1/2"	4'-9"	5'-3 1/4"	6'-0 ¹ /8"	6'-0 3/8"	7'-1 1/8"
(1232)	(1448)	(1607)	(1832)	(1838)	(2162)
19 5/16"	23 9/16"	26 11/16"	31 1/8"	19 5/16"	23 9/16"
(491)	(598)	(678)	(1703)	(491)	(598)
AR 221	AR2251	AR2281	AR 231	AR 321	AR3251
AN221	AN2251	AN2281	AN231	AN321	AN3251
A 221	A 2251	A 2281	A 231	A 321	A 3251
A 221	A2251	A2281	A231	A321	A3251
A221 AW221	A2251 AW2251	A2281 AW2281	A231 A231 AW231	A321 AW321	A3251 A3251 AW3251



Custom-size windows are available in 1/8" (3) increments. Windows can also be custom sized to match standard sizes ending in a sixteenth of an inch. **Single windows only.** See page 33 for custom sizes and specifications.



Choose venting or stationary. **AXW**551 and **AXW**61 windows are stationary only. In addition to venting shown in table, other standard configurations are available for twin, triple and stacked windows.

Twin, triple and stacked windows shown have one continuous outer frame.

Awning windows must be installed to vent as shown, and should not be rotated and used as a hopper.

Transom (CTR) windows (shown on pages 24-25) can be used over casement or awning windows, and may be rotated 90° and used as a sidelight with casement, awning or picture windows.

Grille patterns shown on page 34.

^{• &}quot;Window Dimension" always refers to outside frame-to-frame dimension.

^{* &}quot;Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 210-211 for more details.

[•] Dimensions in parentheses are in millimeters.

Table of Picture and Transom Window Sizes

Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96

Scale $\frac{1}{8}$ " (3) = 1'-0" (3)	305) – 1:9	6							
Unit Dimension	2'-11 15/16" (913)	3'-4 ¹³ / ₁₆ " (1037)	4'-0"	4'-4 ¹³ / ₁₆ " (1341)	4'-11 ⁷ /8" (1521)		5'-4 ¹³ / ₁₆ " (1646)	5'-11 ⁷ /8" (1826)	
Minimum Rough Opening	3'-0 ¹ /2" (927)	3'-5 ³ /8" (1051)	4'-0 ¹ / ₂ " (1232)	4'-5 ³ /8" (1356)	5'-0 ³ /8" (1534)		5'-5 ³ /8" (1660)	6'-0 ³ /8" (1838)	
	31 1/8"	36"	43 3/16"	48"	55 ¹ / ₁₆ "		60"	67 1/16"	
Unobstructed Glass	(791)	(914)	(1097)	(1219)	(1399)		(1524)	(1703)	7 \
	CUSTOM WI	DTHS – 36 " to	71 7/8"						
1-0" (305) (1-0 1/2" (318) (183) (183)	PTR3010	PTR3510	PTR4010	PTR4510	PTR5010		PTR5510	PTR6010	Custom-size windows are
	CUSTOM WI	DTHS — 35 ¹⁵ /1	6" to 59 7/8"				TOM WIDTHS –	60" to 71 ⁷ /8"	available in ¹ / ₈ " (3)increments.
3) 3) 1/2" 7) 1) 1)						29 7/8"			Windows can also be custom
2'-11 15/16 (913) 3'-0 1/2" (927) 31 1/8" (791)						to 59			sized to match standard sizes
2/16"	P 3030	P 3530	P 4030	P 4530	P 5030	35 15/16" to	P 5530	P 6030	ending in a sixteenth of an inch.
$3^{-}4 \ \frac{13}{16}$ (1037) $3^{-}5 \ \frac{3}{8}$ (1051) 36° (914)						35 1			See page 33 for custom sizes
3'-5 (10 (10 (10 (9)						2			and specifications.
	P 3035	P 3535	P 4035	P 4535	P 5035	CUSTOM HEIGHTS	P 5535	P 6035	
4'-0" 1219) -0 1/2" 1232) 3 3/16" 1097)						W _O			Picture (P) and transom (PTR)
4'-0" (1219) 4'-0 1/2" (1232) 43 3/16" (1097)						CUST			windows may be rotated 90°
 	P 3040	P 3540	P 4040	P 4540	P 5040		P 5540	P 6040	to align with casement
16"									or awning windows.
4'-4 ¹³ / ₁₆ ' (1341) 4'-5 ³ / ₈ " (1356) 48" (1219)									Grille patterns shown
-'4									on page 34.
	P 3045	P 3545	P 4045	P 4545	P 5045		P 5545	P 6045	on page 34.
/8" 1) (8" (8" 16" 9)									
4'-11 7/8" (1521) 5'-0 3/8" (1534) 55 1/16" (1399)									
4									
	P 3050	P 3550	P 4050	P 4550	P 5050		P 5550	P 6050	
16" ()									
5'-4 13/16" (1646) 5'-5 3/8" (1660) 60" (1524)									
5 2									
	P 3055	P 3555	P 4055	P 4555	P 5055				
5'-11 7/8" (1826) 6'-0 3/8" (1838) 67 1/16" (1703)									
5'-1 (1 ⁸ (1 ⁸ (1 ⁷ (1 ⁷									
	P 2000	Parco	P 4000	B4500	D EOCO.				
	P 3060	P 3560	P 4060	P 4560	P 5060				

^{• &}quot;Window Dimension" always refers to outside frame-to-frame dimension.
• "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 210-211 for more details.
• Dimensions in parentheses are in millimeters.



Casement Window Opening and Area Specifications

	Clear Ope	_			pening in Full Ope			Vent				Subfloor			
Window Number	Hinge for Widest Clear Opening Sq. Ft./(m²)	Hinge w Wash M Sq. Ft./	ode	Hinge for Widest Clear Opening Inches/(mm)	Hinge with Wash Mode Inches/(mm)	Height Inches/(mm)	Gla Ar Sq. Ft	rea	Hinge for Widest Clear Opening Sq. Ft./(m²)	Wash	e with Mode t./(m²)		of Inside Stop		Windov ea :./(m²)
CR12	5q.1 t./(III-)		0.09)	- Iliches/ (Illill)	7 ⁵ / ₁₆ " (186)	19 1/4" (489)	1.7	(0.16)	- Sq. i t./(iii-)	1.5	(0.14)	60 ⁹ / ₁₆ "	(1538)	2.8	(0.26
CR125			0.03)	_			2.0	(0.10)	_	1.8	(0.17)		(1432)	3.3	(0.20
												56 ³ / ₈ "			
CR13			0.15)	-	7 5/16" (186)	31 1/16" (789)	2.7	(0.25)	-	2.4	(0.22)	48 3/4"	(1238)	4.2	(0.39
CR135			0.17)	-	7 5/16" (186)	35 15/16" (913)	3.1	(0.29)	-	2.7	(0.25)	43 7/8"	(1114)	4.8	(0.45
CR14	-		0.20)	-	7 5/16" (186)	43 1/8" (1095)	3.8	(0.35)	-	3.3	(0.31)	36 11/16"	(932)	5.7	(0.53
CR145	-	2.4 (0.22)	_	7 5/16" (186)	47 15/16" (1218)	4.2	(0.39)	-	3.6	(0.33)	31 7/8"	(810)	6.2	(0.58
CR15	-	2.8 (0.26)	-	7 5/16" (186)	55" (1397)	4.8	(0.45)	-	4.2	(0.39)	24 13/16"	(630)	7.1	(0.66
CR155	-	3.1 (0.29)	-	7 ⁵ / ₁₆ " (186)	59 ¹⁵ / ₁₆ " (1522)	5.2	(0.48)	-	4.5	(0.42)	19 7/8"	(505)	7.7	(0.72
CR16		3.4 (0.32)	-	7 5/16" (186)	67" (1702)	5.9	(0.55)	-	5.1	(0.47)	12 13/16"	(325)	8.5	(0.79
CR23		1.6 (0.15)	_	7 5/16" (186)	31 1/16" (789)	5.4	(0.50)	-	4.7	(0.44)	48 3/4"	(1238)	8.4	(0.78
CR235	-	1.8 (0.17)	-	7 5/16" (186)	35 15/16" (913)	6.3	(0.59)	-	5.4	(0.50)	43 7/8"	(1114)	9.6	(0.89
CR24	-	2.2 (0.20)	-	7 5/16" (186)	43 1/8" (1095)	7.6	(0.71)	-	6.5	(0.60)	36 11/16"	(932)	11.3	(1.0
CR245	_	2.4 (0.22)	_	7 5/16" (186)	47 15/16" (1218)	8.4	(0.78)	-	7.3	(0.68)	31 7/8"	(810)	12.4	(1.1
CR25	-	2.8 (0.26)	-	7 5/16" (186)	55" (1397)	9.6	(0.89)	-	8.3	(0.77)	24 13/16"	(630)	14.2	(1.3
CR255	_	3.1 (0.29)	_	7 5/16" (186)	59 ¹⁵ / ₁₆ " (1522)	10.5	(0.98)	_	9.1	(0.85)	19 7/8"	(505)	15.4	(1.4
CR26	_		0.32)	_	7 5/16" (186)	67" (1702)	11.7	(1.09)	_	10.2	(0.95)	12 13/16"	(325)	17.0	(1.5
CN12			0.14)	_	10 13/16" (275)	19 1/4" (489)	2.2	(0.20)	_	1.9	(0.18)	60 9/16"	(1538)	3.4	(0.3
CN125							2.6		_	2.3		_			
			0.17)			23 7/16" (595)		(0.24)			(0.21)	56 ³ / ₈ "	(1432)	4.0	(0.3
CN13	_		0.21)	_	10 13/16" (275)	31 1/16" (789)	3.5	(0.33)	-	3.1	(0.29)	48 3/4"	(1238)	5.1	(0.4
CN135	-		0.25)	_	10 13/16" (275)	35 15/16" (913)	4.0	(0.37)	-	3.6	(0.33)	43 7/8"	(1114)	5.8	(0.5
CN14		3.2 (0.30)	_	10 13/16" (275)	43 1/8" (1095)	4.8	(0.45)	-	4.3	(0.40)	36 11/16"	(932)	6.8	(0.6
CN145		3.6 (0.33)	-	10 13/16" (275)	47 15/16" (1218)	5.4	(0.50)	-	4.8	(0.45)	31 7/8"	(810)	7.5	(0.7
CN15	-	4.1 (0.38)		10 13/16" (275)	55" (1397)	6.2	(0.58)	-	5.5	(0.51)	24 13/16"	(630)	8.5	(0.7
CN155		4.5 (0.42)	_	10 13/16" (275)	59 ¹⁵ / ₁₆ " (1522)	6.7	(0.62)	-	6.0	(0.56)	19 7/8"	(505)	9.2	(0.8
CN16	-	5.0 (0.47)	-	10 13/16" (275)	67" (1702)	7.5	(0.70)	-	6.7	(0.62)	12 13/16"	(325)	10.2	(0.9
CN22	-	1.5 (0.14)	-	10 13/16" (275)	19 1/4" (489)	4.4	(0.41)	-	3.8	(0.35)	60 9/16"	(1538)	6.8	(0.6
CN225	_	1.8 (0.17)	_	10 13/16" (275)	23 7/16" (595)	5.2	(0.48)	-	4.6	(0.43)	56 6/16"	(1432)	8.0	(0.7
CN23	_	2.3 (0.21)	_	10 13/16" (275)	31 1/16" (789)	7.0	(0.65)	_	6.2	(0.58)	48 3/4"	(1238)	10.2	(0.9
CN235	_		0.25)	_	10 13/16" (275)	35 ¹⁵ / ₁₆ " (913)	8.0	(0.74)	_	7.2	(0.67)	43 7/8"	(1114)	11.5	(1.0
CN24	_		0.30)	_	10 13/16" (275)	43 1/8" (1095)	9.7	(0.90)	_	8.6	(0.80)	36 11/16"	(932)	13.6	(1.2
CN245	_		0.33)	_	10 13/16" (275)	47 15/16" (1218)	10.7	(0.99)	_	9.6	(0.89)	31 7/8"	(810)	15.0	(1.3
CN25			0.38)	_		55" (1397)	12.3	(1.14)	_	11.0	. ,		(630)		(1.5
											(1.02)	24 13/16"		16.9	
CN255			0.42)		10 13/16" (275)	59 ¹⁵ / ₁₆ " (1522)	13.4	(1.25)		12.0	(1.12)	19 7/8"	(505)	18.4	(1.7
CN26			0.47)	_	10 13/16" (275)	67" (1702)	15.0	(1.39)	-	13.4	(1.25)	12 13/16"	(325)	20.3	(1.8
CN32	-		0.14)	_	10 13/16" (275)	19 1/4" (489)	6.6	(0.61)	-	3.8	(0.35)	60 ⁹ / ₁₆ "	(1538)	10.2	(0.9
CN325		1.8 (0.17)	_	10 13/16" (275)	23 7/16" (595)	7.8	(0.73)	-	4.6	(0.43)	56 ³ / ₈ "	(1432)	12.0	(1.1
CN33		2.3 (0.21)	_	10 13/16" (275)	31 1/16" (789)	10.5	(0.98)	-	6.2	(0.58)	48 3/4"	(1238)	15.3	(1.4
CN335		2.7 (0.25)	-	10 13/16" (275)	35 15/16" (913)	12.0	(1.12)	-	7.2	(0.67)	43 7/8"	(1114)	17.4	(1.6
CN34	-	3.2 (0.30)	-	10 13/16" (275)	43 1/8" (1095)	14.4	(1.34)	-	8.6	(0.80)	36 11/16"	(932)	20.4	(1.9
CN345	-	3.6 (0.33)	-	10 13/16" (275)	47 15/16" (1218)	16.2	(1.51)	-	9.6	(0.89)	31 7/8"	(810)	22.5	(2.0
CN35	-	4.1 (0.38)	-	10 13/16" (275)	55" (1397)	18.6	(1.73)	-	11.0	(1.02)	24 13/16"	(630)	25.5	(2.3
CN355	-	4.5 (0.42)	_	10 13/16" (275)	59 ¹⁵ / ₁₆ " (1522)	20.1	(1.87)	-	12.0	(1.11)	19 7/8"	(505)	27.6	(2.5
CN36	_		0.47)	_	10 13/16" (275)	67" (1702)	22.5	(2.09)	_	13.4	(1.24)	12 13/16"	(325)	30.6	(2.8
C12	2.5 (0.23)		0.18)	18 5/16" (465)	14 7/16" (367)	19 1/4" (489)	2.6	(0.24)	2.5 (0.23)	2.4	(0.22)	60 9/16"	(1538)	4.0	(0.3
C125	3.0 (0.28)		0.22)	18 5/16" (465)	14 7/16" (367)	23 7/16" (595)	3.2	(0.30)	3.0 (0.28)	2.9	(0.27)	56 3/8"	(1432)	4.7	(0.4
C13	, ,								` '						
	4.0 (0.37)		0.29)	18 5/16" (465)	14 7/16" (367)	31 1/16" (789)	4.3	(0.40)	4.0 (0.37)	3.9	(0.36)	48 3/4"	(1238)	6.0	(0.5
C135	4.6 (0.43)		0.33)	18 5/16" (465)	14 7/16" (367)	35 15/16" (913)	4.9	(0.46)	4.6 (0.43)	4.5	(0.42)	43 7/8"	(1114)	6.8	(0.6
C14	5.5 (0.51)		0.40)	18 5/16" (465)	14 7/16" (367)	43 1/8" (1095)	5.9	(0.55)	5.5 (0.51)	5.4	(0.50)	36 11/16"	(932)	8.0	(0.7
145	6.1 (0.57)	4.8 (0.45)	18 5/16" (465)	14 7/16" (367)	47 15/16" (1218)	6.6	(0.61)	6.1 (0.57)	6.0	(0.56)	31 7/8"	(810)	8.8	(0.8
215	7.0 (0.65)	5.5 (0.51)	18 5/16" (465)	14 7/16" (367)	55" (1397)	7.5	(0.70)	7.0 (0.65)	6.9	(0.64)	24 13/16"	(630)	10.0	(0.9
155	7.6 (0.71)	6.0 (0.56)	18 5/16" (465)	14 7/16" (367)	59 ¹⁵ / ₁₆ " (1522)	8.2	(0.76)	7.6 (0.71)	7.5	(0.70)	19 7/8"	(505)	10.9	(1.0
216	8.5 (0.79)	6.7 (0.62)	18 5/16" (465)	14 7/16" (367)	67" (1702)	9.2	(0.86)	8.5 (0.79)	8.4	(0.78)	12 13/16"	(325)	12.0	(1.3
222	2.5 (0.23)	1.9 (0.18)	18 5/16" (465)	14 7/16" (367)	19 1/4" (489)	5.2	(0.48)	5.0 (0.46)	4.8	(0.45)	60 9/16"	(1538)	8.0	(0.7
2225	3.0 (0.28)	2.4 (0.22)	18 5/16" (465)	14 7/16" (367)	23 7/16" (595)	6.4	(0.59)	6.0 (0.56)	5.8	(0.54)	56 ³ / ₈ "	(1432)	9.4	(0.8
2 23	4.0 (0.37)		0.29)	18 5/16" (465)	14 7/16" (367)	31 1/16" (789)	8.5	(0.79)	7.9 (0.73)	7.8	(0.73)	48 3/4"	(1238)	12.0	(1.
2235	4.6 (0.43)		0.23)	18 ⁵ / ₁₆ " (465)	14 7/16 (367)	35 ¹⁵ / ₁₆ " (913)	9.9	(0.73)	9.2 (0.86)	9.0	(0.73)	43 7/8"	(1114)	13.6	(1.2
									` ′						
224	5.5 (0.51)		0.40)	18 5/16" (465)	14 7/16" (367)	43 1/8" (1095)	11.8	(1.10)	11.0 (1.02)	10.8	(1.00)	36 11/16"	(932)	16.0	(1.4
2245	6.1 (0.57)		0.45)	18 5/16" (465)	14 7/16" (367)	47 15/16" (1218)	13.1	(1.22)	12.2 (1.13)	12.0	(1.12)	31 7/8"	(810)	17.6	(1.6
C 25	7.0 (0.65)	5.5 (0.51)	18 5/16" (465)	14 7/16" (367)	55" (1397)	15.1	(1.40)	14.0 (1.30)	13.8	(1.28)	24 13/16"	(630)	20.0	(1

^{• &}quot;Top of Subfloor to Top of Inside Sill Stop" is calculated based upon a structural header height of 6° - $10^{\circ}1/2^{\circ}$ (2096).
• Dimensions in parentheses are in millimeters or square meters.

Casement Window Opening and Area Specifications (continued)

Window Number	Clear (Clear Ope or Widest Opening t./(m²)	Hinge	with Mode	Hinge fo Clear O Inches	r Widest pening	pening in f Hinge Wash Inches	with Mode		ight :/(mm)		ass rea ./(m²)		r Widest Opening		e with Mode :./(m²)	to Top o	Subfloor of Inside Stop s/(mm)		l Windo rea t./(m²)
C 255	7.6	(0.71)	6.0	(0.56)	18 5/16"	(465)	14 7/16"	(367)	59 15/16"	(1522)	16.4	(1.52)	15.3	(1.42)	15.0	(1.39)	19 7/8"	(505)	21.6	(2.01
C 26	8.5	(0.79)	6.7	(0.62)	18 5/16"	(465)	14 7/16"	(367)	67"	(1702)	18.4	(1.71)	17.1	(1.59)	16.8	(1.56)	12 13/16"	(325)	24.0	(2.23
C 32	2.5	(0.23)	1.9	(0.18)	18 5/16"	(465)	14 7/16"	(367)	19 1/4"	(489)	7.8	(0.73)	5.0	(0.46)	4.8	(0.45)	60 9/16"	(1538)	12.0	(1.12
325	3.0	(0.28)	2.4	(0.22)	18 5/16"	(465)	14 7/16"	(367)	23 7/16"	(595)	9.6	(0.89)	6.0	(0.56)	5.8	(0.54)	56 ³ / ₈ "	(1432)	14.1	(1.3
233	4.0	(0.37)	3.1	(0.29)	18 5/16"	(465)	14 7/16"	(367)	31 1/16"	(789)	12.8	(1.19)	7.9	(0.73)	7.8	(0.73)	48 3/4"	(1238)	17.9	(1.6
2335	4.6	(0.43)	3.6	(0.33)	18 5/16"	(465)	14 7/16"	(367)	35 15/16"	(913)	14.8	(1.38)	9.2	(0.86)	9.0	(0.84)	43 7/8"	(1114)	20.4	(1.9
34	5.5	(0.51)	4.3	(0.40)	18 5/16"	(465)	14 7/16	(367)	43 1/8"	(1095)	17.7	(1.64)	11.0	(1.02)	10.8	(1.00)	36 11/16"	(932)	24.0	(2.2
345	6.1	(0.57)	4.8	(0.45)	18 5/16"	(465)		(367)		(1218)	19.7	(1.83)	12.2	(1.13)	12.0	(1.12)	31 7/8"	(810)	26.4	(2.4
35							14 7/16"		47 15/16"				_							
	7.0	(0.65)	5.5	(0.51)	18 5/16"	(465)	14 7/16"	(367)	55"	(1397)	22.6	(2.10)	14.0	(1.30)	13.8	(1.28)	24 13/16"	(630)	29.9	(2.
W12*	3.0	(0.28)	2.5	(0.23)	22 9/16"	(573)	18 11/16"	(475)	19 1/4"	(489)	3.2	(0.30)	3.0	(0.28)	3.0	(0.28)	60 9/16"	(1538)	4.8	(0.4
W125*	3.7	(0.34)	3.0	(0.28)	22 9/16"	(573)	18 11/16"	(475)	23 7/16"	(595)	3.9	(0.36)	3.7	(0.34)	3.6	(0.33)	56 3/8"	(1432)	5.6	(0.
:W13*	4.9	(0.46)	4.0	(0.37)	22 9/16"	(573)	18 11/16"	(475)	31 1/16"	(789)	5.2	(0.48)	4.9	(0.46)	4.8	(0.45)	48 3/4"	(1238)	7.1	(0.
: W 135 ◊ *	5.7	(0.53)	5.1	(0.47)	22 9/16"	(573)	20"	(508)	36 ³ / ₈ "	(924)	6.0	(0.56)	5.7	(0.53)	5.5	(0.51)	43 7/8"	(1114)	8.0	(0.
CW14 ◊*	6.8	(0.63)	6.0	(0.56)	22 9/16"	(573)	20"	(508)	43 1/8"	(1095)	7.2	(0.67)	6.8	(0.63)	6.6	(0.61)	36 11/16"	(932)	9.5	(0.8
W145 ◊ *	7.5	(0.70)	6.7	(0.62)	22 9/16"	(573)	20"	(508)	47 15/16"	(1218)	8.0	(0.74)	7.5	(0.70)	7.3	(0.68)	31 7/8"	(810)	10.4	(0.
CW15 ◊ *	8.6	(0.80)	7.6	(0.71)	22 9/16"	(573)	20"	(508)	55"	(1397)	9.2	(0.86)	8.6	(0.80)	8.4	(0.78)	24 13/16"	(630)	11.8	(1.
CW155 ◊*	9.4	(0.87)	8.3	(0.77)	22 9/16"	(573)	20"	508)	59 15/16"	(1522)	10.0	(0.93)	9.4	(0.87)	9.1	(0.85)	19 7/8"	(505)	12.8	(1.
CW16 ◊*	10.5	(0.98)	9.3	(0.86)	22 9/16"	(573)	20"	(508)	67"	(1702)	11.2	(1.04)	10.5	(0.98)	10.2	(0.95)	12 13/16"	(325)	14.2	(1.
CW22*	3.0	(0.28)	2.5	(0.23)	22 9/16"	(573)	18 11/16"	(475)	19 1/4"	(489)	6.4	(0.59)	6.0	(0.56)	6.0	(0.56)	60 9/16"	(1538)	9.6	(0.
CW225*	3.7	(0.34)	3.0	(0.28)	22 9/16"	(573)	18 11/16"	(475)	23 7/16"	(595)	7.8	(0.72)	7.4	(0.69)	7.2	(0.67)	56 ³ / ₈ "	(1432)	11.2	(1.
CW23*	4.9	(0.46)	4.0	(0.37)	22 9/16"	(573)	18 11/16"	(475)	31 1/16"	(789)	10.4	(0.97)	9.8	(0.91)	9.6	(0.89)	48 3/4"	(1238)	14.1	(1.
CW235 ◊*	5.7	(0.53)	5.1	(0.47)	22 9/16"	(573)	20"	(508)	36 3/8"	(924)	12.0	(1.12)	11.4	(1.06)	11.1	(1.03)	43 7/8"	(1114)	16.0	(1.
CW24 ◊ *	6.8	(0.63)	6.0	(0.56)	22 9/16"	(573)	20"	(508)	43 1/8"	(1095)	14.4	(1.34)	13.5	(1.25)	13.1	(1.22)	36 11/16"	(932)	18.8	(1.
CW245 ◊*	7.5	(0.70)	6.7	(0.62)	22 9/16"	(573)	20"	(508)	47 15/16"	(1218)	16.0	(1.49)	15.0	(1.39)	14.6	(1.36)	31 7/8"	(810)	20.8	(1.
:W25 ◊ *	8.6	(0.80)	7.6	(0.71)	22 9/16"	(573)	20"	(508)	55"	(1397)	18.3	(1.70)	17.3	(1.61)	16.7	(1.55)	24 13/16"	(630)	23.5	(2.
:W255 ◊ *	9.4	(0.87)	8.3	(0.77)	22 9/16"	(573)	20"	(508)	59 15/16"	(1522)	20.0	(1.86)	18.8	(1.75)	18.2	(1.69)	19 7/8"	(505)	25.6	(2.
:W26 ◊ *	10.5	(0.98)	9.3	(0.86)	22 9/16"	(573)	20"	(508)	67"	(1702)	22.3	(2.07)	21.0	(1.95)	20.4	(1.90)	12 13/16"	(325)	28.2	(2.
CW32*	3.0	(0.28)	2.5						_		9.6	(0.89)	6.0	(0.56)						(1.
		` ′		(0.23)	22 9/16"	(573)	18 11/16"	(475)	19 1/4"	(489)			_		6.0	(0.56)	60 9/16"	(1538)	14.4	
CW325*	3.7	(0.34)	3.0	(0.28)	22 9/16"	(573)	18 11/16"	(475)	23 7/16"	(595)	11.7	(1.09)	7.4	(0.69)	7.2	(0.67)	56 3/8"	(1432)	16.8	(1.
CW33*	4.9	(0.46)	4.0	(0.37)	22 9/16"	(567)	18 11/16"	(475)	31 1/16"	(789)	15.6	(1.45)	9.8	(0.91)	9.6	(0.89)	48 3/4"	(1238)	21.1	(1.
CW335 ◊*	5.7	(0.53)	5.1	(0.47)	22 9/16"	(567)	20"	(508)	36 ³ / ₈ "	(924)	18.0	(1.67)	11.4	(1.06)	11.1	(1.03)	43 7/8"	(1114)	24.0	(2.
CW34 ◊*	6.8	(0.63)	6.0	(0.56)	22 9/16"	(567)	20"	(508)	43 1/8"	(1095)	21.6	(2.01)	13.6	(1.26)	13.1	(1.22)	36 11/16"	(932)	28.2	(2.
CW345 ◊*	7.5	(0.70)	6.7	(0.62)	22 9/16"	(567)	20"	(508)	47 15/16"	(1218)	24.0	(2.23)	15.0	(1.39)	14.6	(1.36)	31 7/8"	(810)	31.0	(2.
CW35 ◊ *	8.6	(0.80)	7.6	(0.71)	22 9/16"	(567)	20"	(508)	55"	(1397)	27.6	(2.56)	17.2	(1.60)	16.7	(1.55)	24 13/16"	(630)	35.2	(3.
CX125	4.2	(0.39)	3.5	(0.33)	25 11/16"	(653)	21 13/16"	(554)	23 7/16"	(595)	4.4	(0.41)	4.2	(0.39)	4.1	(0.38)	56 ³ / ₈ "	(1432)	6.2	(0.
CX 13	5.5	(0.52)	4.7	(0.44)	25 11/16"	(653)	21 13/16"	(554)	31 1/16"	(789)	5.9	(0.54)	5.5	(0.52)	5.4	(0.51)	48 3/4"	(1238)	7.9	(0.
CX135◊	6.4	(0.60)	5.4	(0.51)	25 11/16"	(653)	21 13/16"	(554)	35 15/16"	(913)	6.8	(0.63)	6.4	(0.60)	6.3	(0.59)	43 7/8"	(1114)	8.9	(0.
CX14 ◊	7.7	(0.72)	6.5	(0.61)	25 11/16"	(653)	21 13/16"	(554)	43 1/8"	(1095)	8.1	(0.76)	7.7	(0.72)	7.6	(0.70)	36 11/16"	(932)	10.5	(0.
X145 ◊	8.6	(0.80)	7.3	(0.67)	25 11/16"	(653)	21 13/16"	(554)	47 15/16"	(1218)	9.0	(0.84)	8.6	(0.80)	8.4	(0.78)	31 7/8"	(810)	11.6	(1.
CX15♦	9.8	(0.91)	8.3	(0.77)	25 11/16"	(653)	21 13/16"	(554)	55"	(1397)	10.4	(0.96)	9.8	(0.91)	9.7	(0.90)	24 13/16"	(630)	13.1	(1.
CX155◊	10.7	(0.99)	9.1	(0.84)	25 11/16"	(653)	21 13/16"	(554)	59 15/16"	(1522)	11.3	(1.05)	10.7	(0.99)	10.5	(0.98)	19 7/8"	(505)	14.2	(1.
CX16 ♦	12.0	(1.11)	10.1	(0.94)	25 11/16"	(653)	21 13/16"	(554)	67"	(1702)	12.6	(1.17)	12.0	(1.11)	11.8	(1.09)	12 13/16"	(325)	15.7	(1.
CX 23	5.5	(0.52)	4.7	(0.44)	25 11/16"	(653)	21 13/16"	(554)	31 1/16"	(789)	11.7	(1.09)	11.1	(1.03)	10.9	(1.01)	48 3/4"	(1238)	15.7	(1.
CX235◊	6.4	(0.60)	5.4	(0.51)	25 11/16"	(653)	21 13/16"	(554)	35 15/16"	(913)	13.6	(1.26)	12.8	(1.19)	12.6	(1.17)	43 7/8"	(1114)	17.8	(1.
CX24 ◊	7.7	(0.72)	6.5	(0.61)	25 11/16"	(653)	21 13/16"	(554)	43 1/8"	(1095)	16.3	(1.51)	15.4	(1.43)	15.1	(1.41)	36 11/16"	(932)	20.9	(1.
CX245♦	8.6	(0.80)	7.3	(0.67)	25 11/16"	(653)	21 13/16"	(554)	47 15/16"	(1218)	18.1	(1.68)	17.1	(1.59)	16.8	(1.56)	31 7/8"	(810)	23.0	(2.
X25 ◊	9.8	(0.91)	8.3	(0.07)	25 11/16	(653)	21 13/16	(554)	55"	(1397)	20.7	(1.03)	19.6	(1.82)	19.3	(1.79)	24 13/16"	(630)	26.1	(2.
CXW13 ◊	6.5	(0.60)	5.6	(0.77)	30 1/8"	(765)	26 1/4"	(667)	31 1/16"	(789)	6.8	(0.63)	6.5	(0.60)	6.1	(0.57)	48 3/4"	(1238)	9.0	(0.
XW135 ◊	7.5	(0.70)	6.6	(0.61)	30 1/8"	(765)	26 1/4"	(667)	35 15/16"	(913)	7.9	(0.73)	7.5	(0.70)	7.0	(0.65)	43 7/8"	(1114)	10.2	(0.
XW14 ◊	9.0	(0.84)	7.9	(0.73)	30 1/8"	(765)	26 1/4"	(667)	43 1/8"	(1095)	9.5	(0.88)	9.0	(0.84)	8.4	(0.78)	36 11/16"	(932)	12.0	(1.
XW145 ◊	10.0	(0.93)	8.8	(0.82)	30 1/8"	(765)	26 1/4"	(667)	47 15/16"	(1218)	10.5	(0.98)	10.0	(0.93)	9.4	(0.87)	31 7/8"	(810)	13.2	(1.
XW15 ◊**	11.5	(1.07)	-		30 1/8"	(765)	-	-	55"	(1397)	12.1	(1.12)	11.5	(1.07)			24 13/16"	(630)	14.9	(1.
XW 155 ◊ **	12.6	(1.17)	-		30 1/8"	(765)			59 15/16"	(1522)	13.1	(1.22)	12.6	(1.17)			19 7/8"	(505)	16.2	(1.
XW16 ◊**	14.0	(1.30)	-	-	30 1/8"	(765)	-	-	67"	(1702)	14.7	(1.37)	14.0	(1.30)			12 13/16"	(325)	17.9	(1.
XW 23	6.5	(0.60)	5.6	(0.53)	30 1/8"	(765)	26 1/4"	(667)	31 1/16"	(789)	13.6	(1.26)	13.0	(1.21)	12.2	(0.57)	48 3/4"	(1238)	17.9	(1.
XW 235 ◊	7.5	(0.70)	6.5	(0.61)	30 1/8"	(765)	26 1/4"	(667)	35 5/16"	(913)	15.8	(1.47)	15.0	(1.39)	14.0	(0.57)	43 7/8"	(1114)	20.3	(1.
CXW24 ◊	9.0	(0.84)	7.9	(0.73)	30 1/8"	(765)	26 1/4"	(667)	43 1/8"	(1059)	19.0	(1.77)	18.0	(1.67)	16.8	(0.57)	36 11/16"	(932)	23.9	(2.
OVINO 4E A	10.0	(0.93)	8.7	(0.81)	30 1/8"	(765)	26 1/4"	(667)	47 15/16"	(1218)	21.0	(1.95)	20.0	(1.86)	18.8	(0.57)	31 7/8"	(810)	26.3	(2.
CXW245 ◊					, ,				, 10			. ,				. ,	, ,			

^{• &}quot;Top of Subfloor to Top of Inside Sill Stop" is calculated based upon a structural header height of $6'-10^{1}/2''$ (2096).

[•] Top of sociation to top of inside similarly associated based upon a structural negative 16-10 /2 (2006).

• Dimensions in parentheses are in millimeters or square meters.

• Meet or exceed clear opening area of 5.7 sq. ft. or 0.53 m², clear opening width of 20" (508) and clear opening height of 24" (610) with appropriate hinge specified.

• Meet clear opening width of 20" (508) using hinge with wash mode and control bracket (bracket can be pivoted for cleaning position) and meet clear opening width of 22" (559) using hinge for widest clear opening.

• *Available with straight-arm operators (hinged for widest clear opening) only.



Awning Window Opening and Area Specifications

/indow lumber	Clear Opening Area Sq. Ft./(m²)		Depth Inches/(mm)	Glass Area Sq. Ft./(m²)	Vent Area Sq. Ft./(m²)	Top of Subfloor to Top of Inside Sill Stop Inches/(mm)	Overall Windo Area Sq. Ft./(m²)
R 21	0.9 (0.08		6 ³ / ₈ " (162)	1.7 (0.16)	0.9 (0.08)	67 ⁷ / ₁₆ " (1713)	2.8 (0.2)
R251	1.1 (0.10		6 3/8" (162)	2.0 (0.19)	1.1 (0.10)	67 7/16" (1713)	3.3 (0.3
R281	· ` `			2.3 (0.21)	. ,		· `
R31	1.2 (0.11		6 3/8" (162)		. ,	67 ⁷ / ₁₆ " (1713)	· `
	``	, , , , ,	6 3/8" (162)	. ,	. ,	67 ⁷ / ₁₆ " (1713)	· · ·
R351	1.6 (0.15	, ,10 ,	6 3/8" (162)	3.1 (0.29)	1.6 (0.15)	67 7/16" (1713)	4.8 (0.4
R41	1.9 (0.18	, , , ,	6 3/8" (162)	3.8 (0.35)	1.9 (0.18)	67 7/16" (1713)	5.7 (0.5
R451	2.1 (0.20	, , , , ,	6 3/8" (162)	4.2 (0.39)	2.1 (0.20)	67 7/16" (1713)	6.2 (0.5
R51	2.5 (0.23		6 3/8" (162)	4.8 (0.45)	2.5 (0.23)	67 7/16" (1713)	7.1 (0.6
R551	2.7 (0.25		6 3/8" (162)	5.2 (0.48)	2.7 (0.25)	67 7/16" (1713)	7.7 (0.7
R61	3.0 (0.28		6 3/8" (162)	5.9 (0.55)	3.0 (0.28)	67 ⁷ / ₁₆ " (1713)	8.5 (0.7
R221	0.9 (0.08		6 3/8" (162)	3.4 (0.32)	1.7 (0.16)	67 7/16" (1713)	5.6 (0.5
R2251	1.1 (0.10		6 3/8" (162)	4.0 (0.37)	2.1 (0.20)	67 7/16" (1713)	6.6 (0.6
R2281	1.2 (0.11		6 3/8" (162)	4.6 (0.43)	2.4 (0.22)	67 7/16" (1713)	7.4 (0.6
R231	1.4 (0.13		6 3/8" (162)	5.4 (0.50)	2.8 (0.26)	67 7/16" (1713)	8.4 (0.7
R321	0.9 (0.08		6 3/8" (162)	5.1 (0.47)	2.6 (0.24)	67 7/16" (1713)	8.4 (0.7
R3251	1.1 (0.10	, , , , ,	6 3/8" (162)	6.0 (0.56)	3.2 (0.29)	67 7/16" (1713)	9.9 (0.9
N21	0.9 (0.08		6 7/16" (164)	2.2 (0.20)	0.9 (0.08)	63 15/16" (1624)	3.4 (0.3
N251	1.1 (0.10		6 7/16" (164)	2.6 (0.24)	1.1 (0.10)	63 15/16" (1624)	4.0 (0.3
N281	1.2 (0.11		6 7/16" (164)	3.0 (0.28)	1.2 (0.11)	63 15/16" (1624)	4.5 (0.4
N31	1.4 (0.13	, , , , ,	6 7/16" (164)	3.5 (0.33)	1.4 (0.13)	63 15/16" (1624)	5.1 (0.4
N351	1.6 (0.15		6 7/16" (164)	4.0 (0.37)	1.6 (0.15)	63 15/16" (1624)	5.8 (0.5
N41	1.9 (0.18		6 7/16" (164)	4.8 (0.45)	1.9 (0.18)	63 15/16" (1624)	6.8 (0.6
N451	2.2 (0.20		6 7/16" (164)	5.4 (0.50)	2.2 (0.20)	63 15/16" (1624)	7.5 (0.7
N51	2.5 (0.23		6 7/16" (164)	6.2 (0.58)	2.5 (0.23)	63 15/16" (1624)	8.5 (0.7
N551	2.7 (0.25		6 7/16" (164)	6.7 (0.62)	2.7 (0.25)	63 15/16" (1624)	9.2 (0.8
N61	3.0 (0.28		6 7/16" (164)	7.5 (0.70)	3.0 (0.28)	63 15/16" (1624)	10.2 (0.9
N221	0.9 (0.08		6 7/16" (164)	4.4 (0.41)	1.7 (0.16)	63 15/16" (1624)	6.8 (0.6
N2251	1.1 (0.10	, , , , ,	6 7/16" (164)	5.2 (0.48)	2.1 (0.20)	63 15/16" (1624)	8.0 (0.7
N2281	1.2 (0.11		6 7/16" (164)	6.0 (0.56)	2.4 (0.22)	63 15/16" (1624)	9.0 (0.8
N231	1.4 (0.13		6 7/16" (164)	7.0 (0.65)	2.8 (0.26)	63 15/16" (1624)	10.2 (0.9
N321	0.9 (0.08		6 7/16" (164)	6.6 (0.61)	2.6 (0.24)	63 15/16" (1624)	10.2 (0.9
N3251	1.1 (0.10		6 7/16" (164)	7.8 (0.73)	3.2 (0.30)	63 15/16" (1624)	12.0 (1.1
21	0.9 (0.08		6 1/2" (165)	2.6 (0.24)	0.9 (0.08)	60 5/16" (1532)	4.0 (0.3
251	1.1 (0.10		6 1/2" (165)	3.2 (0.30)	1.1 (0.10)	60 5/16" (1532)	4.8 (0.4
281	1.2 (0.11		6 1/2" (165)	3.7 (0.34)	1.2 (0.11)	60 5/16" (1532)	5.3 (0.4
31	1.4 (0.13		6 1/2" (165)	4.3 (0.40)	1.4 (0.13)	60 5/16" (1532)	6.0 (0.5
351	1.6 (0.15		6 1/2" (165)	4.9 (0.46)	1.6 (0.15)	60 5/16" (1532)	6.8 (0.6
41	2.0 (0.18		6 1/2" (165)	5.9 (0.55)	2.0 (0.18)	60 5/16" (1532)	8.0 (0.7
451	2.2 (0.20	, , , ,	6 1/2" (165)	6.6 (0.61)	2.2 (0.20)	60 5/16" (1532)	8.8 (0.8
51	2.5 (0.23		6 1/2" (165)	7.5 (0.70)	2.5 (0.23)	60 5/16" (1532)	10.0 (0.9
551	2.7 (0.25		6 1/2" (165)	8.2 (0.76)	2.7 (0.25)	60 5/16" (1532)	10.9 (1.0
61	3.0 (0.28		6 1/2" (165)	9.2 (0.86)	3.0 (0.28)	60 5/16" (1532)	12.0 (1.1
221	0.9 (0.08		6 1/2" (165)	5.2 (0.48)	1.8 (0.16)	60 5/16" (1532)	8.0 (0.7
2251	1.1 (0.10		6 1/2" (165)	6.4 (0.60)	2.1 (0.20)	60 5/16" (1532)	9.6 (0.8
2281	1.2 (0.11		6 1/2" (165)	7.4 (0.69)	2.4 (0.23)	60 5/16" (1532)	10.6 (0.9
231	1.4 (0.13		6 1/2" (165)	8.6 (0.80)	2.8 (0.26)	60 5/16" (1532)	12.0 (1.1
321	0.9 (0.08		6 1/2" (165)	7.8 (0.73)	2.6 (0.25)	60 5/16" (1532)	12.0 (1.1
3251	1.1 (0.10		6 1/2" (165)	9.6 (0.89)	3.2 (0.30)	60 ⁵ / ₁₆ " (1532)	14.4 (1.3
W 21	0.9 (0.08		6 1/2" (165)	3.2 (0.30)	0.9 (0.08)	56 ¹ / ₁₆ " (1424)	4.8 (0.4
W 251	1.1 (0.10		6 1/2" (165)	3.9 (0.36)	1.1 (0.10)	56 ¹ / ₁₆ " (1424)	5.6 (0.5
W 281	1.2 (0.11		6 1/2" (165)	4.4 (0.41)	1.2 (0.11)	56 ¹ / ₁₆ " (1424)	6.2 (0.5
W 31	1.4 (0.13		6 1/2" (165)	5.2 (0.48)	1.4 (0.13)	56 ¹ / ₁₆ " (1424)	7.1 (0.6
W 351	1.6 (0.15		6 1/2" (165)	6.0 (0.56)	1.6 (0.15)	56 ¹ / ₁₆ " (1424)	8.0 (0.7
W 41	2.0 (0.18		6 1/2" (165)	7.2 (0.67)	2.0 (0.18)	56 1/16" (1424)	9.5 (0.8
W 451	2.2 (0.20		6 1/2" (165)	8.0 (0.74)	2.2 (0.20)	56 ¹ / ₁₆ " (1424)	10.4 (0.9
W 51	2.5 (0.23		6 1/2" (165)	9.2 (0.86)	2.5 (0.23)	56 1/16" (1424)	11.8 (1.1
W 551	2.7 (0.25		6 1/2" (165)	10.0 (0.93)	2.7 (0.25)	56 ¹ / ₁₆ " (1424)	12.8 (1.1
) 67 ¹ / ₂ " (1715)	6 1/2" (165)	11.2 (1.04)	3.0 (0.28)	56 ¹ / ₁₆ " (1424)	14.2 (1.3
W 61 W 221	3.0 (0.28 0.9 (0.08		6 1/2" (165)	6.4 (0.60)	1.8 (0.16)	56 ½" (1424)	9.6 (0.8

^{• &}quot;Top of Subfloor to Top of Inside Sill Stop" is calculated based upon a structural header height of 6'-10 1/2" (2096).
• Dimensions in parentheses are in millimeters or square meters.

Picture Window Area Specifications

Window Number	Glass Area		Overall Window Area	
		./(m²)	Sq. Ft	
P3030	6.8	(0.63)	9.0	(0.84)
P3035	7.8	(0.73)	10.2	(0.95)
P3040	9.4	(0.87)	12.0	(1.12)
P3045	10.4	(0.97)	13.2	(1.23)
P3050	12.0	(1.12)	14.9	(1.38)
P3055	13.0	(1.21)	16.2	(1.51)
P3060	14.6	(1.36)	17.9	(1.66)
P3530 P3535	7.8 9.0	(0.73)	10.2	(0.95)
P3540	10.8	(0.84)	13.6	(1.08)
10010		(1.00)		(1.26)
P3545	12.1	(1.12)	15.0	(1.39)
P3550 P3555	13.8	(1.28)	17.0	(1.58)
	15.1	(1.40)	18.4	(1.71)
P3560 P4030	16.8 9.4	(1.56)	20.4 12.0	(1.90)
	-	(0.87)		(1.12)
P4035	10.8	(1.00)	13.6	(1.26)
	13.0	(1.21)	16.0	(1.49)
P4045	14.5	(1.35)	17.6	(1.64)
P4050 P4055	16.6	(1.54)	20.0	(1.86)
P4060	20.2	(1.68)	21.6	(2.01)
P4530	10.4	(0.97)	13.2	(2.23)
P4535	12.1		15.2	(1.23)
P4540	14.5	(1.12)		(1.39)
P4545	16.1	(1.35)	17.6	(1.64)
P4550	18.4	(1.71)	22.0	(2.04)
P4555	20.1	(1.87)	23.8	(2.21)
P4560	22.4	(2.08)	26.4	(2.45)
P5030	12.0	(1.12)	14.9	(1.38)
P5035	13.8	(1.28)	17.0	(1.58)
P 5040	16.6	(1.54)	20.0	(1.86)
P 5045	18.4	(1.71)	22.0	(2.04)
P 5050	21.1	(1.96)	24.9	(2.31)
P 5055	23.0	(2.14)	26.9	(2.50)
P 5060	25.7	(2.39)	29.9	(2.78)
P 5530	13.0	(1.21)	16.2	(1.51)
P 5535	15.1	(1.40)	18.4	(1.71)
P 5540	18.1	(1.68)	21.6	(2.01)
P 5545	20.1	(1.87)	23.8	(2.21)
P 5550	23.0	(2.14)	26.9	(2.50)
P 6030	14.6	(1.36)	17.9	(1.66)
P 6035	16.8	(1.56)	20.4	(1.90)
P 6040	20.2	(1.88)	24.0	(2.23)
P 6045	22.4	(2.08)	26.4	(2.45)
P 6050	25.7	(2.39)	29.9	(2.78)

[•] Dimensions in parentheses are in square meters.

Awning Window Opening and Area Specifications (continued)

		Clear Opening in I	Full Open Position	-		Top of Subfloor	
Window Number	Clear Opening Area	Width	Depth	Glass Area	Vent Area	to Top of Inside Sill Stop	Overall Window Area
	Sq. Ft./(m ²)	Inches/(mm)	Inches/(mm)	Sq. Ft./(m ²)	Sq. Ft./(m ²)	Inches/(mm)	Sq. Ft./(m ²)
AW2281	1.2 (0.11)	26 7/8" (683)	6 1/2" (165)	8.8 (0.82)	2.4 (0.23)	56 1/16" (1424)	12.4 (1.15)
AW231	1.4 (0.13)	31 5/16" (795)	6 1/2" (165)	10.4 (0.97)	2.8 (0.26)	56 1/16" (1424)	14.2 (1.32)
AW321	0.9 (0.08)	19 1/2" (495)	6 1/2" (165)	9.6 (0.89)	2.6 (0.25)	56 1/16" (1424)	14.4 (1.34)
AW3251	1.1 (0.10)	23 3/4" (603)	6 1/2" (165)	11.7 (1.09)	3.2 (0.30)	56 1/16" (1424)	16.8 (1.56)
AX 251	1.1 (0.10)	23 3/4" (603)	6 1/2" (165)	4.4 (0.41)	1.1 (0.10)	53 15/16" (1370)	6.2 (0.58)
AX 281	1.2 (0.11)	26 7/8" (683)	6 1/2" (165)	5.0 (0.47)	1.2 (0.11)	53 15/16" (1370)	6.9 (0.64)
AX 31	1.4 (0.13)	31 5/16" (795)	6 1/2" (165)	5.9 (0.54)	1.4 (0.13)	53 15/16" (1370)	7.9 (0.73)
AX 351	1.6 (0.15)	36 ³ / ₁₆ " (919)	6 1/2" (165)	6.8 (0.63)	1.6 (0.15)	53 15/16" (1370)	8.9 (0.83)
AX 41	2.0 (0.18)	43 3/8" (1102)	6 1/2" (165)	8.1 (0.76)	2.0 (0.18)	53 15/16" (1370)	10.5 (0.98)
AX 451	2.2 (0.20)	48 3/16" (1224)	6 1/2" (165)	9.0 (0.84)	2.2 (0.20)	53 15/16" (1370)	11.6 (1.07)
AX 51	2.5 (0.23)	55 ¹ / ₂ " (1410)	6 1/2" (165)	10.4 (0.96)	2.5 (0.23)	53 15/16" (1370)	13.1 (1.22)
AX 551	2.7 (0.25)	60 ³ / ₁₆ " (1529)	6 1/2" (165)	11.3 (1.05)	2.7 (0.25)	53 15/16" (1370)	14.2 (1.32)
AX 61	3.0 (0.28)	67 1/2" (1715)	6 1/2" (165)	12.6 (1.17)	3.0 (0.28)	53 15/16" (1370)	15.7 (1.46)
AX 2251	1.1 (0.10)	23 3/4" (603)	6 1/2" (165)	8.9 (0.82)	2.1 (0.20)	53 15/16" (1370)	12.4 (1.15)
AX 2281	1.2 (0.11)	26 7/8" (683)	6 1/2" (165)	10.0 (0.93)	2.4 (0.23)	53 15/16" (1370)	13.8 (1.28)
AX 231	1.4 (0.13)	31 5/16" (795)	6 1/2" (165)	11.7 (1.09)	2.8 (0.26)	53 15/16" (1370)	15.7 (1.46)
AX 3251	1.1 (0.10)	23 3/4" (603)	6 1/2" (165)	13.3 (1.24)	3.2 (0.30)	53 15/16" (1370)	18.6 (1.73)
AXW 281	1.2 (0.11)	26 7/8" (683)	6 1/2" (165)	5.8 (0.54)	1.2 (0.11)	48 1/2" (1232)	7.9 (0.73)
AXW 31	1.4 (0.13)	31 5/16" (795)	6 1/2" (165)	6.8 (0.63)	1.4 (0.13)	48 1/2" (1232)	9.0 (0.84)
AXW 351	1.6 (0.15)	36 3/16" (919)	6 1/2" (165)	7.9 (0.73)	1.6 (0.15)	48 1/2" (1232)	10.2 (0.95)
AXW 41	2.0 (0.18)	43 3/8" (1102)	6 1/2" (165)	9.5 (0.88)	2.0 (0.18)	48 1/2" (1232)	12.0 (1.12)
AXW 451	2.2 (0.20)	48 3/16" (1224)	6 1/2" (165)	10.5 (0.98)	2.2 (0.20)	48 1/2" (1232)	13.2 (1.23)
AXW 51	2.5 (0.23)	55 ½" (1410)	6 1/2" (165)	12.1 (1.12)	2.5 (0.23)	48 1/2" (1232)	14.9 (1.38)
AXW 551	2.7 (0.25)	60 ³ / ₁₆ " (1529)	6 1/2" (165)	13.1 (1.22)	2.7 (0.25)	48 1/2" (1232)	16.2 (1.51)
AXW61	3.0 (0.28)	67 ¹ / ₂ " (1715)	6 1/2" (165)	14.7 (1.37)	3.0 (0.28)	48 1/2" (1232)	17.9 (1.66)
AXW 2281	1.2 (0.11)	26 7/8" (683)	6 1/2" (165)	11.6 (1.08)	2.4 (0.23)	48 1/2" (1232)	15.8 (1.47)
AXW 231	1.4 (0.13)	31 3/8" (795)	6 1/2" (165)	13.6 (1.26)	2.8 (0.26)	48 1/2" (1232)	18.0 (1.67)
A 335*	1.4 (0.13)	31 5/16" (795)	6 1/2" (676)	7.0 (0.65)	1.3 (0.12)	43 11/16" (1110)	10.2 (0.95)
A 3535	1.6 (0.14)	36 3/16" (943)	6 1/2" (165)	8.1 (0.75)	1.6 (0.15)	43 11/16" (1110)	11.5 (1.07)
AP32V	1.4 (0.12)	31 5/16" (795)	6 1/2" (165)	9.4 (0.87)	1.4 (0.13)	36 7/16" (926)	12.0 (1.12)
AP352V	1.6 (0.14)	36 3/16" (919)	6 1/2" (165)	10.9 (1.01)	1.6 (0.15)	36 7/16" (926)	13.6 (1.26)
AP42V	2.0 (0.17)	43 3/8" (1102)	6 1/2" (165)	13.1 (1.22)	2.0 (0.18)	36 7/16" (926)	16.0 (1.49)
A 212	0.9 (0.08)	19 1/2" (495)	6 1/2" (165)	5.2 (0.48)	1.8 (0.16)	60 5/16" (1532)	8.0 (0.74)
A 213	0.9 (0.08)	19 1/2" (495)	6 1/2" (165)	7.8 (0.73)	2.6 (0.25)	60 5/16" (1532)	12.0 (1.12)
A 312	1.4 (0.13)	31 5/16" (795)	6 1/2" (165)	8.6 (0.80)	2.8 (0.26)	60 5/16" (1532)	12.0 (1.12)
A 313	1.4 (0.13)	31 5/16" (795)	6 1/2" (165)	12.9 (1.20)	4.2 (0.39)	60 5/16" (1532)	18.0 (1.67)
PA3050**	1.4 (0.13)	31 5/16" (795)	6 1/2" (165)	4.3 (0.40)	1.4 (0.13)	60 5/16" (1532)	6.0 (0.56)
PA 3060**	1.4 (0.13)	31 5/16" (795)	6 1/2" (165)	4.3 (0.40)	1.4 (0.13)	60 5/16" (1532)	6.0 (0.56)
PA3550**	1.6 (0.15)	36 ³ / ₁₆ " (919)	6 1/2" (165)	4.9 (0.46)	1.6 (0.15)	60 5/16" (1532)	6.8 (0.63)
PA 3560**	1.6 (0.15)	36 ³ / ₁₆ " (919)	6 1/2" (165)	4.9 (0.46)	1.6 (0.15)	60 5/16" (1532)	6.8 (0.63)
PA 4060**	2.0 (0.18)	43 3/8" (1102)	6 1/2" (165)	5.9 (0.55)	2.0 (0.18)	60 5/16" (1532)	8.0 (0.74)
AXW 312	1.4 (0.13)	31 1/3" (795)	6 1/2" (165)	13.6 (1.26)	2.8 (0.26)	48 1/2" (1232)	18.0 (1.67)

Transom Window Area Specifications

		u opo	J		
Window Number	Ar	ass ea ./(m²)	Overall Window Area Sq. Ft./(m²)		
CTR1510	0.7	(0.07)	1.4	(0.13)	
CTR1810	0.8	(0.07)	1.7	(0.16)	
CTR21810	1.7	(0.16)	3.4	(0.32)	
CTR31810	2.6	(0.24)	5.1	(0.47)	
CTR2010	1.0	(0.09)	2.0	(0.19)	
CTR22010	2.1	(0.19)	4.0	(0.37)	
CTR32010	3.1	(0.29)	6.0	(0.56)	
CTR2410	1.2	(0.11)	2.4	(0.22)	
CTR22410	2.5	(0.24)	4.7	(0.44)	
CTR32410	3.8	(0.35)	7.1	(0.66)	
CTR2810	1.4	(0.13)	2.6	(0.24)	
CTR22810	2.9	(0.27)	5.2	(0.49)	
CTR3010	1.6	(0.15)	3.0	(0.28)	
CTR23010	3.3	(0.31)	6.0	(0.55)	
CTR5110	2.8	(0.26)	5.1	(0.47)	
CTR2910	1.5	(0.14)	2.8	(0.26)	
CTR3410	1.8	(0.17)	3.4	(0.32)	
CTR4010	2.2	(0.20)	4.0	(0.37)	
CTR4810	2.6	(0.24)	4.7	(0.44)	
CTR5210	2.9	(0.27)	5.2	(0.48)	
CTR51110	3.4	(0.32)	6.0	(0.56)	
CTR6010	3.4	(0.32)	6.0	(0.56)	
CTR7010	4.0	(0.37)	7.1	(0.66)	
PTR3010	1.6	(0.15)	3.0	(0.28)	
PTR3510	1.8	(0.17)	3.4	(0.32)	
PTR4010	2.2	(0.20)	4.0	(0.37)	
PTR4510	2.4	(0.22)	4.4	(0.41)	
PTR5010	2.8	(0.26)	5.0	(0.47)	
PTR5510	3.0	(0.28)	5.4	(0.50)	
PTR6010	3.4	(0.32)	6.0	(0.56)	

[•] Dimensions in parentheses are in square meters.

^{• &}quot;Top of Subfloor to Top of Inside Sill Stop" is calculated based upon a structural header height of 6'-10 1/2" (2096).

[•] Dimensions in parentheses are in millimeters or square meters.

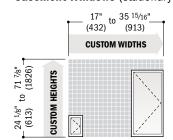
• Clear opening area of 5.8 sq. ft. or 0.54 m² and clear opening height of 26 ½" (673) can be obtained by detaching operator from sash.

• Dimensions and calculations are for bottom venting sash.



Custom Sizes and Specification Formulas

Casement Windows (stationary and venting)

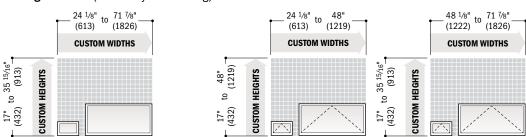




Available in 1/8" (3) increments between minimum and maximum widths and heights. Windows can also be custom sized to match standard sizes ending in a sixteenth of an inch. Some restrictions apply; contact your Andersen supplier. Custom sizing is available for single windows only. To achieve custom-size 2- or 3-wide combinations, join custom-size single windows. For minimum rough opening dimensions for joined windows, see specific joining instruction guides. Measurement guide for custom-size windows can be found at andersenwindows.com/measure.

Clear Opening	width = window width - 5.81" (148) = (window width - 9.66" (245)) x 1.07 = window width - 9.70" (246) Height = window height - 4.43" (113) = window height - 4.85" (123)	Width \geq 24 ½" (613) (hinge for widest clear opening) Width \geq 28 ¾" (721) (hinge with wash mode and control bracket) Width \geq 17" (432) (hinge with wash mode) Height \geq 40 ½1/6" (1037) and $<$ 48" (1219); Width \geq 28 ¾%" (721) and $<$ 31 ½" (800) All other window heights	Min. R.O.	width = window width + $\frac{1}{2}$ " (13) Height = window height + $\frac{1}{2}$ " (13)
Vent Opening	$\label{eq:width} \begin{tabular}{ll} \textbf{width} &= window \ width - 5.81" \ (148) \\ &= window \ width - 6.10" \ (155) \\ \end{tabular}$ $\begin{tabular}{ll} \textbf{Height} &= window \ height - 4.43" \ (113) \\ &= window \ height - 4.85" \ (123) \\ \end{tabular}$	Width \geq 24 $^{1}/8"$ (613) (hinge for widest clear opening) Width \geq 17" (432) (hinge with wash mode) Height \geq 40 $^{13}/16"$ (1037) and $<$ 48" (1219); Width \geq 28 $^{3}/8"$ (721) and $<$ 31 $^{1}/2"$ (800) All other window heights	Unobst. GIs.	$\label{eq:width} \begin{tabular}{ll} width = window width - 4.40" (112) \\ \begin{tabular}{ll} Height = window height - 4.95" (126) \\ \end{tabular}$

Awning Windows (stationary and venting)



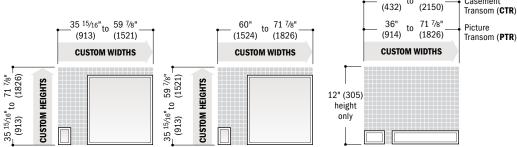
Clear Opening	Width = window width - 4.53" (115)		Min. R.O.	Width = window width + 1/2" (13)
	Depth = 6.38 " (162) = 6.44 " (164) = 6.50 " (165)	Height \geq 17" (432) and < 20 $^{1}/_{2}$ " (521) Height \geq 20 $^{1}/_{2}$ " (521) and < 24 $^{1}/_{8}$ " (613) All other window heights		Height = window height + $1/2"$ (13)
Vent Opening	width = window width - 4.53" (115)		Unobst.Gls.	Width = Window Width - 4.81" (122)
	Depth = $6.38" (162)$ = $6.44" (164)$	Height \geq 17" (432) and < 20 $^{1}/_{2}$ " (521) Height \geq 20 $^{1}/_{2}$ " (521) and < 24 $^{1}/_{8}$ " (613) All other window heights		Height = window height - 4.51" (115)

17"

84 5/8" to

Casement

Casement/Awning Picture and Transom Windows



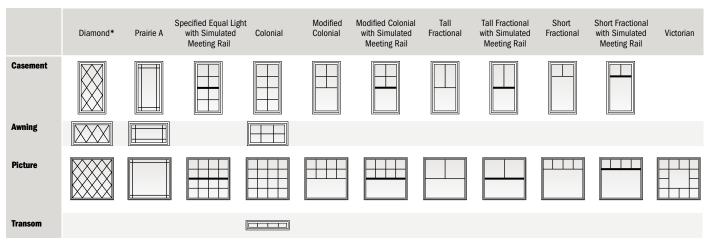
Min. R.O.	$\textbf{Width} = \textbf{window width} - \frac{1}{2} \textbf{"} (13)$
	Height = window height $-1/2"$ (13)
Unobst. Gls.	Width = window width - 4.80" (122)
+	Height = window height - 4.80" (122)

[·] Dimensions in parentheses are in millimeters

[•] Clear Opening formulas provide dimensions for determining area available for egress. Vent Opening formulas provide dimensions for determining area available for passage of air. Min. R.O. (minimum rough opening) formulas provide minimum rough opening width and height dimensions. Unobst. Gls. (unobstructed glass) formulas provide dimensions for determining area available for passage of light.

[•] Refer to andersenwindows.com/measure for detailed instructions on how to properly measure for custom-size windows.

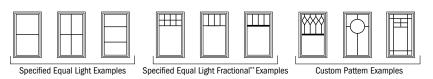
Grille Patterns



^{*}Available only in Simulated Divided Light (SDL) configuration and only in 3/4" (19) and 7/8" (22) widths.

Number of lights and overall pattern varies with window size.

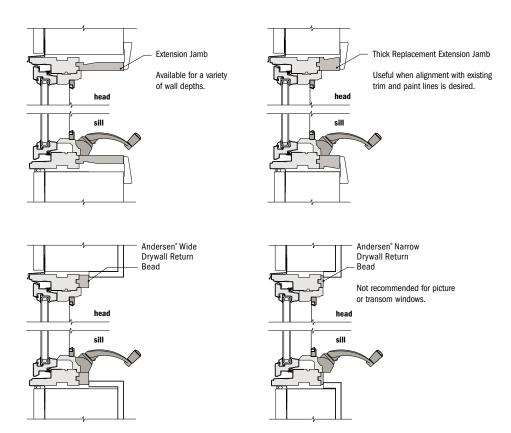
Patterns not available in all configurations. Specified equal light and custom patterns are also available. For more grille options, see page 14 or visit andersenwindows.com/grilles.



^{**}Daylight opening dimensions are available at 8" (203): 10" (254): 12" (305): center and custom dimensions.

Interior Trim Options

Extension jamb and drywall return bead applications shown. See page 21 for more information.

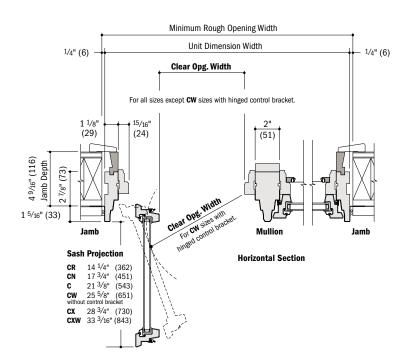


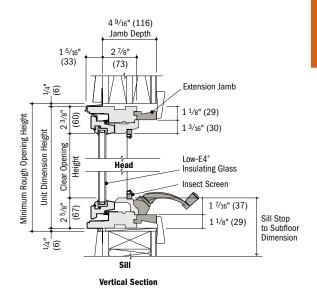
- *Light-colored areas are parts included with window. Dark-colored areas are additional Andersen* parts required to complete window assembly as shown.
- Dimensions in parentheses are in millimeters.
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com.



Casement Window Details

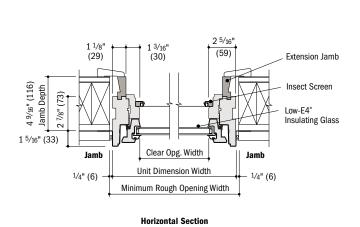
Scale $1^{1}/2$ " (38) = 1'-0" (305) - 1:8

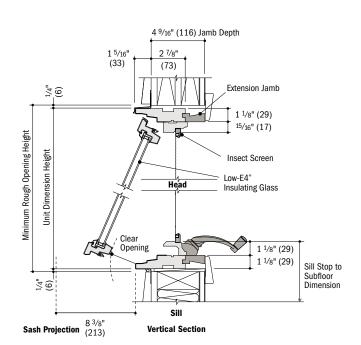




Awning Window Details

Scale $1^{1}/2$ " (38) = 1'-0" (305) - 1:8



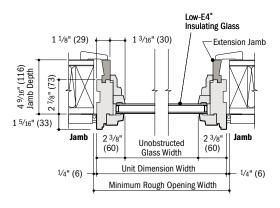


- 4 9/16" (116) overall jamb depth and 2 7/8" (73) base jamb depth measurement is from back side of installation flange.
- Light-colored areas are parts included with window. Dark-colored areas are additional Andersen* parts required to complete window assembly as shown.
- Dimensions in parentheses are in millimeters.
- * Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 210-211.
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com.

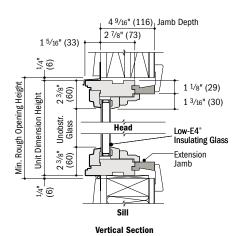
CASEMENT & AWNING WINDOWS

Picture and Transom Window Details

Scale $1^{1}/2^{1}$ (38) = 1'-0'' (305) -1:8



Horizontal Section



Horizontal (stack) Joining Detail

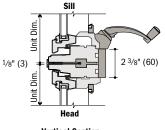
Scale $1^{1}/2^{1}$ (38) = 1'-0'' (305) - 1:8

Overall Window Dimension Height

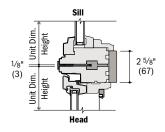
Sum of individual window heights plus 1/8" (3) for each join.

Overall Rough Opening Height

Overall window dimension height plus 1/2" (13).



Vertical Section Casement over Awning

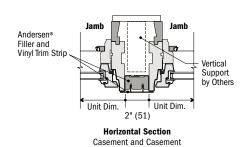


Vertical Section Picture over Casement

Separate Rough Openings Detail

Scale $1^{1}/2^{1}$ (38) = 1'-0'' (305) - 1:8

To meet structural requirements or to achieve a wider joined appearance, windows may be installed into separate rough openings having vertical support (by others) in combination with Andersen® exterior filler and exterior vinyl trim.



Vertical (ribbon) Joining Detail

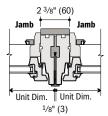
Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8

Overall Window Dimension Width

Sum of individual window widths plus 1/8" (3) for each join.

Overall Rough Opening Width

Overall window dimension width plus 1/2" (13).



Horizontal Section Casement to Casement

For more joining information, see the combination designs section starting on page 181.

- 4 9 /se" (116) overall jamb depth and 2 7 /s" (73) base jamb depth measurement is from back side of installation flange.
 Light-colored areas are parts included with window. Dark-colored areas are additional Andersen* parts required to complete window assembly as shown.
- Dimensions in parentheses are in millimeters
- Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 210-211.
 Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com.
- · Consult with an architect or structural engineer regarding minimum requirements for structural support members between adjacent rough openings.





REPLACEMENT CASEMENT & AWNING WINDOWS

FEATURES

FRAME

- A seamless one-piece, rigid vinyl frame cover is secured to the exterior of the frame to protect the wood frame from moisture and maintain an attractive appearance while minimizing maintenance.
- Pre-drilled, through-the-jamb installation holes allow for quick and easy installation.
- Wood frame members are treated with a water-repellent preservative for long-lasting* protection and performance.
- Interior stops are unfinished pine. Low-maintenance prefinished white, dark bronze and black** interiors are also available.

SASH

- Rigid vinyl encases the entire sash - a vinyl weld protects each sash corner for superior weathertightness. It maintains an attractive appearance and minimizes maintenance.
- Wood core members provide excellent structural stability and energy efficiency.
- **6** Vinyl closed-cell foam weatherstrip is factory installed on the perimeter of the sash.

GLASS

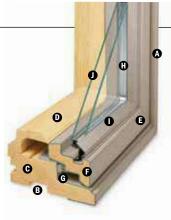
- 1 In addition to stainless steel glass spacers, black or white glass spacers are now available to allow the spacer to blend in with the unit color.
- A glazing bead and silicone provide superior weathertightness and durability.
- High-Performance options include:
- · Low-E4® glass
- Low-E4 HeatLock® glass
- Low-E4 SmartSun[™] glass
- · Low-E4 SmartSun HeatLock glass
- · Low-E4 Sun glass

Tempered and other glass options are available. Contact your Andersen

A removable translucent film helps shield the glass from damage during delivery and construction, and simplifies finishing at the job site.

Patterned Glass

Patterned glass options are available. See page 12 for more details.



HARDWARE

Smooth Control Hardware System



The smooth control hardware system employs a worm gear drive for easy operation. Units with a wash mode have hinges that move the sash away from the frame to provide easier glass

cleaning. CXW15, CXW155, CXW16 and CXW25 sizes not available with wash mode. Hardware option and finish must be specified. Operator handle and cover sold separately.

Single-Actuation Casement Lock



On casement windows, a singleactuation lock easily releases all locking points on the casement sash while the reach-out action eliminates binding when closing. The lock handle is offered in finishes that coordinate with your specified hardware option.

Awning Sash Locks



Awning sash locks provide an added measure of security and weathertightness. Hardware style and finish options are compatible with Andersen® casement windows to ensure consistency in appearance when used in window combination designs.

INSTALLATION

Included Installation Materials

Flat self-hanging shims, backer rod, installation screws and complete instructions are included with each replacement window. See the measurement guide and worksheet at andersenwindows.com/measure.



EXTERIOR & INTERIOR OPTIONS

EXTERIOR COLORS



INTERIOR OPTIONS



Dark Bronze*

HARDWARE OPTIONS Sold Separately



CONTEMPORARY FOLDING

Black | Bright Brass | Gold Dust Oil Rubbed Bronze | Satin Nickel Stone | White



TRADITIONAL FOLDING

Antique Brass | Black | Bright Brass Distressed Bronze | Distressed Nickel Gold Dust | Oil Rubbed Bronze Satin Nickel | Stone | White

Folding handles avoid interference with window treatments



Rold name denotes finish shown

Bronze



ESTATE™

Antique Brass | Bright Brass Brushed Chrome | Distressed Bronze Distressed Nickel | Oil Rubbed Bronze Polished Chrome | Satin Nickel

HARDWARE FINISHES



Chrome

Dimensions in parentheses are in millimeters.

Printing limitations prevent exact replication of colors and finishes. See your Andersen supplier for actual color and finish samples.

Naturally occurring variations in grain, color and texture of wood make each window one of a kind. All wood interiors are unfinished unless a finish is specified. Distressed bronze and oil rubbed bronze are "living" finishes that will change with time and use.

Nickel

^{*}Visit andersenwindows.com/warranty for details.

^{**}Products with dark bronze and black interiors have matching exteriors.



ACCESSORIES Sold Separately

FRAME

Extension Jambs





Standard jamb depth is 27/8" (73). Extension jambs are available in unfinished pine or prefinished white, dark bronze and black. Some sizes may be veneered.

Factory-applied and non-applied interior extension jambs are available in 1/16" (1.5) increments between 4%₁₆" (116) and 7 1/8" (181). Extension jambs can be factory applied to either three sides (stool and apron application) or four sides (picture frame casing).

Thick Replacement Extension Jambs



To help preserve original alignment of trim and paint lines in replacement situations, special 11/8" (29) thick replacement extension jambs are available. Factory-applied and non-applied extension jambs are available in 1/16" (1.5) increments between 4%16" (116) and 71/8" (181). Non-applied extension jambs are available in 12' (3658) lineals. Detail on page 34.

Drywall Return Bead



A drywall return bead is available in a narrow or wide dimension with unfinished pine or prefinished white, dark bronze and black interiors. Can be ordered factory applied or in nonapplied lineals. Detail on page 34.

HARDWARE

Corrosion-Resistant Components



Corrosion-resistant hinge and operator arm hardware is designed for applications in harsh and corrosive environments such as heavy industrial or coastal areas."

Window Opening Control Device



A window opening control device is available, which limits sash travel to less than 4" (102) when the window is first opened. Available factory applied, or as a field-applied kit in stone, white and black.

Power Operator for Awning Windows



Awning windows can be ordered with an operator enhanced by PowerAssist™ technology that opens and closes the window with the touch of a button. Easy to install, the 24-volt system features a concealed window power drive, battery backup in case of a power outage and a moisture sensor that automatically closes the window when it rains. A wireless remote control is available (sold separately).

The PowerAssist system is controlled by a wall-mounted console, which includes a power box, battery, touch pad and mounting bracket. Windows can be ordered factory prepped to save time, or they can be ordered as a field kit. Power driver requires field installation. PowerAssist technology eliminates the need for sash locks. Available for windows up to 5' (1524) wide. Not available for units with Stormwatch® Protection or performance upgrades.

SPECIAL USE OPERATOR **HANDLES**

Available in Classic Series[™] design only.

Compact Operator Handle



Specially designed for use in situations where blinds or other window treatments interfere with standard operator handle. Available in white or stone finish.

Easy-Grip Handle



Operator Spline Cover



An operator spline cover is an attractive cap that covers the roto operator stud when the handle has been removed to control access or operation of the window. The operator spline cover should not be used on any window designated or intended for emergency escape or rescue. Please consult your local building code official for local egress code requirements.

Metal T-Handle





Our smallest operator handle, the metal T-handle, may make it more difficult for young children (5 and under) to open the window. For more information on child safety, write:

Andersen Corporation LookOut For Kids® Program 100 Fourth Avenue North Bayport, MN 55003 Call 800-313-8889 or email lofk@andersencorp.com.

GLASS

Andersen® Art Glass

Andersen art glass panels come in a variety of original patterns. See art glass section starting on page 173 for more information or visit andersenwindows.com/artglass.

INSECT SCREENS

TruScene® Insect Screens



Andersen TruScene insect screens let in over 25% more fresh air** and provide 50% greater clarity than conventional Andersen insect screens, all while keeping out unwanted small insects. For casement and awning windows, frames are available in white, stone, dark bronze and black, or with pine veneer frame interiors to blend with the wood interior of the window.

Conventional Insect Screens

Conventional insect screens have charcoal powder-coated aluminum screen mesh. Available with frames in white, stone, dark bronze and black.

Grilles are available in a variety of configurations and widths. For casement and awning window grille patterns, see page 34.

EXTERIOR TRIM

Available with Andersen exterior trim. See exterior trim section starting on page 175.

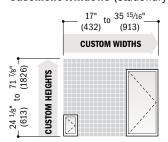
- Painting and staining may cause damage to rigid vinyl.
- · 400 Series windows in Terratone color may be painted any color lighter than Terratone color using quality oil-based or latex paint.
- · Do not paint 400 Series windows in white, canvas, Sandtone, dark bronze, forest green or black exterior colors
- · Andersen does not warrant the adhesion or performance of homeowner-applied paint over vinyl or other factory-coated surfaces.
- · For vinyl painting instructions and preparation, contact your Andersen supplier.
- Do not paint weatherstrip.
- Creosote-based stains should not come in contact with Andersen products.
- · Abrasive cleaners or solutions containing corrosive solvents should not be used on Andersen products.

^{*}Visit andersenwindows.com/warranty for details.

REPLACEMENT CASEMENT & AWNING WINDOWS

Replacement Sizes and Specification Formulas

Casement Windows (stationary and venting)

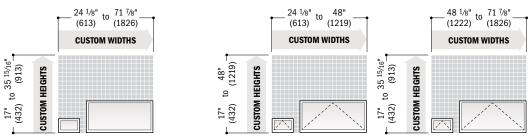




Available in ¹/8" (3) increments between minimum and maximum widths and heights. Windows can also be custom sized to match standard sizes ending in a sixteenth of an inch. Some restrictions apply; contact your Andersen supplier. Custom sizing is available for single windows only. To achieve custom-size 2- or 3-wide combinations, join custom-size single windows. For minimum rough opening dimensions for joined windows, see specific joining instruction guides. Measurement guide for custom-size windows can be found at **andersenwindows.com/measure**. Thick replacement extension jambs are available to preserve original alignment of trim and paint lines. Shown on page 39; see page 34 for detail.

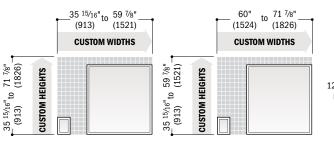


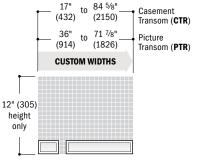
Awning Windows (stationary and venting)



Clear Opening	width = window width - 4.53" (115)		Min. R.O.	width = window width + 1/2" (13)
	Depth = 6.38" (162) = 6.44" (164) = 6.50" (165)	Height \geq 17" (432) and $<$ 20 $^{1}/_{2}$ " (521) Height \geq 20 $^{1}/_{2}$ " (521) and $<$ 24 $^{1}/_{8}$ " (613) All other window heights		Height = window height + 1/2" (13)
Vent Opening	Width = window width - 4.53" (115)		Unobst. Gls.	width = window width - 4.81" (122)
	Depth = 6.38" (162) = 6.44" (164) = 6.50" (165)	Height $\geq 17"$ (432) and $< 20 \frac{1}{2}"$ (521) Height $\geq 20 \frac{1}{2}"$ (521) and $< 24 \frac{1}{8}"$ (613) All other window heights		Height = window height - 4.51" (115)

Casement/Awning Picture and Transom Windows





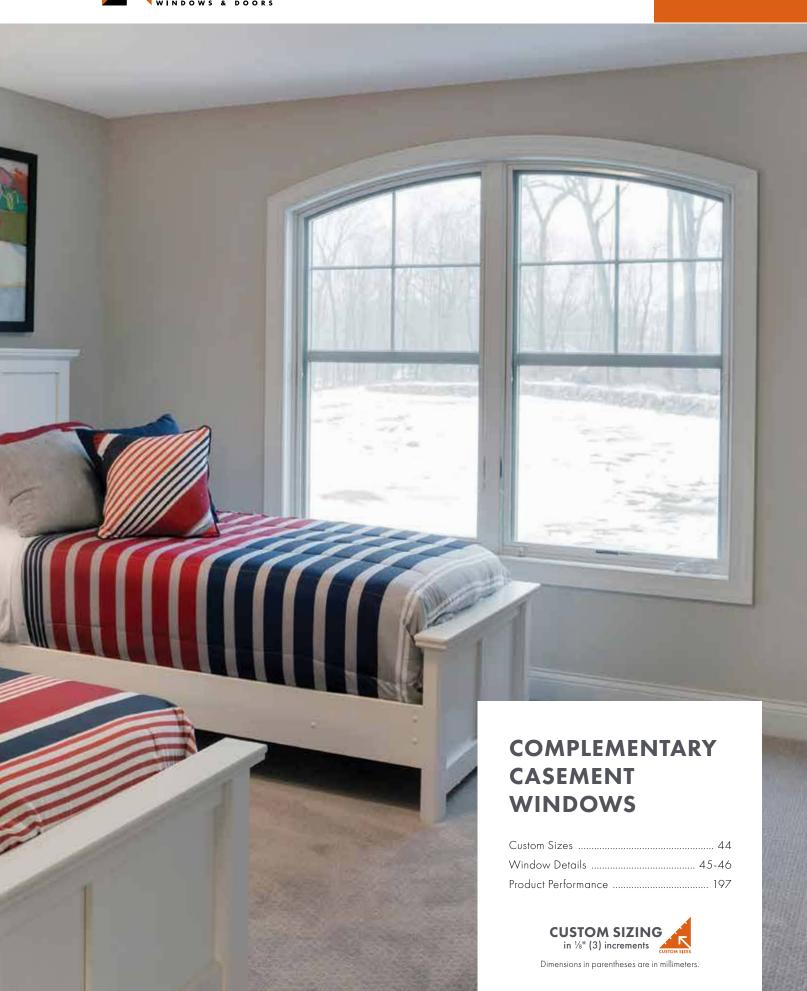
Min. R.O.	width = window width $-\frac{1}{2}$ " (13)
	Height = window height - 1/2" (13)
Unobst.Gls.	Width = Window Width - 4.80" (122)
-	Height = window height - 4.80" (122)

[•] Dimensions in parentheses are in millimeters

[•] Clear Opening formulas provide dimensions for determining area available for egress. Vent Opening formulas provide dimensions for determining area available for passage of air. Min. R.O. (minimum rough opening) formulas provide minimum rough opening width and height dimensions. Unobst. Gls. (unobstructed glass) formulas provide dimensions for determining area available for passage of light.

[•] Refer to andersenwindows.com/measure for detailed instructions on how to properly measure for custom-size windows.





COMPLEMENTARY CASEMENT WINDOWS

FEATURES

FRAME

- A Heavy-duty extruded aluminum cladding protects the frame exterior, providing low-maintenance durability. Standard cladding finish meets AAMA 2604. An optional finish that meets the AAMA 2605 standard is also available.
- Wood frame members are treated with a water-repellent preservative for long-lasting* protection and performance.
- Interior stops are unfinished. Low-maintenance prefinished white, dark bronze and black interiors are also available.

Installation flange extends 1 ½" (38) around the perimeter of the unit for positioning and locating. Installation clips are standard for increased structural anchoring to building members. Mounted around the frame perimeter, the clips rotate into position and can be bent into place against the framing members to suit all jamb conditions.

SASH

- **D** Wood core members provide excellent structural stability and energy efficiency.
- Heavy-duty extruded aluminum cladding protects the sash exterior, providing low-maintenance durability.
- Weatherstrip throughout the unit provides a long-lasting,* energyefficient seal. Rain skirt is factory installed on the perimeter of the sash.

GLASS

- **6** In addition to stainless steel glass spacers, black or white glass spacers are now available to allow the spacer to blend in with the unit color.
- Silicone glazing bead combined with two-sided silicone tape provide superior weathertightness.
- High-Performance options include:
- Low-E4® glass
- · Low-E4 HeatLock® glass
- Low-E4 SmartSun[™] glass
- · Low-E4 SmartSun HeatLock glass
- · Low-E4 Sun glass

Tempered and other glass options are available. Contact your Andersen supplier.

A removable translucent film helps shield the glass from damage during delivery and construction, and simplifies finishing at the job site.

Patterned Glass

Patterned glass options are available. See page 12 for more details.



HARDWARE Smooth Control Hardware System



The smooth control hardware system employs a worm gear drive for easy operation. Units with a wash mode have hinges that move the sash away from the frame to provide easier glass cleaning on rectangular units. Arch and Springline™ casement units use the same smooth control hardware system with stainless steel butt hinges for smooth operation. Hardware option and finish must be specified. Operator handle and cover sold separately.

Single-Actuation Casement Lock



A single-actuation lock easily releases all locking points on the casement sash while the reach-out action eliminates binding when closing. The lock handle is offered in finishes that coordinate with your specified hardware option.

EXTERIOR & INTERIOR OPTIONS

EXTERIOR COLORS



INTERIOR OPTIONS



HARDWARE OPTIONS Sold Separately



CONTEMPORARY FOLDING

Black | Bright Brass | Gold Dust Oil Rubbed Bronze | Satin Nickel Stone | White



TRADITIONAL FOLDING

Antique Brass | Black | Bright Brass Distressed Bronze | Distressed Nickel Gold Dust | Oil Rubbed Bronze Satin Nickel | Stone | White

Folding handles avoid interference with window treatments



Bold name denotes finish shown.



Antique Brass | Bright Brass Brushed Chrome | Distressed Bronze Distressed Nickel | Oil Rubbed Bronze Polished Chrome | Satin Nickel

HARDWARE FINISHES



*Visit andersenwindows.com/warranty for details. Dimensions in parentheses are in millimeters.

Printing limitations prevent exact replication of colors and finishes. See your Andersen supplier for actual color and finish samples. Naturally occurring variations in grain, color and texture of wood make each window one of a kind. All wood interiors are unfinished unless a finish is specified. Distressed bronze and oil rubbed bronze are "living" finishes that will change with time and use.



FRENCH CASEMENT



Andersen® complementary French casements allow both sash to swing outward from the center, eliminating a center mullion post. They offer smooth operating multi-point locking mechanisms and hinges. The multi-point lock is activated with a single turn of a handle that simultaneously secures both sash. French casement windows have a unique locking handle that's available in antique brass, black, bright brass, brushed chrome, oil rubbed bronze, polished chrome, satin nickel, stone and white finishes.

ACCESSORIES Sold Separately

FRAME

Extension Jambs





Complementary casement jamb depth is 3 3/8" (86). Extension base jambs are available in 1/16" (1.5) increments between 4 9/16" (116) and 7 1/8" (181). Additional dimensions are available. Contact your Andersen supplier for more information. Extension jambs are available in unfinished pine or prefinished white, dark bronze and black. Available for job site application or can be factory applied.

HARDWARE

Corrosion-Resistant Components



Corrosion-resistant hinge and operator arm hardware is designed for applications in harsh and corrosive environments such as heavy industrial or coastal areas.* Shown above on a 400 Series casement window.

Window Opening Control Device



A window opening control device is available, which limits sash travel to less than 4" (102) when the window is first opened. Available factory applied, or as a field-applied kit in stone, white and black. Not available for French casement windows.

SPECIAL USE OPERATOR HANDLES

Available in Classic Series[™] design only.

Compact Operator Handle



Specially designed for use in situations where blinds or other window treatments interfere with standard operator handle. Available in white or stone finish.

Easy-Grip Handle

Larger knob makes it easier to grip and operate. Available in white or stone finish.

Operator Spline Cover



An operator spline cover is an attractive cap that covers the roto operator stud when the handle has been removed to control access or operation of the window. The operator spline cover should not be used on any window designated or intended for emergency escape or rescue. Please consult your local building code official for local egress code requirements.

Metal T-Handle





Our smallest operator handle, the metal T-handle, may make it more difficult for young children (5 and under) to open the window. For more information on child safety, write:

Andersen Corporation **LookOut For Kids® Program** 100 Fourth Avenue North Bayport, MN 55003 Call 800-313-8889 or email **lofk@andersencorp.com**.

INSECT SCREENS

TruScene® Insect Screens



Andersen TruScene insect screens let in over 25% more fresh air** and provide 50% greater clarity than conventional Andersen insect screens, all while keeping out unwanted small insects. For complementary casement windows, TruScene frames are available in white, stone, dark bronze and black as well as pine, maple and oak wood veneers.

Conventional Insect Screens

Conventional insect screens have black fiberglass screen mesh. Optional charcoal powder-coated aluminum screen mesh is available. Frames are available in white, stone, dark bronze and black.

CAUTION:

- Do not paint weatherstrip.
- Creosote-based stains should not come in contact with Andersen products.
- Abrasive cleaners or solutions containing corrosive solvents should not be used on Andersen products.

^{*}Visit andersenwindows.com/warranty for details.

^{**}TruScene insect screens let in over 25% more fresh air than standard Andersen fiberglass insect screens. Dimensions in parentheses are in millimeters.

COMPLEMENTARY CASEMENT WINDOWS

Shapes and Sizes

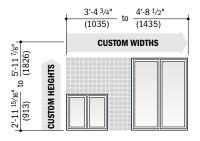
Standard sizes are available for French, Springline™ French and Arch French casement windows. Springline, Springline flanker, twin Springline, arch, twin and triple arch, trapezoid, unequal leg arch and rectangular casement window standard sizes are also available. For casement picture and transom window sizes, contact your Andersen supplier.

Custom Sizes

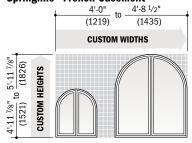


Choose left, right or stationary as viewed from the exterior. Custom-size windows are available in 1/8" (3) increments between minimum and maximum widths and heights.

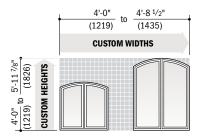
French Casement



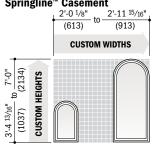
Springline™ French Casement



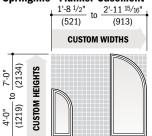
Arch French Casement



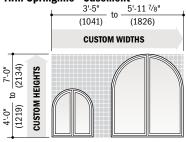
Springline™ Casement*



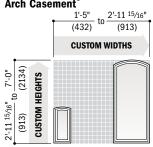
Springline™ Flanker Casement*



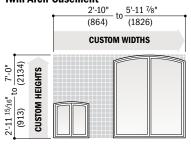
Twin Springline™ Casement*



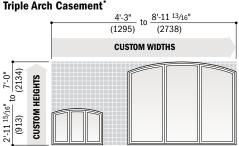
Arch Casement



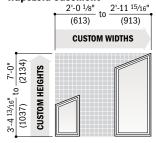
Twin Arch Casement'



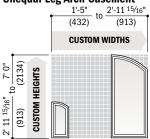
Triple Arch Casement



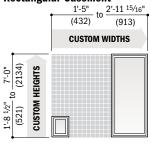
Trapezoid Casement*



Unequal Leg Arch Casement



Rectangular Casement



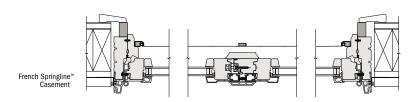
[•] Rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 210-211 for more details.
• Dimensions in parentheses are in millimeters.

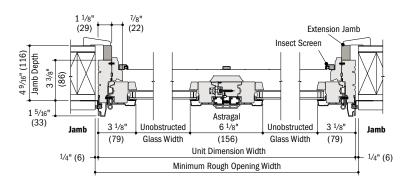
^{*}For exterior wall cladding that extends beyond the face of the window, there may be a reduction in the amount of opening "swing" when the top of the sash touches the wall cladding.



Clad Complementary Venting French Casement Window Details

Scale $1^{1/2}$ " (38) = 1'-0" (305) -1:8



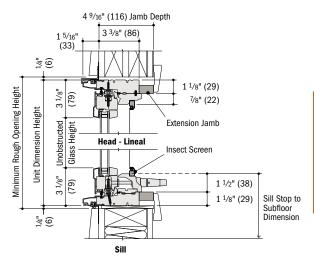


Horizontal Section

French Casement and French Arch Casement

Head - Curved

French Springline™ and French Arch Casement

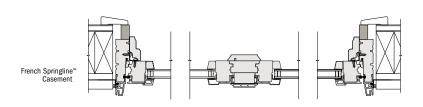


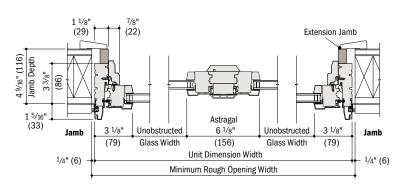
Vertical Section

French Casement and French Arch Casement

Clad Complementary Stationary French Casement Window Details

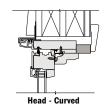
Scale $1^{1}/2^{"}$ (38) = 1'-0" (305) - 1:8



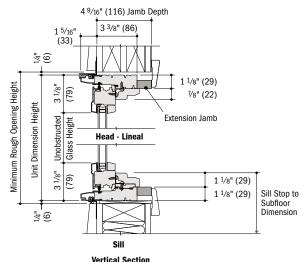


Horizontal Section

French Casement and French Arch Casement



French Springline™ and French Arch Casement



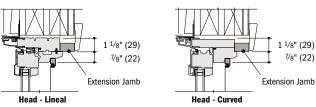
French Casement and French Arch Casement

- 4 9/16" (116) overall jamb depth and 3 3/8" (86) base jamb depth measurement is from back side of installation flange.
- Light-colored areas are parts included with window. Dark-colored areas are additional Andersen* parts required to complete window assembly as shown.
 Dimensions in parentheses are in millimeters.
- Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 210-211.
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to unit installation guides at andersenwindows.com.

COMPLEMENTARY CASEMENT WINDOWS

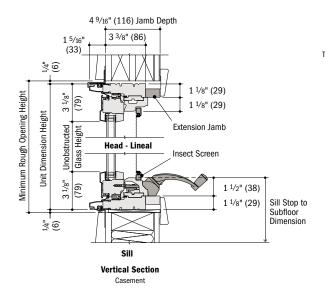
Clad Complementary Venting Casement Window Details

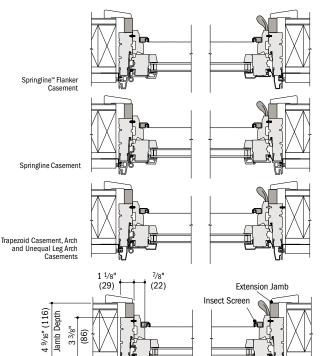
Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8



Trapezoid Casemen

Arch Casement, Unequal Leg Arch Casement, Springline™ and Springline Flanker Casements





Horizontal Section Casement

Unobstructed

Glass Width

Unit Dimension Width

Minimum Rough Opening Width

3 1/8"

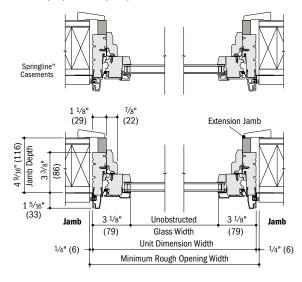
(79)

Jamb

1/4" (6)

Clad Complementary Stationary Casement Window Details

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8



Horizontal Section

Casement, Trapezoid Casement, Arch and Unequal Leg Arch Casements

- 4 9/16" (116) overall jamb depth and 3 3/8" (86) base jamb depth measurement is from back side of installation flange.
- · Light-colored areas are parts included with window. Dark-colored areas are additional Andersen* parts required to complete window assembly as shown.
- · Dimensions in parentheses are in millimeters.
- · Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 210-211.
- · Details are for illustration only and are not intended to represent product installation methods or materials. Refer to unit installation guides at andersenwindows.com.



3 1/8'

(79)

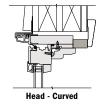
1 5/16'

(33)

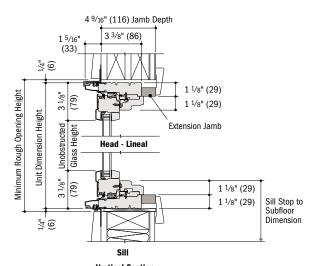
Jamb

1/4" (6)

Trapezoid Casement

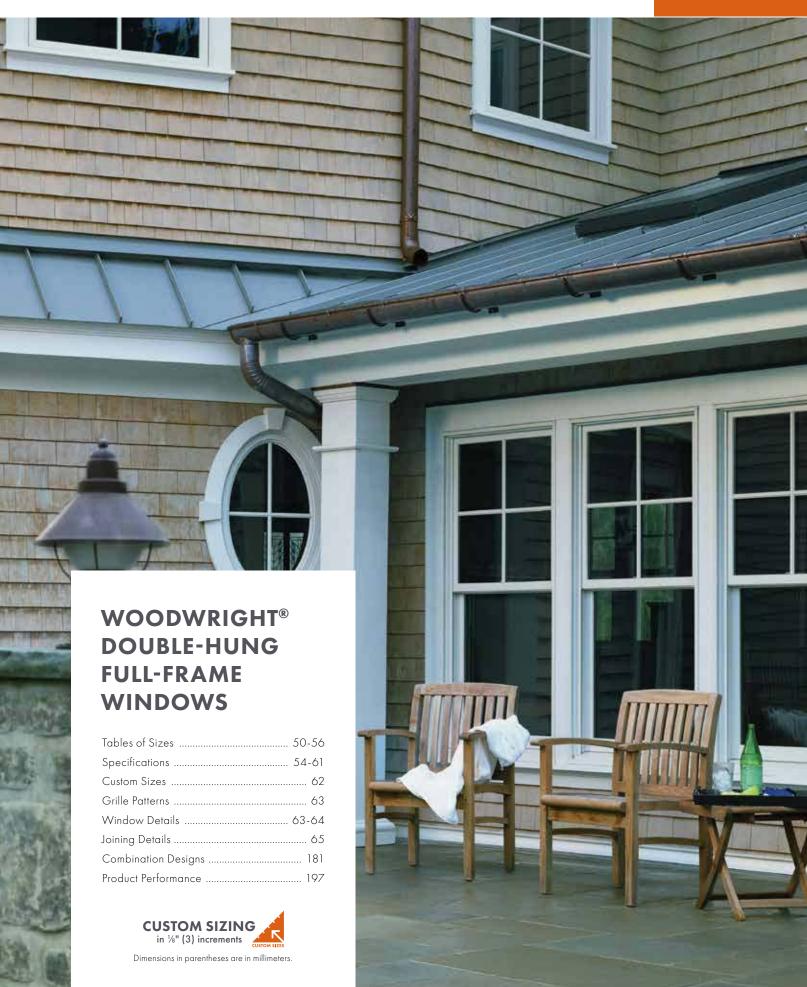


Arch Casement, Unequal Leg Arch Casement, Springline™ and Springline Flanker Casements



Vertical Section





FEATURES

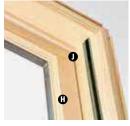
FRAME

- A Perma-Shield® exterior cladding protects the frame - beautifully. Best of all, it's low maintenance and never needs painting.*
- B For exceptional long-lasting* performance, sill members are constructed with a wood core and a Fibrex® material exterior.
- Natural wood stops are available in pine, maple, oak and prefinished white. Wood jamb liners add beauty and authenticity to the window interior.
- A factory-applied rigid vinyl flange on the head, sill and sides of the outer frame helps secure the unit to the structure.
- Multiple weatherstrip systems help provide a barrier against wind, rain and dust. The combination of springtension vinyl, rigid vinyl and flexible bulb weatherstrip is efficient and effective.
- For units with white exterior color, the exterior jamb liner is white. For all other units, the exterior jamb liner is gray.

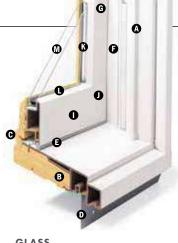
SASH

@ Balancers in the sash enable contractors to screw through the jamb during installation without interfering with the window's operation.

Wood Jamb Liner



- Natural wood sash interior with classic chamfer detailing. Available in pine, maple, oak or prefinished white.
- Low-maintenance sash exterior provides long-lasting* protection and performance. Sash exteriors on most units include Fibrex material.
- Sash joints simulate the look of traditional mortise-and-tenon construction inside and out



GLASS

- 1 In addition to stainless steel glass spacers, black or white glass spacers are now available to allow the spacer to blend in with the unit color.
- Silicone bed glazing provides superior weathertightness and durability.
- M High-Performance options include:
- · Low-E4® glass
- Low-E4 HeatLock® glass
- Low-E4 SmartSun[™] glass
- Low-E4 SmartSun HeatLock glass
- · Low-E4 Sun glass

Tempered and other glass options are available. Contact your Andersen supplier.

A removable translucent film helps shield the glass from damage during delivery and construction, and simplifies finishing at the job site.

Patterned Glass

Patterned glass options are available. See page 12 for more details.

HARDWARE



Standard lock and keeper design provides an easy tilt-to-clean feature integrated into the lock.

EXTERIOR & INTERIOR OPTIONS

EXTERIOR COLORS



INTERIOR OPTIONS Pine Maple

White

Oak

HARDWARE



Standard Lock & Keeper

Antique Brass | **Black** | Bright Brass Brushed Chrome | Distressed Bronze Distressed Nickel | Gold Dust Oil Rubbed Bronze | Polished Chrome Satin Nickel | Stone | White

OPTIONAL HARDWARE Sold Separately

CONTEMPORARY



Available in all hardware finishes. Shown in Distressed Nickel

FSTATE"



Finger Lifts

Antique Brass | Bright Brass Brushed Chrome | Distressed Bronze

Distressed Nickel | Oil Rubbed Bronze Polished Chrome | Satin Nickel

TRADITIONAL





Hand Lift





Antique Brass | Black | Bright Brass | Brushed Chrome Distressed Bronze | Distressed Nickel | Gold Dust | Oil Rubbed Bronze Polished Chrome | Satin Nickel | Stone | White

CLASSIC SERIES"







Stone | White

Bold name denotes finish shown.

HARDWARE FINISHES



Dimensions in parentheses are in millimeters.

Printing limitations prevent exact replication of colors and finishes. See your Andersen supplier for actual color and finish samples.

Naturally occurring variations in grain, color and texture of wood make each window one of a kind. All wood interiors are unfinished unless a finish is specified.

Distressed bronze and oil rubbed bronze are "living" finishes that will change with time and use.

^{*}Visit andersenwindows.com/warranty for details.



Stormwatch

Performance Grade (PG) Upgrades

Performance upgrades are available for select sizes of standard, non-impact Woodwright® windows allowing these units to achieve higher performance ratings.

Performance Grade (PG) ratings are more comprehensive than Design Pressure (DP) ratings for measuring product performance. For up-to-date performance information of individual products, visit andersenwindows.com. Use of this option will subtract 5/s® (16) from clear opening height. Contact your Andersen supplier for availability.

Visit andersenwindows.com/coastal for more information on Stormwatch® Protection.

SHAPES

Woodwright windows are available in the following shapes.





Double-Hung Springline™ Single-Hung





Arch Double-Hung Unequal Leg Arch Double-Hung

SASH OPTIONS



ACCESSORIES Sold Separately

FRAME

Extension Jambs



Standard jamb depth is 4 ½" (114). Extension jambs are available in unfinished pine or prefinished white. Some sizes may be veneered.

Factory-applied and non-applied interior extension jambs are available in 1/16" (1.5) increments between 5 1/4" (133) and 7 1/8" (181). Extension jambs can be factory applied to either three sides (stool and apron application) or four sides (picture frame casing).

Pine Stool



A clear pine stool is available and ready for finishing. The Woodwright stool is available in $4\%_{10}$ " (116) for use in wall depths up to $5\frac{1}{4}$ " (133) and $6\%_{10}$ " (167) for use in wall depths up to $7\frac{1}{4}$ " (181). Works with $2\frac{1}{4}$ " (57) and $2\frac{1}{2}$ " (64) casing widths. Shown above on a 400 Series tilt-wash double-hung window.

HARDWARE

Window Opening Control Device



A window opening control device is available, which limits sash travel to less than 4" (102) when the window is first opened. Available factory applied, or as a field-applied kit in stone or white.

STORM/INSECT SCREEN COMBINATION UNIT"



A self-storing storm window combined with an insect screen provides greater energy efficiency, while allowing ventilation when needed.

Constructed with an aluminum frame, single-pane upper and lower glass panels, and charcoal powder-coated aluminum screen mesh. Available in white, Sandtone and Terratone to match product exteriors. Canvas, dark bronze, forest green and black are available by special order.

Combination units can improve Sound Transmission Class (STC) and Outdoor Indoor Transmission Class (OITC) ratings. Ideal for projects near airports, busy roadways or other noisy environments. For example, adding a combination unit to a 400 Series tilt-wash double-hung (3862) unit with Low-E4® glass will improve its STC rating from 26 to 32. Contact your Andersen supplier for additional STC and OITC rating information.

INSECT SCREENS

Insect Screen Frames



Choose full insect screen or half insect screen. Half insect screen (shown above) allows ventilation without affecting the view through the upper sash. Frames are available in colors to match product exteriors.

TruScene® Insect Screens

Andersen TruScene insect screens let in over 25% more fresh air† and provide 50% greater clarity than conventional Andersen insect screens, all while keeping out unwanted small insects.

Conventional Insect Screens

Conventional insect screens have charcoal powder-coated aluminum screen mesh.

GRILLES

Grilles are available in a variety of configurations and widths. For doublehung grille patterns, see page 63.

EXTERIOR TRIM

Available with Andersen® exterior trim. See exterior trim section starting on page 175.

CAUTION:

- Painting and staining may cause damage to rigid vinyl.
- 400 Series windows in Terratone color may be painted any color lighter than Terratone color using quality oil-based or latex paint.
- Do not paint 400 Series windows with white, canvas, Sandtone, dark bronze, forest green or black exterior colors.
- Andersen does not warrant the adhesion or performance of homeowner-applied paint over vinyl or other factory-coated surfaces.
- For vinyl painting instructions and preparation, contact your Andersen supplier.
- Do not paint weatherstrip.
- Creosote-based stains should not come in contact with Andersen products.
- Abrasive cleaners or solutions containing corrosive solvents should not be used on Andersen products.

^{*}Shown on 400 Series tilt-wash double-hung windows.

^{**}Do not add combination units to windows with Low-E4 Sun glass unless window glass is tempered. Combination units may also reduce the overall clear operable area of the window. See your local code official for egress requirements in your area.

[†]TruScene insect screens let in over 25% more fresh air than standard Andersen fiberglass insect screens. Dimensions in parentheses are in millimeters.

Table of Woodwright* Double-Hung Window Sizes Notes on the next page also apply to this page. Scale $\frac{1}{8}$ " (3) = 1'-0" (305) -1:962:3 cottage or 3:2 reverse cottage sash 1'-9 5/8" 2'-5 5/8" 2'-7 5/8" 2'-9 5/8" 2'-11 5/8" 3'-1 5/8" 3'-5 5/8" 3'-9 5/8" Window Dimension ratio available for all widths and heights. (549) (651) (752) (803) (854) (905) (956) (1057) (1159) Size tables for windows with cottage or 1'-10 ¹/8' 2'-2 1/8" 2'-6 1/8" 2'-8 1/8' 2'-10 1/8" 3'-0 1/8" 3'-2 1/8" 3'-6 1/8" 3'-10 1/8" reverse cottage sash are available at **Rough Opening** (562) (664) (765) (816) (867) (917) (968) (1070) (1172) andersenwindow.com/sizing. **CUSTOM WIDTHS -**15 5/8" 19 5/8" 23 5/8" 25 5/8' 27 5/8" 29 5/8" 31 5/8' 35 5/8" 39 5/8" Unobstructed Glass 1'-4 1/2" (419) to 3'-9 5/8" (1159) (803) (lower sash only) (397) (498) (600) (651) (702) (752) (905) (1006) CUSTOM HEIGHTS -CUSTOM WIDTHS - 16 $^{1}\!/_{2}"$ to 45 $^{5}\!/_{8}$ 3'-0 ⁷/8" (937) to 6'-4 ⁷/8" (1953) 32" to 76 7/8' 3'-0 7/8" 13 3/8" (340) (937) WDH18210 WDH20210 WDH24210 WDH26210 **WDH**28210 **WDH**210210 **WDH**34210 **WDH**38210 Cottage Reverse Cottage (1038) 15 3/8" (391) **CUSTOM HEIGHTS WDH**3432 WDH1832 WDH2032 WDH2432 WDH2632 WDH2832 WDH21032 WDH3032 WDH3832 3'-8 7/8" (1140) (1140)17 3/8" WDH1836 WDH2036 **WDH**2436 WDH2636 WDH2836 WDH21036 WDH3036 **WDH**3436 WDH3836 4'-0 7/8" (1241)193/8" (492)**WDH**210310 WDH18310 WDH20310 WDH24310 **WDH**26310 WDH28310 WDH30310 **WDH**34310 **WDH**38310 (1343)21 3/8" (543)**WDH**3442 **WDH**3842 WDH1842 WDH2042 WDH2442 WDH2642 WDH2842 WDH21042 **WDH**3042 4'-8 7/8" 22 3/4" (1445)(577) WDH1846 WDH2046 WDH2646 WDH21046 **WDH**3446[◊] **WDH**3846◊ **WDH**2446 **WDH**2846 **WDH**3046 2'-0 7/8" (1546)(1546)25 3/8" (645) WDH18410 WDH20410 WDH24410 WDH26410 WDH28410 WDH210410 WDH30410[◊] WDH34410 WDH38410⁽ 5'-4 7/8" (1648)(1648)273/8" (969)WDH2652 WDH2852 WDH210520 **WDH**3452[◊] WDH3852 WDH1852 WDH2052 WDH2452 WDH3052 18/2 8-19 (1749)(1749)29 3/8" (746)WDH2856 **WDH**2656[◊] **WDH**2456 ..8/2 0-.9 (1851)(1851)31 3/8" 18/2 0-19 (797)WDH18510 WDH20510 WDH24510 WDH26510 WDH28510 WDH210510 **WDH**30510◊ WDH34510⁶ 6'-4 7/8" (1953)33 3/8" (848)

WDH1862 WDH2062 WDH2462 WDH2662

WDH2862◊

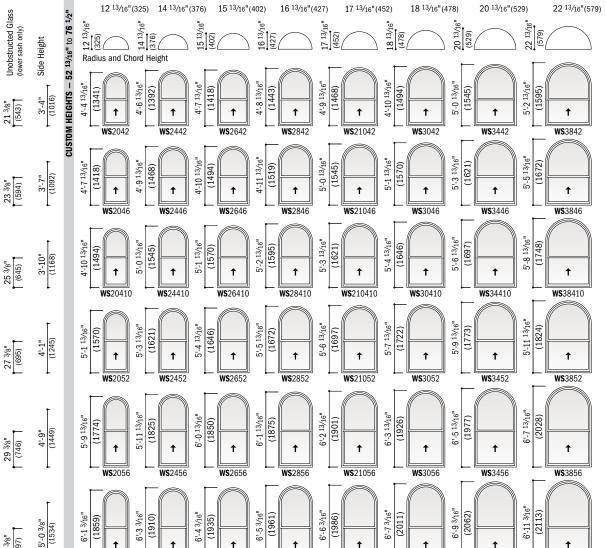
WDH21062◊



Table of Woodwright Springline Single-Hung Window Sizes

Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96

Window Dimension	2'-1 5/8"	2'-5 5/8"	2'-7 5/8"	2'-9 5/8"	2'-11 5/8"	3'-1 5/8"	3'-5 5/8"	3'-9 5/8"
WINDOW DIMENSION	(651)	(752)	(803)	(854)	(905)	(956)	(1057)	(1159)
Minimum	2'-2 1/8"	2'-6 1/8"	2'-8 1/8"	2'-10 ¹ /8"	3'-0 1/8"	3'-2 1/8"	3'-6 1/8"	3'-10 ¹ /8"
Rough Opening	(664)	(765)	(816)	(867)	(917)	(968)	(1070)	(1172)
Unobstructed Glass	19 5/8"	23 5/8"	25 5/8"	27 5/8"	29 5/8"	31 5/8"	35 ⁵ /8"	39 5/8"
(lower sash only)	(498)	(600)	(651)	(702)	(752)	(803)	(905)	(1006)
	OLICTOR WIDTHS	OF 5/411 44 4F	5/-11					





Custom-size windows are available in 1/8" (3) increments. See page 62 for custom sizing.

Grille patterns shown on page 63.

Woodwright Springline single-hung only:

Minimum rough opening height is the same as the window dimension height. Upper sash does not operate and lower sash travel is limited by the radius of the upper sash. Contact your Andersen supplier for cottage and reverse cottage sash availability. Side-by-side joining is

not recommended.

t

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WS2062

6'-6 1/2"

(1994)

WS2462

6'-7 1/2"

(2019)

6'-9 1/2" (2070)

t

WS28510

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WS2862

t

WS210510

t

WS21062

6'-10 1/2"

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WS30510

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WS3062

7'-0 1/2" (2146) t

WS34510

t

WS3462

7'-2 1/2"

(2197)

WS38510

WS3862

6'-4 1/2"

5'-3 11/16"

(1943)

31 3/8" (797)

33 3/8" (848)

6'-8 1/2"

(2045)

Ť

WS2662

^{. &}quot;Window Dimension" always refers to outside frame-to-frame dimension

^{* &}quot;Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 210-211 for more details.

Dimensions in parentheses are in millimeters.

Meet or exceed clear opening area of 5.7 sq. ft. or 0.53 m², clear opening width of 20" (508) and clear opening height of 24" (210). See tables on pages 57-58.

Table of Woodwright Arch Double-Hung Window Sizes Notes on the next page also apply to this page. Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96 1'-9 5/8" 2'-1 5/8" 2'-5 5/8" 2'-7 5/8" 2'-9 5/8" 2'-11 5/8" 3'-1 5/8" 3'-5 5/8" 3'-9 5/8" Window Dimension (549) (651) (752) (803) (854) (905) (1057) (1159) (956) 1'-10 1/8' 2'-6 1/8" 2'-2 1/8' 2'-8 1/8" 2'-10 1/8' 3'-0 1/8' 3'-2 1/8" 3'-6 1/8" 3'-10 1/8" **Rough Opening** (562) (664) (765) (816) (867) (917) (968) (1070)(1172) 15 ⁵/8" 19 5/8" 23 5/8" 25 5/8" 27 5/8" 29 5/8" 31 5/8" 35 5/8' 39 5/8" Unobstructed Glass (397) (498) (600) (lower sash only) (651) (702) (752) (803) (905) (1006) CUSTOM WIDTHS - 21 5/8" to 45 5/8" 29 5/8" (752) HEIGHTS - 36 7/8" to 76 7/8' Radius 21 5/8" (549) 25 5/8" (651) 31 5/8" (803) 33 5/8" (854) 35 5/8" (905) 37 5/8" (956) 41 5/8"(1057) 45 5/8" (1159) 4 13/16" (122) 5 1/16" (129) 5 %16" Chord Chord Height C 114) Side Height 3'-0 7/8" 13 3/8" (937)(340)(937)**WA**18210 3'-4 7/8" 3'-0 5/8" 15 3/8" CUSTOM 3'-0 7/8" (1038)(391)(930)Side-by-side joining of arch (937)double-hung windows is WA2632 not recommended. 3'-8 7/8" (1140)17 3/8" 3'-4 5/8" (1032) 3'-4 3/8" (441)3'-4 7/8" (1026)(1038)WA2436 **WA**2636 **WA**2836 -9 15/16" 4'-0 7/8" 3'-9 7/16" (1154) (1241)(1241)19 3/8" 3'-8 7/8" 3'-8 5/8" (1133) 3'-83/8" 3'-8 1/₁₆" (1119) 3'-7 13/16' 3'-7 5/16" (1100) (1140)(1113)(492)**WA**18310 **WA**20310 WA24310 **WA**26310 **WA**28310 WA210310 **WA**30310 **WA**34310 (1343)4'-4 7/8" 4'-1 15/16' 3'-11 13/16' 5/16" (1343)21 3/8" 4'-03/8" 4'-0 5/8" 4'-0 7/8" 4'-0 1/16' 3'-10 3/4' (543)4'-17/16(1229)(1214)(1187)(1221)WA2442 **WA**2642 **WA**2842 **WA**21042 **WA**3042 **WA**3442 **WA**3842 **WA**1842 WA2042 4'-5 15/16" 4'-5 7/16" (1357) 4'-8 7/8" 4'-3 13/16" 4'-3 5/16" (1303) (1445)(1445)23 3/8" 4'-4 7/8" 4'-4 5/8" (1337) 4'-43/8" 4'-8 7/8' (594)4'-23/4" (1343)4'-4 1/16' (1316)(1289)(1330)**WA**21046 **WA**3046 **WA**3446 **WA**3846 WA1846 WA2046 **WA**2446 **WA**2646 **WA**2846 18/2 0-19 4'-7 5/16" (1405) (1546)25 3/8" 15/16 4'-9 7/16" (1459) 4'-8 5/8" (1438) (1546)4'-8 7/8" 4'-83/8" -8 1/16" 4'-7 13/16" 4'-63/4" (645)(1445)(1432)1424) (1418)(1391)WA18410 WA24410 WA26410 **WA**28410 WA210410 **WA**30410 **WA**34410 **WA**38410 5'-1 15/16" (1573) 5'-1 7/16" (1561) 5'-0 1/16" 4'-11 5/16" (1507) 5'-4 7/8" 5'-0 5/8" (1540) 4'-11 13/16' (1648)27 3/8" (1648)5'-0 7/8" 2'-03/8" 4'-10 3/4" (969)(1534)(1546)(1526)(1519)(1492)**WA**1852 **WA**2052 **WA**2452 **WA**2652 **WA**2852 **WA**21052 **WA**3052 **WA**3452 **WA**3852 18/2 8-19 5'-5 15/16" (1749)5'-5 7/16" (1662) 5'-4 5/8" (1641) 5'-4 3/8" 5'-3 13/16" 5'-3 5/16" (1608) 29 3/8" 5'-4 1/16' 5'-23/4" (746)5'-4 7/8' (1635)(1627)(1648)(1594)**WA**3856 **WA**2456 WA2656 **WA**2856 WA21056 **WA**3056 **WA**3456 WA1856 WA2056 5'-9 7/16" (1764) .8/2 0-.9 15/16" 5'-7 5/16" (1710) -8 1/16" (1851)(1851)31 3/8" 5'-8 7/8" (1749) 5'-8 5/8" (1743) 5'-8 3/8" 5'-7 13/16" 5'-63/4" (797)(1776)(1737)(1722)(1692)(1729)5'-9 WA24510 WA26510 **WA**28510 WA210510^o **WA**30510 **WA**34510 **WA**38510[◊] WA18510 WA20510 6'-4 7/8" 5'-11 13/16" 5'-10 3/4" (1953)15/16 5/16" (1953)33 3/8" (848) 6'-1 7/16' 18/2 0 -.9 6'-0 3/8" |8/5 0-19 (1838)6'-0 1/16 (1830)(1797)(1851)1845) (1824)5'-11

WA1862

WA2062

WA2462

WA2662

WA2862

WA210620

WA3062[◊]

WA3462[♦]

WA38620



Table of Woodwright Unequal Leg Arch Double-Hung Window Sizes

Table of Woodwright Scale $\frac{1}{8}$ " (3) = 1'-0" (3	t [*] Unequal Leg Arch Double-Hun 305) – 1:96	g Window Sizes		
Window Dimension		2'-5 5/8" 2'-7 5/8" 2'-9 5/8" (752) (803) (854)	2'-11 ⁵ /8" 3'-1 ⁵ /8" (905) (956)	3'-5 5/8" 3'-9 5/8" (1159)
Minimum Rough Opening	1'-10 ¹ / ₈ " 2'-2 ¹ / ₈ " (664)	2'-8 ¹ / ₈ " 2'-10 ¹ / ₈ " 2'-10 ¹ / ₈ " (816) (867)	3'-0 ¹ / ₈ " 3'-2 ¹ / ₈ " (968)	3'-6 ½" 3'-10 ½" (1172)
Unobstructed Glass	15 5/8" 19 5/8"	23 5/8" 25 5/8" 27 5/8"	29 5/8" 31 5/8"	(1070) (1172) 35 5/8" 39 5/8"
(lower sash only)	(397) (498) (498) (CUSTOM WIDTHS – 21 5/8" to 45 5/8"	(600) (651) (702)	T (752) T (803) T	(905) (1006)
"8/z 9	Radius 45 5/8" (1159) 45 5/8" (1159)	45 ⁵ /8"(1159) 45 ⁵ /8"(1159) 45 ⁵ /8"(1		
14 7/8" to 7	$\begin{array}{c c} \text{Chould} & \frac{7}{48} \\ \text{Height} & \frac{7}{48} \\ \text{Height} & \frac{10}{48} \\ \text{C279} & \frac{10}{48} \\ \text{Height} & \frac{10}{48} \\ \text$	12 3/4" (324) (376)	6 13/16" (173) (173) (195)	(241) (11946" (294)
3-8 7/8" (1140) 3-8 7/8" (1140) 17 3/8" (441) CUSTOM HEIGHTS - 44 7/8" to 76 7/8"	## .s .			
3'-8 7/8" (1140) 3'-8 7/8" (1140) 17 3/8" (441)	Side Height (1002) (1002) (1002) (1002) (1002)	Custom size windows	Channel left feeing or	Arch double hung with fleeling
4'-0 7/8" (1241) 4'-0 7/8" (1241) 19 3/8" (492)	3-7 7/16" (1103) 3-5" (1041)	Custom-size windows are available in ¹ /s" (3) increments. See page 62	Choose left facing or right facing as viewed from the exterior.	Arch double-hung with flanking unequal leg arch double-hungs.
	WU18310 WU20310	for custom sizing.		
(1343) (1343) 4'-4 7/8" (1343) 21 3/8" (543)	3'-117/16" (1205) (1205) 3'-9" (1143)	Lower sash travel is limited by the radius of	3'-10 1/16" (1170) 3'-9 3/16" (1148)	
	WU1842 WU2042	the upper sash. Contact your Andersen supplier	WU21042 WU3042	Joining long sides creates a smooth arc. Joining short
4'-8 7/8" (1445) 4'-8 7/8" (1445) 23 3/8" (594)	4'-37/6" (1307) 4'-1" (1245) 3'-9 15/46"	for cottage and reverse	4-2 1/16" (1272) (1272) 4-1 3/16" (1249)	sides is not recommended.
		cottage sash availability.	WU21046 WU3046	t
5'-0 7/8" (1546) 5'-0 7/8" (1546) 25 3/8" (645)	4'-7 7/16" (1408) 4'-5" (1346) (1268)	4-01/8" (1222)	(1373) (1373) (1374) (1351)	(1305)
		U24410 WU26410	WU210410 WU30410	WU34410
5'-4 7/8" (1648) 5'-4 7/8" (1648) 2 7 3/8" (695)	4'-11 7/16" (1510) 4'-9" (1448) 4'-5 15/16"	4'-4 1/8" (1324) 4'-2 1/16" (1272)	4-10 1/16" (1475) (1475) 4-9 3/16" (1453)	4'-7 3/8" (1407) (1407) (1354)
		/U2452 WU2652 WU2852	Wu21052 Wu3052	WU3452 WU3852
5'-8 7/8" (1749) 5'-8 7/8" (1749) 29 3/8" (746)	11) 11) 11) 10 110 110 110 110 110 110 1	88.	(16" 10"	110
5'-8 78' (1749) 5'-8 78' (1749) 29 3/8" (746)	5-37/16" (1611) (1611) (1549) (1549) (1472)	4'-8 1/8" (1426) 4'-6 1/16"	5'-2 1/16" (1576) (1576) 5'-1 3/16" (1554)	4-11 3/8" (1508) 4-9 5/16" (1456)
	WU1856 WU2056 V	/U2456 WU2656 WU2856	WU21056 WU3056	Wu3456 Wu3856
6'-0 7/8" (1851) 6'-0 7/8" (1851) 31 3/8" (797)	5-7 7/16" (1713) [173] 5-5" (1651) [157]	277 277 277 277 277 277 277 277	5-6 1/16" (1678) 5-5 3/16" (1656)	5-3 3/8" (1610) 5-1 5/16" (1557)
(1)		5-0 1/8" (1527) (1527) 4-10 1/16" (1475)		
	WU18510 WU20510 W	WU 24510 WU 26510 WU 28510	WU210510 WU30510	Wu34510 Wu38510
(1953) (1953) (1953) (1953) 33 3/8" (848)	5-11 7/16" (1815) (185) (1753) (1753) (1753) (1675)	5'-4 1/8" (1629) (1629) 5'-2 1/16" (1576)	5'-10 1/16" (1779) 	5-73%" (1711) (1711) 5-55/6" (1659)
	WU1862 WU2062 V	WU2662 WU2862 WU2862	WU210620 WU30620	WU 3462 WU 3862

^{• &}quot;Window Dimension" always refers to outside frame-to-frame dimension.
• "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 210-211 for more details.
• Dimensions in parentheses are in millimeters.

[•] Meet or exceed clear opening area of 5.7 sq. ft. or 0.53 m², clear opening width of 20" (508) and clear opening height of 24" (210). See tables on pages 59-61.

Table of Woodwright Transom Window Sizes

Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96

Notes on the next page also apply to this page.

Window Dimension	1'-9 5/8"	2'-1 ⁵ /8" (651)	2'-5 ⁵ /8" (752)	2'-7 ⁵ /8" (803)	2'-9 ⁵ /8" (854)	2'-11 ⁵ /8" (905)	3'-1 ⁵ /8" (956)	3'-5 ⁵ /8" (1057)	3'-9 ⁵ /8" (1159)	3'-11 ⁵ /16" (1202)
Minimum Rough Opening	1'-10 ½" (562)	2'-2 ¹ /8" (664)	2'-6 ¹ /8" (765)	2'-8 ¹ /8" (816)	2'-10 ¹ /8" (867)	3'-0 ¹ /8" (917)	3'-2 ¹ /8" (968)	3'-6 ¹ /8" (1070)	3'-10 ¹ /8" (1172)	3'-11 ⁷ /8" (1215)
Unobstructed Glass	15 ⁵ /8" (397)	19 ⁵ /8" (498)	23 ⁵ /8" (600)	25 ⁵ /8" (651)	27 ⁵ /8" (702)	29 ⁵ / ₈ " (752)	31 ⁵ /8" (803)	35 ⁵ /8" (905)	39 ⁵ /8" (1006)	41 ¹ / ₄ " (1048)
	CUSTOM V	VIDTHS – 12	" to 75 ⁵/16 "							
(305) (305) (318) (318) (173) (0 39 5/16"	WTR1810	WTR 2010	WTR 2410	WTR 2610	WTR 2810	WTR 21010	WTR3010	WTR3410	WTR3810	WTR 31010
11-7 5/16 (491) 11-7 7/8 (504) (359) (359)	WTR1815	WTR2015	WTR 2415	WTR2615	WTR2815	WTR21015	WTR3015	WTR3415	WTR3815	WTR31015
1'-9 5/16" (541) 1'-9 7/8" (555) (410) HEIGHTS	WTR1817	WTR 2017	WTR 2417	WTR2617	WTR2817	WTR 21017	WTR3017	WTR3417	WTR3817	WTR 31017
2'-1 5/16" (643) 2'-1 7/8" (657) 20 1/8" (511)	WTR18111	WTR20111	WTR24111	WTR26111	WTR28111	WTR210111	WTR30111	WTR34111	WTR38111	WTR310111
2'-3 5/16" (694) 2'-3 7/8" (707) 22 1/8" (562)	WTR1821	WTR2021	WTR2421	WTR2621	WTR2821	WTR21021	WTR3021	WTR3421	WTR3821	WTR31021
2'-5 5/16" (745) 2'-5 78" (758) 24 1/8" (613)										
2'-9 5/16" (846) 2'-9 78" (860) 28 1/8" (714)	WTR1823	WTR2023	WTR2423	WTR2623	WTR2823	WTR21023 WTR21027	WTR3023	WTR3423	WTR3823	WTR31023
3-3 5/16" (999) 3-3 7/8" (1012) 34 1/8"	WTR1831	WTR2031	WTR2431	WTR2631	WTR2831	WTR21027	WTR3031	WTR3431	WTR3831	WTR31031

 $[\]hbox{\bf \bullet "Window Dimension" always refers to outside frame-to-frame dimension.}$

Woodwright° Transom Window Area Specifications

WTR1810 0.74 (0.07) 1.80 (0.17) WTR1815 1.53 (0.14) 2.90 (0.27) WTR1817 1.75 (0.16) 3.20 (0.30) WTR18111 2.18 (0.20) 3.80 (0.35) WTR1821 2.40 (0.22) 4.10 (0.38) WTR1823 2.62 (0.24) 4.40 (0.41) WTR1827 3.05 (0.28) 5.00 (0.46) WTR1831 3.70 (0.34) 5.90 (0.55) WTR2010 0.93 (0.09) 2.14 (0.20) WTR2015 1.93 (0.18) 3.44 (0.32) WTR2017 2.20 (0.20) 3.79 (0.35) WTR20111 2.74 (0.25) 4.50 (0.42) WTR2021 3.02 (0.28) 4.86 (0.45) WTR2023 3.29 (0.31) 5.22 (0.48) WTR2027 3.83 (0.36) 5.93 (0.55) </th
WTR1817 1.75 (0.16) 3.20 (0.30) WTR18111 2.18 (0.20) 3.80 (0.35) WTR1821 2.40 (0.22) 4.10 (0.38) WTR1823 2.62 (0.24) 4.40 (0.41) WTR1827 3.05 (0.28) 5.00 (0.46) WTR1831 3.70 (0.34) 5.90 (0.55) WTR2010 0.93 (0.09) 2.14 (0.20) WTR2015 1.93 (0.18) 3.44 (0.32) WTR2017 2.20 (0.20) 3.79 (0.35) WTR20111 2.74 (0.25) 4.50 (0.42) WTR2021 3.02 (0.28) 4.86 (0.45) WTR2023 3.29 (0.31) 5.22 (0.48)
WTR18111 2.18 (0.20) 3.80 (0.35) WTR1821 2.40 (0.22) 4.10 (0.38) WTR1823 2.62 (0.24) 4.40 (0.41) WTR1827 3.05 (0.28) 5.00 (0.46) WTR1831 3.70 (0.34) 5.90 (0.55) WTR2010 0.93 (0.09) 2.14 (0.20) WTR2015 1.93 (0.18) 3.44 (0.32) WTR2017 2.20 (0.20) 3.79 (0.35) WTR20111 2.74 (0.25) 4.50 (0.42) WTR2021 3.02 (0.28) 4.86 (0.45) WTR2023 3.29 (0.31) 5.22 (0.48)
WTR1821 2.40 (0.22) 4.10 (0.38) WTR1823 2.62 (0.24) 4.40 (0.41) WTR1827 3.05 (0.28) 5.00 (0.46) WTR1831 3.70 (0.34) 5.90 (0.55) WTR2010 0.93 (0.09) 2.14 (0.20) WTR2015 1.93 (0.18) 3.44 (0.32) WTR2017 2.20 (0.20) 3.79 (0.35) WTR20111 2.74 (0.25) 4.50 (0.42) WTR2021 3.02 (0.28) 4.86 (0.45) WTR2023 3.29 (0.31) 5.22 (0.48)
WTR1823 2.62 (0.24) 4.40 (0.41) WTR1827 3.05 (0.28) 5.00 (0.46) WTR1831 3.70 (0.34) 5.90 (0.55) WTR2010 0.93 (0.09) 2.14 (0.20) WTR2015 1.93 (0.18) 3.44 (0.32) WTR2017 2.20 (0.20) 3.79 (0.35) WTR20111 2.74 (0.25) 4.50 (0.42) WTR2021 3.02 (0.28) 4.86 (0.45) WTR2023 3.29 (0.31) 5.22 (0.48)
WTR1827 3.05 (0.28) 5.00 (0.46) WTR1831 3.70 (0.34) 5.90 (0.55) WTR2010 0.93 (0.09) 2.14 (0.20) WTR2015 1.93 (0.18) 3.44 (0.32) WTR2017 2.20 (0.20) 3.79 (0.35) WTR20111 2.74 (0.25) 4.50 (0.42) WTR2021 3.02 (0.28) 4.86 (0.45) WTR2023 3.29 (0.31) 5.22 (0.48)
WTR1831 3.70 (0.34) 5.90 (0.55) WTR2010 0.93 (0.09) 2.14 (0.20) WTR2015 1.93 (0.18) 3.44 (0.32) WTR2017 2.20 (0.20) 3.79 (0.35) WTR20111 2.74 (0.25) 4.50 (0.42) WTR2021 3.02 (0.28) 4.86 (0.45) WTR2023 3.29 (0.31) 5.22 (0.48)
WTR2010 0.93 (0.09) 2.14 (0.20) WTR2015 1.93 (0.18) 3.44 (0.32) WTR2017 2.20 (0.20) 3.79 (0.35) WTR20111 2.74 (0.25) 4.50 (0.42) WTR2021 3.02 (0.28) 4.86 (0.45) WTR2023 3.29 (0.31) 5.22 (0.48)
WTR2015 1.93 (0.18) 3.44 (0.32) WTR2017 2.20 (0.20) 3.79 (0.35) WTR20111 2.74 (0.25) 4.50 (0.42) WTR2021 3.02 (0.28) 4.86 (0.45) WTR2023 3.29 (0.31) 5.22 (0.48)
WTR2017 2.20 (0.20) 3.79 (0.35) WTR20111 2.74 (0.25) 4.50 (0.42) WTR2021 3.02 (0.28) 4.86 (0.45) WTR2023 3.29 (0.31) 5.22 (0.48)
WTR20111 2.74 (0.25) 4.50 (0.42) WTR2021 3.02 (0.28) 4.86 (0.45) WTR2023 3.29 (0.31) 5.22 (0.48)
WTR2021 3.02 (0.28) 4.86 (0.45) WTR2023 3.29 (0.31) 5.22 (0.48)
WTR2023 3.29 (0.31) 5.22 (0.48)
3.23 (3.32)
WTR2027 3.83 (0.36) 5.93 (0.55)
WTR 2031 4.65 (0.43) 7.00 (0.65)
WTR 2410 1.12 (0.10) 2.47 (0.23)
WTR 2415 2.32 (0.22) 3.97 (0.37)
WTR 2417 2.65 (0.25) 4.38 (0.41)
WTR 24111 3.30 (0.31) 5.21 (0.48)

Window Number	Glass Area Sq. Ft./(m²)		Ar	Window ea t./(m²)
WTR2421	3.63	(0.34)	5.62	(0.52)
WTR2423	3.96	(0.37)	6.03	(0.56)
WTR2427	4.61	(0.43)	6.85	(0.64)
WTR2431	5.60	(0.52)	8.09	(0.75)
WTR2610	1.21	(0.11)	2.64	(0.24)
WTR2615	2.51	(0.23)	4.24	(0.39)
WTR2617	2.87	(0.27)	4.68	(0.43)
WTR26111	3.58	(0.33)	5.56	(0.52)
WTR2621	3.94	(0.37)	6.00	(0.56)
WTR2623	4.29	(0.40)	6.44	(0.60)
WTR2627	5.00	(0.46)	7.32	(0.68)
WTR2631	6.07	(0.56)	8.63	(0.80)
WTR2810	1.31	(0.12)	2.80	(0.26)
WTR2815	2.71	(0.25)	4.51	(0.42)
WTR2817	3.09	(0.29)	4.98	(0.46)
WTR28111	3.86	(0.36)	5.91	(0.55)
WTR2821	4.24	(0.39)	6.38	(0.59)
WTR2823	4.63	(0.43)	6.84	(0.64)
WTR2827	5.40	(0.50)	7.78	(0.72)
WTR2831	6.55	(0.61)	9.18	(0.85)

Window Number	Ar	ass ea t./(m²)	Overall Window Area Sq. Ft./(m²)		
WTR21010	1.40	(0.13)	2.97	(0.28)	
WTR21015	2.91	(0.27)	4.78	(0.44)	
WTR21017	3.32	(0.31)	5.27	(0.49)	
WTR210111	4.14	(0.38)	6.26	(0.58)	
WTR21021	4.55	(0.42)	6.76	(0.63)	
WTR21023	4.96	(0.46)	7.25	(0.67)	
WTR21027	5.79	(0.54)	8.24	(0.77)	
WTR21031	7.02	(0.65)	9.73	(0.90)	
WTR3010	1.50	(0.14)	3.14	(0.29)	
WTR3015	3.10	(0.29)	5.05	(0.47)	
WTR3017	3.54	(0.33)	5.57	(0.52)	
WTR30111	4.42	(0.41)	6.61	(0.61)	
WTR3021	4.86	(0.45)	7.14	(0.66)	
WTR3023	5.30	(0.49)	7.66	(0.71)	
WTR3027	6.18	(0.57)	8.70	(0.81)	
WTR3031	7.49	(0.70)	10.27	(0.95)	
WTR3410	1.69	(0.16)	3.47	(0.32)	
WTR3415	3.49	(0.32)	5.58	(0.52)	

[•] Dimensions in parentheses are in square meters.

continued on next page

^{**}Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 210-211 for more details.

[•] Dimensions in parentheses are in millimeters.



4'-3 5/16"	4'-11 5/16"	5'-7 5/16"	6'-3 5/16"					
(1303)	(1506)	(1710)	(1913)					
4'-3 7/8"	4'-11 7/8"	5'-7 7/8"	6'-3 7/8"					
(1317)	(1520)	(1724)	(1927)					
45 1/4"	53 1/4"	61 1/4"	69 1/4"					
(1149)	(1353)	(1556)	(1745)					
WTR4210	WTR41010	WTR5610	WTR6210					

WTR 4210	WTR 41010	WTR 5610	WTR 6210
WTR 4215	WTR 41015	WTR5615	WTR6215
WTR 4217	WTR 41017	WTR5617	WTR 6217
WTR42111	WTR410111	WTR56111	WTR62111
WTR4221	WTR 41021	WTR5621	WTR6221
WTR4223	WTR 41023	WTR5623	WTR6223
WTR4223	WTR41023	WTR5623	WTR6223
WTR4223	WTR41023	WTR5623	WTR6223
WTR4223 WTR4227	WTR41023 WTR41027	WTR5623 WTR5627	WTR6223 WTR6227
WTR4227	WTR 41027	WTR5627	WTR6227
WTR4227 WTR4231		WTR5627 WTR5631	



Custom-size windows are available in $^1/8\mbox{"}$ (3) increments. See page 62 for custom sizing.

Grille patterns shown on page 63.

- "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 210-211 for more details.
 Dimensions in parentheses are in millimeters.

Woodwright® Transom Window Area Specifications (continued)

Window Number	Glass Area Sq. Ft./(m²)		Overall Window Area Sq. Ft./(m²)	
WTR3417	3.99	(0.37)	6.16	(0.57)
WTR34111	4.98	(0.46)	7.32	(0.68)
WTR3421	5.47	(0.51)	7.90	(0.73)
WTR3423	5.97	(0.55)	8.47	(0.79)
WTR3427	6.96	(0.65)	9.63	(0.89)
WTR3431	8.44	(0.78)	11.36	(1.06)
WTR3810	1.87	(0.17)	3.80	(0.35)
WTR3815	3.89	(0.36)	6.12	(0.57)
WTR3817	4.44	(0.41)	6.75	(0.63)
WTR38111	5.54	(0.51)	8.02	(0.75)
WTR3821	6.09	(0.57)	8.65	(0.80)
WTR3823	6.64	(0.62)	9.29	(0.86)
WTR3827	7.74	(0.72)	10.55	(0.98)
WTR3831	9.39	(0.87)	12.46	(1.16)
WTR31010	1.95	(0.18)	3.94	(0.37)
WTR31015	4.05	(0.38)	6.35	(0.59)
WTR31017	4.63	(0.43)	7.00	(0.65)
WTR310111	5.77	(0.54)	8.32	(0.77)
WTR31021	6.35	(0.59)	8.97	(0.83)
WTR31023	6.92	(0.64)	9.63	(0.89)

Window Number	Glass Area Sq. Ft./(m²)		Overall Window Area Sq. Ft./(m²)	
WTR31027	8.07	(0.75)	10.95	(1.02)
WTR31031	9.79	(0.91)	12.92	(1.20)
WTR4210	2.14	(0.20)	4.28	(0.40)
WTR4215	4.44	(0.41)	6.88	(0.64)
WTR4217	5.07	(0.47)	7.59	(0.71)
WTR42111	6.33	(0.59)	9.02	(0.84)
WTR4221	6.96	(0.65)	9.73	(0.90)
WTR4223	7.59	(0.71)	10.45	(0.97)
WTR4227	8.85	(0.82)	11.87	(1.10)
WTR4231	10.74	(1.00)	14.01	(1.30)
WTR41010	2.52	(0.23)	4.94	(0.46)
WTR41015	5.23	(0.49)	7.95	(0.74)
WTR41017	5.97	(0.55)	8.78	(0.82)
WTR410111	7.45	(0.69)	10.43	(0.97)
WTR41021	8.19	(0.76)	11.25	(1.05)
WTR41023	8.93	(0.83)	12.07	(1.12)
WTR41027	10.41	(0.97)	13.72	(1.27)
WTR41031	12.63	(1.17)	16.19	(1.50)
WTR5610	2.90	(0.27)	5.61	(0.52)
WTR5615	6.01	(0.56)	9.03	(0.84)

Window Number	1A	ass ea t./(m²)	Ar	Window ea t./(m²)
WTR5617	6.87	(0.64)	9.96	(0.93)
WTR56111	8.57	(0.80)	11.83	(1.10)
WTR5621	9.42	(0.88)	12.77	(1.19)
WTR5623	10.27	(0.95)	13.70	(1.27)
WTR5627	11.98	(1.11)	15.57	(1.45)
WTR5631	14.53	(1.35)	18.38	(1.71)
WTR6210	3.28	(0.30)	6.28	(0.58)
WTR6215	6.80	(0.63)	10.10	(0.94)
WTR6217	7.76	(0.72)	11.15	(1.04)
WTR62111	9.69	(0.90)	13.24	(1.23)
WTR6221	10.65	(0.99)	14.28	(1.33)
WTR6223	11.61	(1.08)	15.33	(1.42)
WTR6227	13.54	(1.26)	17.42	(1.62)
WTR6231	16.43	(1.53)	20.56	(1.91)

• Dimensions in parentheses are in square meters.

Table of Woodwright $^{\circ}$ Picture Window Sizes Scale $^1\!/\!s"$ (3) = 1'-0" (305) - 1:96

30aie 78 (3) - 1-0	(505) 1.	30					
Window Dimension	1'-0"	3'-1 ⁵ /8" (956)	3'-5 ⁵ /8" (1057)	3'-11 ⁵ / ₁₆ " (1202)	4'-3 ⁵ / ₁₆ " (1303)	4'-11 ⁵ / ₁₆ " (1507)	5'-7 ⁵ / ₁₆ " (1710)
Minimum	1'-0 1/2"	3'-2 1/8"	3'-6 1/8"	3'-11 7/8"	4'-3 7/8"	4'-11 7/8"	5'-7 7/8"
Rough Opening	(318)	(968)	(1070)	(1216)	(1318)	(1521)	(1724)
Unobstructed Glass	6"	31 5/8"	35 5/8"	41 1/4"	45 1/4"	53 1/4"	61 1/4"
	l (152) l	l (803) l	I (905) I	[(1048) [l (1149)	l (1353)	l (1556) l
	_	VIDTHS — 12	' to 67 ⁵ /16"				
[3]	MPW 10310						
4'-0 7/8" (1241) 4'-0 7/8" (1241) 41 1/8" (1045)	1 01						
4 4 4							
	WPW 10310	WPW 30310	WPW 34310	WPW 310310	WPW 42310	WPW 410310	WPW 56310
	<u>2</u>						
4'-4 7/8" (1343) 4'-4 7/8" (1343) 45 1/8" (1146)							
4 3 4 3 4 3	I						
	WPW1042	WPW 3042	WPW 3442	WPW 31042	WPW4242	WPW 41042	WPW 5642
	3 🗍						
4'-8 7/8" (1445) 4'-8 7/8" (1445) 49 1/8" (1248)							
4'-8 (14-8 (14-8) (12) (12)							
	WPW1046	WPW 3046	WPW 3446	WPW 31046	WPW4246	WPW41046	WPW 5646
	WFW1040	WFW3040	WFW3440	WFW31040	WFW4240	WFW41046	WFW3040
18 L 18 E							
5'-0 7/8" (1547) 5'-0 7/8" (1547) 53 1/8" (1349)							
-	WPW 10410	WPW 30410	WPW 34410	WPW 310410	WPW 42410	WPW 410410	WPW 56410
8) 8) 8) 1)							
5'-4 7/8" (1648) 5'-4 7/8" (1648) 57 1/8" (1451)							
+ +	WPW1052	WPW 3052	WPW 3452	WPW 31052	WPW 4252	WPW41052	WPW5652
3) (8 8 8 8 8 9)							
5'-8 7/8" (1749) 5'-8 7/8" (1749) 61 1/8" (1553)							
	WPW1056	WPW 3056	WPW 3456	WPW 31056	WPW 4256	WPW41056	WPW 5656
		111111111111111111111111111111111111111	1113430	WW W31030	W W 4230	WW W41030	
6'-0 7/8" (1851) 6'-0 7/8" (1851) 65 1/8" (1654)							
(1) (1) (1) (1)							
	WPW 10510	WPW 30510	WPW 34510	WPW 310510	WPW 42510	WPW 410510	WPW56510
3) 3) 3) 3)							
6'-4 7/8" (1953) 6'-4 7/8" (1953) 69 1/8" (1756)							
	WPW 1062	WPW 3062	WPW 3462	WPW 31062	WPW 4262	WPW 41062	WPW 5662



Custom-size windows are available in 1/8" (3) increments. See page 62 for custom sizing.

Grille patterns shown on page 63.

^{• &}quot;Window Dimension" always refers to outside frame-to-frame dimension.

• "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 210-211 for more details.

• Dimensions in parentheses are in millimeters.



Woodwright® Double-Hung Window Opening and Area Specifications

Window	Close	Opening	Clear Op	ening in	Full Open	Position	01	ass	14.	ent		Subfloor	Overall	Winds
Number	A	rea	Wie			ght	A	rea	IA A	ea	Sill	of Inside Stop	A	rea
		t./(m²)	Inches		Inches			t./(m²)		t./(m²)		s/(mm)		t./(m²)
WDH18210	1.73	(0.16)	17 7/8"	(454)	14 1/4"	(362)	2.90	(0.27)	1.78	(0.17)	48 1/2"	(1231)	5.53	(0.51
WDH1832	1.98	(0.18)	17 7/8"	(454)	16 1/4"	(412)	3.32	(0.31)	2.03	(0.19)	44 1/2"	(1130)	6.14	(0.57
WDH1836	2.23	(0.21)	17 7/8"	(454)	18 1/4"	(463)	3.74	(0.35)	2.28	(0.21)	40 1/2"	(1028)	6.74	(0.63
WDH18310	2.48	(0.23)	17 7/8"	(454)	20 1/4"	(514)	4.15	(0.39)	2.53	(0.24)	36 1/2"	(926)	7.34	(0.68
WDH1842	2.73	(0.25)	17 7/8"	(454)	22 1/4"	(565)	4.57	(0.43)	2.78	(0.26)	32 1/2"	(825)	7.94	(0.74
WDH1846	2.90	(0.27)	17 7/8"	(454)	24 1/4"	(616)	4.98	(0.46)	3.02	(0.28)	28 1/2"	(723)	8.54	(0.79
WDH 18410	3.22	(0.30)	17 7/8"	(454)	26 1/4"	(666)	5.40	(0.50)	3.27	(0.30)	24 1/2"	(622)	9.14	(0.85
WDH1852	3.47	(0.32)	17 7/8"	(454)	28 1/4"	(717)	5.81	(0.54)	3.52	(0.33)	20 1/2"	(520)	9.74	(0.91
WDH1856	3.72	(0.35)	17 7/8"	(454)	30 1/4"	(768)	6.23	(0.58)	3.02	(0.28)	16 1/2"	(418)	10.34	(0.96
WDH 18510	3.97	(0.37)	17 7/8"	(454)	32 1/4"	(819)	6.65	(0.62)	4.02	(0.37)	12 1/2"	(317)	10.94	(1.02
WDH1862	4.22	(0.39)	17 7/8"	(454)	34 1/4"	(870)	7.06	(0.66)	4.26	(0.40)	8 1/2"	(215)	11.54	(1.07
WDH 20210	2.12	(0.20)	21 7/8"	(556)	14 1/4"	(362)	3.68	(0.34)	2.18	(0.20)	48 1/2"	(1231)	6.56	(0.61
WDH 2032	2.42	(0.23)	21 7/8"	(556)	16 1/4"	(412)	4.21	(0.39)	2.48	(0.23)	44 1/2"	(1130)	7.27	(0.68
WDH2036	2.73	(0.25)	21 7/8"	(556)	18 1/4"	(463)	4.73	(0.44)	2.79	(0.26)	40 1/2"	(1028)	7.98	(0.74
WDH20310	3.03	(0.28)	21 7/8"	(556)	20 1/4"	(514)	5.26	(0.49)	3.09	(0.29)	36 1/2"	(926)	8.69	(0.81
WDH2042	3.34	(0.31)	21 7/8"	(556)	22 1/4"	(565)	5.79	(0.54)	3.40	(0.32)	32 1/2"	(825)	9.41	(0.87
WDH 2046	3.55	(0.33)	21 7/8"	(556)	24 1/4"	(616)	6.31	(0.59)	3.70	(0.34)	28 1/2"	(723)	10.12	(0.94
WDH 20410	3.94	(0.37)	21 7/8"	(556)	26 1/4"	(666)	6.84	(0.64)	4.00	(0.37)	24 1/2"	(622)	10.83	(1.01
WDH2052	4.25	(0.39)	21 7/8"	(556)	28 1/4"	(717)	7.37	(0.69)	4.31	(0.40)	20 1/2"	(520)	11.54	(1.07
WDH2056	4.55	(0.42)	21 7/8"	(556)	30 1/4"	(768)	7.89	(0.73)	3.70	(0.34)	16 1/2"	(418)	12.25	(1.14
WDH 20510	4.86	(0.45)	21 7/8"	(556)	32 1/4"	(819)	8.42	(0.78)	4.92	(0.46)	12 1/2"	(317)	12.96	(1.20
WDH2062	5.16	(0.48)	21 7/8"	(556)	34 1/4"	(870)	8.95	(0.83)	5.22	(0.49)	8 1/2"	(215)	13.68	(1.27
WDH24210	2.51	(0.23)	25 7/8"	(657)	14 1/4"	(362)	4.46	(0.41)	2.58	(0.24)	48 1/2"	(1231)	7.58	(0.70
WDH2432	2.86	(0.27)	25 7/8"	(657)	16 1/4"	(412)	5.09	(0.47)	2.94	(0.27)	44 1/2"	(1130)	8.40	(0.78
WDH2436	3.22	(0.30)	25 7/8"	(657)	18 1/4"	(463)	5.73	(0.53)	3.30	(0.31)	40 1/2"	(1028)	9.23	(0.86
WDH24310	3.59	(0.33)	25 7/8"	(657)	20 1/4"	(514)	6.37	(0.59)	3.66	(0.34)	36 1/2"	(926)	10.05	(0.93
WDH2442	3.95	(0.37)	25 7/8"	(657)	22 1/4"	(565)	7.01	(0.65)	4.02	(0.37)	32 1/2"	(825)	10.87	(1.01
WDH2442 WDH2446	4.19	(0.37)	25 7/8	(657)	24 1/4"	(616)	7.65	(0.03)	4.38	(0.41)	28 1/2"	(724)	11.70	(1.09
WDH2440 WDH24410	4.19	(0.43)		(657)		(666)	8.28	(0.71)	4.74	(0.41)	24 1/2"	(622)	12.52	
WDH24410 WDH2452	5.02		25 ⁷ / ₈ " 25 ⁷ / ₈ "		26 1/4"				_				_	(1.16
		(0.47)		(657)	28 1/4"	(717)	8.92	(0.83)	5.10	(0.47)	20 1/2"	(520)	13.34	(1.24
WDH2456	5.38	(0.50)	25 7/8"	(657)	30 1/4"	(768)	9.56	(0.89)	4.38	(0.41)	16 1/2"	(418)	14.17	(1.32
WDH24510◊	5.74	(0.53)	25 7/8"	(657)	32 1/4"	(819)	10.20	(0.95)	5.81	(0.54)	12 1/2"	(317)	14.99	(1.39
WDH2462 ◊	6.10	(0.57)	25 7/8"	(657)	34 1/4"	(870)	10.84	(1.01)	6.17	(0.57)	8 1/2"	(215)	15.81	(1.47
WDH26210	2.71	(0.25)	27 7/8"	(708)	14 1/4"	(362)	4.84	(0.45)	2.78	(0.26)	48 1/2"	(1231)	8.09	(0.75
WDH2632	3.09	(0.29)	27 7/8"	(708)	16 1/4"	(412)	5.54	(0.52)	3.17	(0.30)	44 1/2"	(1130)	8.97	(0.83
WDH2636	3.48	(0.32)	27 7/8"	(708)	18 1/4"	(463)	6.23	(0.58)	3.55	(0.33)	40 1/2"	(1028)	9.85	(0.92
WDH26310	3.86	(0.36)	27 7/8"	(708)	20 1/4"	(514)	6.92	(0.64)	3.94	(0.37)	36 1/2"	(926)	10.73	(1.00
WDH2642	4.25	(0.40)	27 7/8"	(708)	22 1/4"	(565)	7.62	(0.71)	4.33	(0.40)	32 1/2"	(825)	11.61	(1.08
WDH2646	4.52	(0.42)	27 7/8"	(708)	24 1/4"	(616)	8.31	(0.77)	4.71	(0.44)	28 1/2"	(723)	12.49	(1.16
WDH 26410	5.02	(0.47)	27 7/8"	(708)	26 1/4"	(666)	9.01	(0.84)	5.10	(0.47)	24 1/2"	(622)	13.36	(1.24
WDH2652	5.41	(0.50)	27 7/8"	(708)	28 1/4"	(717)	9.70	(0.90)	5.49	(0.51)	20 1/2"	(520)	14.24	(1.32
WDH 2656 ◊	5.80	(0.54)	27 7/8"	(708)	30 1/4"	(768)	10.39	(0.96)	4.71	(0.44)	16 1/2"	(418)	15.12	(1.41
WDH26510◊	6.19	(0.57)	27 7/8"	(708)	32 1/4"	(819)	11.09	(1.03)	6.26	(0.58)	12 1/2"	(317)	16.00	(1.49
WDH 2662 ◊	6.58	(0.61)	27 7/8"	(708)	34 1/4"	(870)	11.78	(1.09)	6.65	(0.62)	8 1/2"	(215)	16.88	(1.57
WDH28210	2.90	(0.27)	29 7/8"	(759)	14 1/4"	(362)	5.23	(0.49)	2.98	(0.28)	48 1/2"	(1231)	8.61	(0.80
WDH2832	3.31	(0.31)	29 7/8"	(759)	16 ¹ / ₄ "	(412)	5.98	(0.56)	3.39	(0.32)	44 1/2"	(1130)	9.54	(0.89
WDH 2836	3.73	(0.35)	29 7/8"	(759)	18 1/4"	(463)	6.73	(0.63)	3.81	(0.35)	40 1/2"	(1028)	10.47	(0.9
WDH28310	4.14	(0.38)	29 7/8"	(759)	20 1/4"	(514)	7.48	(0.70)	4.22	(0.39)	36 1/2"	(926)	11.41	(1.06
WDH2842	4.56	(0.42)	29 7/8"	(759)	22 1/4"	(565)	8.23	(0.77)	4.64	(0.43)	32 1/2"	(825)	12.34	(1.15
WDH2846	4.85	(0.45)	29 7/8"	(759)	24 1/4"	(616)	8.98	(0.83)	5.05	(0.47)	28 1/2"	(723)	13.28	(1.23
WDH28410	5.38	(0.50)	29 7/8"	(759)	26 1/4"	(666)	9.73	(0.90)	5.47	(0.51)	24 1/2"	(622)	14.21	(1.32
WDH2852 ◊	5.80	(0.54)	29 7/8"	(759)	28 1/4"	(717)	10.48	(0.97)	5.88	(0.55)	20 1/2"	(520)	15.14	(1.4
WDH2856 ◊	6.22	(0.58)	29 7/8"	(759)	30 1/4"	(768)	11.22	(1.04)	5.05	(0.47)	16 1/2"	(418)	16.08	(1.49
WDH28510◊	6.63	(0.62)	29 7/8"	(759)	32 1/4"	(819)	11.97	(1.11)	6.71	(0.62)	12 1/2"	(317)	17.01	(1.58
WDH2862 ◊	7.05	(0.66)	29 7/8"	(759)	34 1/4"	(870)	12.72	(1.11)	7.13	(0.66)	8 1/2"	(215)	17.95	(1.67
WDH210210	3.09	(0.29)	31 7/8"	(809)	14 1/4"	(362)	5.62	(0.52)	3.18	(0.30)	48 1/2"	(1231)	9.12	(0.85
WDH210210 WDH21032	3.53	(0.29)	31 7/8	(809)	16 1/4"	(412)	6.42	(0.60)	3.62	(0.34)		(1130)	10.11	
									_		44 1/2"		_	(0.94
WDH21036	3.97	(0.37)	31 7/8"	(809)	18 1/4"	(463)	7.23	(0.67)	4.06	(0.38)	40 1/2"	(1028)	11.10	(1.03
WDH210310	4.42	(0.41)	31 7/8"	(809)	20 1/4"	(514)	8.03 8.84	(0.75)	4.51 4.95	(0.42)	36 ¹ / ₂ " 32 ¹ / ₂ "	(926)	12.09 13.08	(1.12
WDH21042														(1.22

For cottage and reverse cottage sash opening specifications, visit

andersenwindows.com/openingspecs.

^{• &}quot;Top of Subfloor to Top of Inside Sill Stop" is calculated based upon

a structural header height of 6'-10 $^1\!/_2$ " (2096).

<sup>Dimensions in parentheses are in millimeters or square meters.

Meet or exceed clear opening area of 5.7 sq. ft. or 0.53 m², clear opening width of 20" (508) and clear opening height of 24" (610).</sup>

Woodwright* Double-Hung Window Opening and Area Specifications (continued)

			Clear O	pening in	Full Open	Position					Top of 9	Subfloor		
Window	Clear C	pening					GI	ass	Ve	ent		of Inside	Overall	Window
Number		rea t./(m²)		dth s/(mm)	Hei Inches	ight (/mm)		rea t./(m²)		rea :./(m²)		Stop s/(mm)		ea ./(m²)
WDH 210410♦	5.74	(0.53)	31 7/8"	(809)	26 1/4"	(666)	10.45	(0.97)	5.83	(0.54)	24 1/2"	(622)	15.05	(1.40)
WDH21052◊	6.18	(0.57)	31 7/8"	(809)	28 1/4"	(717)	11.25	(1.05)	6.28	(0.58)	20 1/2"	(520)	16.04	(1.49)
WDH21056◊	6.63	(0.62)	31 7/8"	(809)	30 1/4"	(768)	12.06	(1.12)	5.39	(0.50)	16 1/2"	(418)	17.03	(1.59)
WDH210510◊	7.07	(0.66)	31 7/8"	(809)	34 1/4"	(819)	12.86	(1.20)	7.16	(0.67)	12 1/2"	(317)	18.02	(1.67)
WDH21062◊	7.52	(0.70)	31 7/8"	(809)	34 1/4"	(870)	13.67	(1.27)	7.60	(0.71)	8 1/2"	(215)	19.01	(1.77)
WDH 30210	3.29	(0.31)	33 7/8"	(860)	14 1/4"	(362)	6.01	(0.56)	3.38	(0.31)	48 1/2"	(1231)	9.63	(0.90)
WDH 3032	3.75	(0.35)	33 7/8"	(860)	16 ¹ / ₄ "	(412)	6.87	(0.64)	3.85	(0.36)	44 1/2"	(1130)	10.67	(0.99)
WDH3036	4.22	(0.39)	33 7/8"	(860)	18 1/4"	(463)	7.73	(0.72)	4.32	(0.40)	40 1/2"	(1028)	11.72	(1.09)
WDH 30310	4.69	(0.44)	33 7/8"	(860)	20 1/4"	(514)	8.59	(0.80)	4.79	(0.45)	36 1/2"	(926)	12.76	(1.19)
WDH 3042	5.17	(0.48)	33 7/8"	(860)	22 1/4"	(565)	9.45	(0.88)	5.26	(0.49)	32 1/2"	(825)	13.81	(1.28)
WDH 3046♦	5.75	(0.53)	33 7/8"	(860)	24 1/4"	(616)	10.31	(0.96)	5.73	(0.53)	28 1/2"	(723)	14.85	(1.38)
WDH 30410◊	6.10	(0.57)	33 7/8"	(860)	26 1/4"	(666)	11.17	(1.04)	6.20	(0.58)	24 1/2"	(622)	15.90	(1.48)
WDH 3052♦	6.57	(0.61)	33 7/8"	(860)	28 1/4"	(717)	12.03	(1.12)	6.67	(0.62)	20 1/2"	(520)	16.95	(1.58)
WDH 3056♦	7.04	(0.65)	33 7/8"	(860)	30 1/4"	(768)	12.89	(1.20)	5.73	(0.53)	16 1/2"	(418)	17.99	(1.67)
WDH 30510◊	7.52	(0.70)	33 7/8"	(860)	32 1/4"	(819)	13.75	(1.28)	7.61	(0.71)	12 1/2"	(317)	19.04	(1.77)
WDH 3062 ◊	7.99	(0.74)	33 7/8"	(860)	34 1/4"	(870)	14.61	(1.36)	8.08	(0.75)	8 1/2"	(215)	20.08	(1.87)
WDH 34210	3.68	(0.34)	37 7/8"	(962)	14 1/4"	(362)	6.79	(0.63)	3.78	(0.35)	48 1/2"	(1231)	10.65	(0.99)
WDH3432	4.19	(0.39)	37 7/8"	(962)	16 1/4"	(412)	7.76	(0.72)	4.30	(0.40)	44 1/2"	(1130)	11.81	(1.10)
WDH3436	4.72	(0.44)	37 7/8"	(962)	18 1/4"	(463)	8.73	(0.81)	4.83	(0.45)	40 1/2"	(1028)	12.97	(1.21)
WDH34310	5.25	(0.49)	37 7/8"	(962)	20 1/4"	(514)	9.70	(0.90)	5.35	(0.50)	36 1/2"	(926)	14.12	(1.31)
WDH3442	5.78	(0.54)	37 7/8"	(962)	22 1/4"	(565)	10.67	(0.99)	5.88	(0.55)	32 1/2"	(825)	15.28	(1.42)
WDH 3446♦	6.14	(0.57)	37 7/8"	(962)	24 1/4"	(616)	11.64	(1.08)	6.41	(0.60)	28 1/2"	(723)	16.43	(1.53)
WDH 34410♦	6.82	(0.63)	37 7/8"	(962)	26 1/4"	(666)	12.61	(1.17)	6.93	(0.64)	24 1/2"	(622)	17.59	(1.63)
WDH 3452 ◊	7.35	(0.68)	37 7/8"	(962)	28 1/4"	(717)	13.58	(1.26)	7.46	(0.69)	20 1/2"	(520)	18.75	(1.74)
WDH 3456♦	7.88	(0.73)	37 7/8"	(962)	30 1/4"	(768)	14.55	(1.35)	6.41	(0.60)	16 1/2"	(418)	19.90	(1.85)
WDH 34510♦	8.41	(0.78)	37 7/8"	(962)	32 1/4"	(819)	15.53	(1.44)	8.51	(0.79)	12 1/2"	(317)	21.06	(1.96)
WDH 3462 ◊	8.94	(0.83)	37 7/8"	(962)	34 1/4"	(870)	16.50	(1.53)	9.04	(0.84)	8 1/2"	(215)	22.22	(2.06)
WDH38210	4.07	(0.38)	41 7/8"	(1064)	14 1/4"	(362)	7.56	(0.70)	4.17	(0.39)	48 1/2"	(1231)	11.68	(1.09)
WDH3832	4.64	(0.43)	41 7/8"	(1064)	16 1/4"	(412)	8.64	(0.80)	4.76	(0.44)	44 1/2"	(1130)	12.94	(1.20)
WDH3836	5.22	(0.49)	41 7/8"	(1064)	18 1/4"	(463)	9.72	(0.90)	5.34	(0.50)	40 1/2"	(1028)	14.21	(1.32)
WDH 38310	5.81	(0.54)	41 7/8"	(1064)	20 1/4"	(514)	10.81	(1.00)	5.92	(0.55)	36 1/2"	(926)	15.48	(1.44)
WDH3842	6.39	(0.59)	41 7/8"	(1064)	22 1/4"	(565)	11.89	(1.11)	6.50	(0.60)	32 1/2"	(825)	16.75	(1.56)
WDH 3846♦	6.79	(0.63)	41 7/8"	(1064)	24 1/4"	(616)	12.97	(1.21)	7.08	(0.66)	28 1/2"	(723)	18.01	(1.67)
WDH 38410♦	7.55	(0.70)	41 7/8"	(1064)	26 1/4"	(666)	14.05	(1.31)	7.66	(0.71)	24 1/2"	(622)	19.28	(1.79)
WDH 3852 ◊	8.13	(0.76)	41 7/8"	(1064)	28 1/4"	(717)	15.14	(1.41)	8.25	(0.77)	20 1/2"	(520)	20.55	(1.91)
WDH3856 ◊	8.72	(0.81)	41 7/8"	(1064)	30 1/4"	(768)	16.22	(1.51)	7.08	(0.66)	16 1/2"	(418)	21.62	(2.01)
WDH38510◊	9.30	(0.86)	41 7/8"	(1064)	32 1/4"	(819)	17.30	(1.61)	9.41	(0.87)	12 1/2"	(317)	23.08	(2.14)
WDH3862 ◊	9.88	(0.92)	41 7/8"	(1064)	34 1/4"	(870)	18.38	(1.71)	9.99	(0.93)	8 1/2"	(215)	24.35	(2.26)

For cottage and reverse cottage sash opening specifications visit andersenwindows.com/openingspecs.

Woodwright® Springline™ Single-Hung Window Opening and Area Specifications

Window Number	Ar	pening ea :./(m²)	Clear Op Wid Inches	ith	Full Open Hei Inches	ght	Ar	ass rea t./(m²)	Ar	ent ea :./(m²)	Top of S to Top o Sill S Inches	f Inside Stop	Ar	Window ea t./(m²)
WS 2042	1.39	(0.13)	21 7/8"	(556)	9 2/16"	(231)	5.48	(0.51)	1.39	(0.13)	32 9/16"	(828)	8.90	(0.83)
WS 2046	1.54	(0.14)	21 7/8"	(556)	10 2/16"	(257)	5.88	(0.55)	1.54	(0.14)	29 9/16"	(751)	9.44	(0.88)
WS 20410	1.69	(0.16)	21 7/8"	(556)	11 2/16"	(282)	6.29	(0.59)	1.69	(0.16)	26 9/16"	(675)	9.97	(0.93)
WS 2052	1.84	(0.17)	21 7/8"	(556)	12 2/16"	(308)	6.70	(0.62)	1.84	(0.17)	23 9/16"	(599)	10.51	(0.98)
WS 2056	2.76	(0.26)	21 7/8"	(556)	18 2/16"	(461)	7.80	(0.72)	2.76	(0.26)	15 9/ ₁₆ "	(395)	11.94	(1.11)
WS 20510	2.96	(0.28)	21 7/8"	(556)	19 1/2"	(495)	8.25	(0.77)	2.96	(0.28)	12 9/16"	(310)	12.53	(1.16)
WS 2062	3.16	(0.29)	21 7/8"	(556)	20 13/16"	(529)	8.71	(0.81)	3.16	(0.29)	8 7/8"	(226)	13.12	(1.22)
WS 2442	1.64	(0.15)	25 7/8"	(658)	9 2/16"	(231)	6.85	(0.64)	1.64	(0.15)	30 9/16"	(777)	10.62	(0.99)
WS 2446	1.82	(0.17)	25 7/8"	(658)	10 2/16"	(257)	7.34	(0.68)	1.82	(0.17)	27 9/16"	(701)	11.23	(1.04)
WS 24410	2.00	(0.19)	25 7/8"	(658)	11 2/16"	(282)	7.83	(0.73)	2.00	(0.19)	24 9/16"	(624)	11.85	(1.10)
WS 2452	2.18	(0.20)	25 7/8"	(658)	12 2/16"	(308)	8.33	(0.77)	2.18	(0.20)	21 9/16"	(548)	12.47	(1.16)
WS 2456	3.26	(0.30)	25 7/8"	(658)	18 2/16"	(461)	9.65	(0.90)	3.26	(0.30)	13 9/16"	(344)	14.12	(1.31)
WS 24510	3.50	(0.33)	25 7/8"	(658)	19 1/2"	(495)	10.19	(0.95)	3.50	(0.33)	10 3/16"	(259)	14.81	(1.38)
WS 2462	3.74	(0.35)	25 7/8"	(658)	20 13/16"	(529)	10.74	(1.00)	3.74	(0.35)	6 7/8"	(175)	15.49	(1.44)
WS 2642	1.76	(0.16)	27 7/8"	(708)	9 1/8"	(231)	7.57	(0.70)	1.76	(0.16)	29 9/16"	(751)	11.51	(1.07)
WS 2646	1.96	(0.18)	27 7/8"	(708)	10 1/8"	(257)	8.10	(0.75)	1.96	(0.18)	26 9/16"	(675)	12.17	(1.13)
WS 26410	2.15	(0.20)	27 7/8"	(708)	11 1/8"	(282)	8.64	(0.80)	2.15	(0.20)	23 9/16"	(599)	12.82	(1.19)
WS 2652	2.35	(0.22)	27 7/8"	(708)	12 1/8"	(308)	9.17	(0.85)	2.35	(0.22)	20 9/16"	(523)	13.48	(1.25)
WS 2656	3.52	(0.33)	27 7/8"	(708)	18 1/8"	(461)	10.60	(0.99)	3.52	(0.33)	12 9/16"	(319)	15.25	(1.42)

^{• &}quot;Top of Subfloor to Top of Inside Sill Stop" is calculated based upon a structural header height of 6'-10 $^1\!/_2$ " (2096).

Dimensions in parentheses are in millimeters or square meters.
 Meet or exceed clear opening area of 5.7 sq. ft. or 0.53 m², clear opening width of 20" (508) and clear opening height of 24" (610).



Woodwright® Springline™ Single-Hung Window Opening and Area Specifications (continued)

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Window Number	A	Opening rea t./(m²)	Wi	pening in dth s/(mm)	Full Open Hei Inches	ght	Aı	ass rea t./(m²)	Ar	ent rea t./(m²)	Top of S to Top o Sill S Inches	f Inside Stop	Ar	Window rea t./(m²)
WS 26510	3.77	(0.35)	27 7/8"	(708)	19 1/2"	(495)	11.19	(1.04)	3.77	(0.35)	9 3/16"	(234)	15.98	(1.49)
W\$ 2662	4.03	(0.38)	27 7/8"	(708)	20 13/16"	(529)	11.79	(1.10)	4.03	(0.38)	*	*	16.71	(1.55)
W\$ 2842	1.89	(0.18)	29 7/8"	(759)	9 1/8"	(231)	8.31	(0.77)	1.89	(0.18)	28 9/16"	(726)	12.42	(1.15)
W\$ 2846	2.10	(0.20)	29 7/8"	(759)	10 1/8"	(257)	8.89	(0.83)	2.10	(0.20)	25 9/16"	(650)	13.12	(1.22)
WS 28410	2.31	(0.21)	29 7/8"	(759)	11 1/8"	(282)	9.46	(0.88)	2.31	(0.21)	22 9/16"	(574)	13.82	(1.28)
W\$ 2852	2.51	(0.23)	29 7/8"	(759)	12 1/8"	(308)	10.04	(0.93)	2.51	(0.23)	19 9/16"	(497)	14.52	(1.35)
W\$ 2856	3.77	(0.35)	29 7/8"	(759)	18 1/8"	(461)	11.58	(1.08)	3.77	(0.35)	11 9/16"	(293)	16.40	(1.52)
W\$ 28510	4.04	(0.38)	29 7/8"	(759)	19 1/2"	(495)	12.22	(1.14)	4.04	(0.38)	8 3/16"	(209)	17.18	(1.60)
WS 2862	4.32	(0.40)	29 7/8"	(759)	20 13/16"	(529)	12.86	(1.20)	4.32	(0.40)	*	*	17.95	(1.67)
WS 21042	2.02	(0.19)	31 7/8"	(810)	9 1/8"	(231)	9.07	(0.84)	2.02	(0.19)	27 9/16"	(701)	13.35	(1.24)
WS 21046	2.24	(0.21)	31 7/8"	(810)	10 1/8"	(257)	9.69	(0.90)	2.24	(0.21)	24 9/16"	(624)	14.09	(1.31)
WS 210410	2.46	(0.23)	31 7/8"	(810)	11 1/8"	(282)	10.31	(0.96)	2.46	(0.23)	21 9/16"	(548)	14.84	(1.38)
WS 21052	2.68	(0.25)	31 7/8"	(810)	12 1/8"	(308)	10.93	(1.02)	2.68	(0.25)	18 9/16"	(472)	15.58	(1.45)
WS 21056	4.02	(0.37)	31 7/8"	(810)	18 1/8"	(461)	12.58	(1.17)	4.02	(0.37)	10 9/16"	(268)	17.57	(1.63)
WS 210510	4.32	(0.40)	31 7/8"	(810)	19 1/2"	(495)	13.27	(1.23)	4.32	(0.40)	7 3/16"	(183)	18.39	(1.71)
WS 21062	4.61	(0.43)	31 7/8"	(810)	20 13/16"	(529)	13.95	(1.30)	4.61	(0.43)	*	*	19.22	(1.79)
W\$ 3042	2.14	(0.20)	33 7/8"	(861)	9 1/8"	(231)	9.86	(0.92)	2.14	(0.20)	26 9/16"	(675)	14.31	(1.33)
W\$ 3046	2.38	(0.22)	33 7/8"	(861)	10 1/8"	(257)	10.52	(0.98)	2.38	(0.22)	23 9/16"	(599)	15.09	(1.40)
WS 30410	2.62	(0.24)	33 7/8"	(861)	11 1/8"	(282)	11.18	(1.04)	2.62	(0.24)	20 9/16"	(523)	15.87	(1.48)
W\$ 3052	2.85	(0.27)	33 7/8"	(861)	12 1/8"	(308)	11.84	(1.10)	2.85	(0.27)	17 9/16"	(447)	16.66	(1.55)
WS 3056	4.27	(0.40)	33 7/8"	(861)	18 1/8"	(461)	13.60	(1.26)	4.27	(0.40)	9 9/16"	(242)	18.76	(1.74)
WS 30510	4.59	(0.43)	33 7/8"	(861)	19 1/2"	(495)	14.33	(1.33)	4.59	(0.43)	6 3/16"	(158)	19.63	(1.82)
W\$ 3062	4.90	(0.46)	33 7/8"	(861)	20 13/16"	(529)	15.07	(1.40)	4.90	(0.46)	*	*	20.50	(1.90)
W\$ 3442	2.40	(0.22)	37 7/8"	(962)	9 1/8"	(231)	11.50	(1.07)	2.40	(0.22)	24 9/16"	(624)	16.28	(1.51)
WS 3446	2.66	(0.25)	37 7/8"	(962)	10 1/8"	(257)	12.24	(1.14)	2.66	(0.25)	21 9/16"	(548)	17.15	(1.59)
WS 34410	2.92	(0.27)	37 7/8"	(962)	11 1/8"	(282)	12.98	(1.21)	2.92	(0.27)	18 9/16"	(472)	18.02	(1.67)
WS 3452	3.19	(0.30)	37 7/8"	(962)	12 1/8"	(308)	13.72	(1.28)	3.19	(0.30)	15 9/16"	(396)	18.88	(1.75)
WS 3456	4.78	(0.44)	37 7/8"	(962)	18 1/8"	(461)	15.71	(1.46)	4.78	(0.44)	7 9/16"	(192)	21.21	(1.97)
WS 34510	5.13	(0.48)	37 7/8"	(962)	19 1/2"	(495)	16.54	(1.54)	5.13	(0.48)	*	*	22.17	(2.06)
W\$ 3462	5.48	(0.51)	37 7/8"	(962)	20 13/16"	(529)	17.36	(1.61)	5.48	(0.51)	*	*	23.13	(2.15)
W\$ 3842	2.65	(0.25)	41 7/8"	(1064)	9 1/8"	(231)	13.22	(1.23)	2.65	(0.25)	22 9/16"	(574)	18.34	(1.70)
WS 3846	2.94	(0.27)	41 7/8"	(1064)	10 1/8"	(257)	14.04	(1.31)	2.94	(0.27)	19 9/16"	(497)	19.29	(1.79)
WS 38410	3.23	(0.30)	41 7/8"	(1064)	11 1/8"	(282)	14.87	(1.38)	3.23	(0.30)	16 9/16"	(421)	20.24	(1.88)
W\$ 3852	3.52	(0.33)	41 7/8"	(1064)	12 1/8"	(308)	15.69	(1.46)	3.52	(0.33)	13 9/16"	(345)	21.19	(1.97)
WS 3856	5.28	(0.49)	41 7/8"	(1064)	18 1/8"	(461)	17.91	(1.66)	5.28	(0.49)	*	*	23.74	(2.21)
W\$ 38510	5.67	(0.53)	41 7/8"	(1064)	19 1/2"	(495)	18.82	(1.75)	5.67	(0.53)	*	*	24.80	(2.30)
WS 3862	6.06	(0.56)	41 7/8"	(1064)	20 13/16"	(529)	19.74	(1.83)	6.06	(0.56)	*	*	25.85	(2.40)

Woodwright® Arch Double-Hung Window Opening and Area Specifications

			•	•	. •		
Window Number	Clear Opening Area Sq. Ft./(m²)	Clear Opening in Width Inches/(mm)	Full Open Position Height Inches/(mm)	Glass Area Sq. Ft./(m²)	Vent Area Sq. Ft./(m²)	Top of Subfloor to Top of Inside Sill Stop Inches/(mm)	Overall Window Area Sq. Ft./(m²)
WA 18210	1.26 (0.12)	17 7/8" (454)	10 3/16" (259)	2.84 (0.26)	1.61 (0.15)	48 1/2" (1232)	5.39 (0.50)
WA 1832	1.51 (0.14)	17 7/8" (454)	12 3/16" (309)	3.27 (0.30)	1.85 (0.17)	44 1/2" (1131)	5.99 (0.56)
WA 1836	1.76 (0.16)	17 7/8" (454)	14 ³ / ₁₆ " (360)	3.71 (0.34)	2.10 (0.20)	40 1/2" (1029)	6.59 (0.61)
WA 18310	2.01 (0.19)	17 7/8" (454)	16 ³ / ₁₆ " (411)	4.14 (0.39)	2.35 (0.22)	36 1/2" (928)	7.20 (0.67)
WA 1842	2.26 (0.21)	17 7/8" (454)	18 ³ / ₁₆ " (462)	4.58 (0.43)	2.60 (0.24)	32 1/2" (826)	7.80 (0.72)
WA 1846	2.51 (0.23)	17 7/8" (454)	20 3/16" (513)	5.01 (0.47)	2.85 (0.27)	28 1/2" (724)	8.40 (0.78)
WA 18410	2.76 (0.26)	17 7/8" (454)	22 3/16" (563)	5.44 (0.51)	3.10 (0.29)	24 1/2" (623)	9.00 (0.84)
WA 1852	3.00 (0.28)	17 7/8" (454)	24 ³ / ₁₆ " (614)	5.88 (0.55)	3.35 (0.31)	20 1/2" (521)	9.60 (0.89)
WA 1856	3.25 (0.30)	17 7/8" (454)	26 ³ / ₁₆ " (665)	6.31 (0.59)	3.59 (0.33)	16 ¹ / ₂ " (420)	10.20 (0.95)
WA 18510	3.50 (0.33)	17 7/8" (454)	28 ³ / ₁₆ " (716)	6.75 (0.63)	3.84 (0.36)	12 1/2" (318)	10.80 (1.00)
WA 1862	3.75 (0.35)	17 7/8" (454)	30 3/16" (767)	7.18 (0.67)	4.09 (0.38)	8 1/2" (216)	11.40 (1.06)
WA 2032	1.77 (0.16)	21 7/8" (556)	11 5/8" (296)	4.09 (0.38)	2.24 (0.21)	44 1/2" (1131)	7.07 (0.66)
WA 2036	2.07 (0.19)	21 7/8" (556)	13 5/8" (347)	4.63 (0.43)	2.55 (0.24)	40 1/2" (1029)	7.78 (0.72)
WA 20310	2.38 (0.22)	21 7/8" (556)	15 5/8" (397)	5.18 (0.48)	2.85 (0.27)	36 1/2" (928)	8.50 (0.79)
WA 2042	2.68 (0.25)	21 7/8" (556)	17 5/8" (448)	5.72 (0.53)	3.15 (0.29)	32 1/2" (826)	9.21 (0.86)
WA 2046	2.99 (0.28)	21 7/8" (556)	19 5/8" (499)	6.27 (0.58)	3.46 (0.32)	28 1/2" (724)	9.92 (0.92)
WA 20410	3.29 (0.31)	21 7/8" (556)	21 5/8" (550)	6.81 (0.63)	3.76 (0.35)	24 1/2" (623)	10.63 (0.99)
WA 2052	3.59 (0.33)	21 7/8" (556)	23 5/8" (601)	7.36 (0.68)	4.07 (0.38)	20 1/2" (521)	11.34 (1.05)
WA 2056	3.90 (0.36)	21 7/8" (556)	25 5/8" (651)	7.90 (0.73)	4.37 (0.41)	16 ¹ / ₂ " (420)	12.05 (1.12)
WA 20510	4.20 (0.39)	21 7/8" (556)	27 5/8" (702)	8.45 (0.79)	4.68 (0.43)	12 1/2" (318)	12.77 (1.19)

Woodwright® Picture Window Area **Specifications**

Window Number	Ar	ass ea t./(m²)	Ar	Window ea :./(m²)
WPW 10310	2.03	(0.19)	4.07	(0.38)
WPW 1042	2.22	(0.21)	4.41	(0.41)
WPW 1046	2.42	(0.23)	4.74	(0.44)
WPW 10410	2.61	(0.24)	5.07	(0.47)
WPW 1052	2.81	(0.26)	5.41	(0.50)
WPW 1056	3.01	(0.28)	5.74	(0.53)
WPW 10510	3.20	(0.30)	6.07	(0.56)
WPW 1062	3.40	(0.32)	6.41	(0.60)
WPW 30310	9.38	(0.87)	12.77	(1.19)
WPW 3042	10.29	(0.96)	13.82	(1.28)
WPW 3046	11.19	(1.04)	14.86	(1.38)
WPW 30410	12.10	(1.12)	15.91	(1.48)
WPW 3052	13.01	(1.21)	16.95	(1.58)
WPW 3056	13.92	(1.29)	18.00	(1.67)
WPW 30510	14.83	(1.38)	19.04	(1.77)
WPW 3062	15.73	(1.46)	20.09	(1.87)
WPW 34310	10.53	(0.98)	14.13	(1.31)
WPW 3442	11.54	(1.07)	15.28	(1.42)
WPW 3446	12.56	(1.17)	16.44	(1.53)
WPW 34410	13.58	(1.26)	17.60	(1.64)
WPW 3452	14.60	(1.36)	18.75	(1.74)
WPW 3456	15.62	(1.45)	19.91	(1.85)
WPW 34510	16.64	(1.55)	21.07	(1.96)
WPW 3462	17.66	(1.64)	22.22	(2.06)
WPW 310310	12.16	(1.13)	16.06	(1.49)
WPW 31042	13.33	(1.24)	17.37	(1.61)
WPW 31046	14.51	(1.35)	18.69	(1.74)
WPW 310410	15.69	(1.46)	20.00	(1.86)
WPW 31052	16.87	(1.57)	21.32	(1.98)
WPW 31056	18.04	(1.68)	22.63	(2.10)
WPW 310510	19.22	(1.79)	23.94	(2.22)
WPW 31062	20.40	(1.90)	25.26	(2.35)
WPW 42310	13.30	(1.24)	17.42	(1.62)
WPW4242	14.20	(1.32)	18.84	(1.75)
WPW 4246	15.88	(1.48)	20.27	(1.88)
WPW 42410	17.17	(1.60)	21.69	(2.02)
WPW4252	18.46	(1.72)	23.12	(2.15)
WPW4256	19.75	(1.84)	24.54	(2.28)
WPW42510	21.03	(1.95)	25.97	(2.41)
WPW4262	22.32	(2.07)	27.39	(2.55)
WPW410310	15.60	(1.45)	20.13	(1.87)
WPW41042	17.11	(1.59)	21.78	(2.02)
WPW41046	18.62	(1.73)	23.43	(2.18)
WPW410410 WPW41052	20.13	(1.87)	25.07	(2.33)
WPW41052 WPW41056	21.64	(2.01)	26.72	(2.48)
WPW41056	24.66			(2.79)
WPW410510 WPW41062	26.17	(2.29)	30.02	
WPW56310	17.89	(2.43)	31.66 22.85	(2.94)
WPW5642	19.63	(1.82)	24.72	(2.30)
WPW5646	21.36	(1.98)	26.59	(2.47)
WPW56410	23.09	(2.15)	28.46	(2.64)
WPW5652	24.83	(2.13)	30.33	(2.82)
WPW5656	26.56	(2.47)	32.20	(2.99)
WPW56510	28.29	(2.63)	34.07	(3.17)
WPW5662	30.02	(2.79)	35.93	(3.34)
Dimensions in parenthes		guare met		,

[·] Dimensions in parentheses are in square meters.

^{• &}quot;Top of Subfloor to Top of Inside Sill Stop" is calculated based upon a structural header height of 6'-10 ¹/₂" (2096).

• Dimensions in parentheses are in millimeters or square meters.

^{*}Dimension varies depending on header height.

Woodwright [®]	Arch	Doub	le-Hu	ng Wi	ndow (Openi	ng and	d Area	Spec	ificati	ions (ca	ontinued)		
we i	01 6		Clear O	pening in	Full Open	Position	01		,,,			Subfloor		Mr. 1
Window Number		Opening rea	Wi	dth	Hei	ght		ass rea		ent rea		of Inside Stop		Window rea
		t./(m²)		s/(mm)	Inches			t./(m²)		t./(m²)		s/(mm)		t./(m²)
WA 2062	4.51	(0.42)	21 7/8"	(556)	29 5/8"	(753)	8.99	(0.84)	4.98	(0.46)	8 1/2"	(216)	13.48	(1.25)
WA 2432	2.00	(0.19)	25 7/8"	(658)	11 1/8"	(282)	4.89	(0.46)	2.62	(0.24)	44 1/2"	(1131)	8.14	(0.76)
WA2436	2.36	(0.22)	25 7/8"	(658)	13 1/8"	(333)	5.55	(0.52)	2.98	(0.28)	40 1/2"	(1029)	8.96	(0.83)
WA 24310 WA 2442	3.08	(0.25)	25 7/8"	(658)	15 1/8"	(384)	6.21	(0.58)	3.34	(0.31)	36 1/2"	(928)	9.79	(0.91)
WA2442 WA2446	3.44	(0.29)	25 ⁷ / ₈ " 25 ⁷ / ₈ "	(658)	17 ¹ / ₈ " 19 ¹ / ₈ "	(435)	7.52	(0.64)	4.06	(0.34)	32 ¹ / ₂ " 28 ¹ / ₂ "	(826)	11.43	(0.99)
WA24410	3.80	(0.35)	25 7/8"	(658)	21 1/8"	(536)	8.17	(0.76)	4.42	(0.41)	24 1/2"	(623)	12.26	(1.14)
WA 2452	4.16	(0.39)	25 7/8"	(658)	23 1/8"	(587)	8.83	(0.82)	4.78	(0.44)	20 1/2"	(521)	13.08	(1.22)
WA 2456	4.51	(0.42)	25 7/8"	(658)	25 1/8"	(638)	9.49	(0.88)	5.14	(0.48)	16 1/2"	(420)	13.90	(1.29)
WA 24510	4.87	(0.45)	25 7/8"	(658)	27 1/8"	(689)	10.14	(0.94)	5.50	(0.51)	12 1/2"	(318)	14.72	(1.37)
WA 2462	5.23	(0.49)	25 7/8"	(658)	29 1/8"	(739)	10.80	(1.00)	5.86	(0.54)	8 1/2"	(216)	15.55	(1.44)
WA 2632	2.10	(0.20)	27 7/8"	(708)	10 13/16"	(275)	5.29	(0.49)	2.81	(0.26)	44 1/2"	(1131)	8.67	(0.81)
WA 2636	2.49	(0.23)	27 7/8"	(708)	12 13/16"	(326)	6.00	(0.56)	3.19	(0.30)	40 1/2"	(1029)	9.55	(0.89)
WA 26310	2.88	(0.27)	27 7/8"	(708)	14 13/16"	(377)	6.72	(0.62)	3.58	(0.33)	36 1/2"	(928)	10.43	(0.97)
WA 2642	3.26	(0.30)	27 7/8"	(708)	16 13/16"	(428)	7.43	(0.69)	3.97	(0.37)	32 1/2"	(826)	11.31	(1.05)
WA 2646	3.65	(0.34)	27 7/8"	(708)	18 13/16"	(479)	8.14	(0.76)	4.36	(0.41)	28 1/2"	(724)	12.18	(1.13)
WA 26410	4.04	(0.38)	27 7/8"	(708)	20 13/16"	(529)	8.85	(0.82)	4.74	(0.44)	24 1/2"	(623)	13.06	(1.21)
WA 2652	4.42	(0.41)	27 7/8"	(708)	22 13/16"	(580)	9.56	(0.89)	5.13	(0.48)	20 1/2"	(521)	13.94	(1.30)
WA2656	4.81	(0.45)	27 7/8"	(708)	24 13/16"	(631)	10.28	(0.96)	5.52	(0.51)	16 1/2"	(420)	14.82	(1.38)
WA 26510 WA 2662	5.20	(0.48)	27 7/8"	(708)	26 13/16"	(682)	10.99	(1.02)	5.91 6.29	(0.55)	12 1/2"	(318)	15.70	(1.46)
WA2002 WA2836	5.59 2.61	(0.52)	27 7/8"	(708)	28 ¹³ / ₁₆ " 12 ⁹ / ₁₆ "	(733)	11.70 6.46	(1.09)	3.41	(0.59)	8 ¹ / ₂ " 40 ¹ / ₂ "	(216)	16.58	(1.54)
WA28310	3.03	(0.24)	29 7/8"	(759)	14 9/16"	(370)	7.22	(0.67)	3.82	(0.36)	36 1/2"	(928)	11.07	(1.03)
WA 2842	3.44	(0.32)	29 7/8"	(759)	16 9/16"	(421)	7.99	(0.74)	4.24	(0.39)	32 1/2"	(826)	12.00	(1.12)
WA 2846	3.86	(0.36)	29 7/8"	(759)	18 9/16"	(472)	8.76	(0.81)	4.65	(0.43)	28 1/2"	(724)	12.94	(1.20)
WA 28410	4.27	(0.40)	29 7/8"	(759)	20 9/16"	(523)	9.53	(0.89)	5.07	(0.47)	24 1/2"	(623)	13.87	(1.29)
WA 2852	4.69	(0.44)	29 7/8"	(759)	22 9/16"	(573)	10.29	(0.96)	5.48	(0.51)	20 1/2"	(521)	14.80	(1.38)
WA 2856	5.10	(0.47)	29 7/8"	(759)	24 9/16"	(624)	11.06	(1.03)	5.90	(0.55)	16 1/2"	(420)	15.74	(1.46)
WA 28510	5.52	(0.51)	29 7/8"	(759)	26 9/16"	(675)	11.83	(1.10)	6.31	(0.59)	12 1/2"	(318)	16.67	(1.55)
WA 2862 ◊	5.93	(0.55)	29 7/8"	(759)	28 9/16"	(726)	12.60	(1.17)	6.73	(0.63)	8 1/2"	(216)	17.61	(1.64)
WA 210310	3.17	(0.29)	31 7/8"	(810)	14 5/16"	(363)	7.73	(0.72)	4.06	(0.38)	36 1/2"	(928)	11.70	(1.09)
WA 21042	3.61	(0.34)	31 7/8"	(810)	16 5/16"	(414)	8.55	(0.80)	4.50	(0.42)	32 1/2"	(826)	12.69	(1.18)
WA 21046	4.05	(0.38)	31 7/8"	(810)	18 5/16"	(465)	9.38	(0.87)	4.94	(0.46)	28 1/2"	(724)	13.68	(1.27)
WA 210410	4.50	(0.42)	31 7/8"	(810)	20 5/16"	(516)	10.20	(0.95)	5.39	(0.50)	24 1/2"	(623)	14.67	(1.36)
WA 21052 WA 21056	4.94	(0.46)	31 7/8"	(810)	22 5/16"	(567)	11.02	(1.02)	5.83	(0.54)	20 1/2"	(521)	15.66	(1.46)
WA21056 WA210510◊	5.38	(0.50)	31 7/8"	(810)	24 ⁵ / ₁₆ " 26 ⁵ / ₁₆ "	(617)	11.84	(1.10)	6.27	(0.58)	16 ¹ / ₂ " 12 ¹ / ₂ "	(420)	16.65 17.64	(1.55)
WA210510 V	6.27	(0.54)	31 7/8"	(810)	28 5/16"	(719)	13.49	(1.25)	7.16	(0.67)	8 1/2"	(216)	18.63	(1.73)
WA 30310	3.30	(0.31)	33 7/8"	(861)	14 1/16"	(357)	8.23	(0.77)	4.29	(0.40)	36 1/2"	(928)	12.34	(1.15)
WA 3042	3.78	(0.35)	33 7/8"	(861)	16 1/16"	(407)	9.11	(0.85)	4.76	(0.44)	32 1/2"	(826)	13.38	(1.24)
WA 3046	4.25	(0.39)	33 7/8"	(861)	18 1/16"	(458)	9.99	(0.93)	5.23	(0.49)	28 1/2"	(724)	14.43	(1.34)
WA 30410	4.72	(0.44)	33 7/8"	(861)	20 1/16"	(509)	10.87	(1.01)	5.70	(0.53)	24 1/2"	(623)	15.47	(1.44)
WA 3052	5.19	(0.48)	33 7/8"	(861)	22 1/16"	(560)	11.75	(1.09)	6.17	(0.57)	20 1/2"	(521)	16.52	(1.54)
WA 3056	5.66	(0.53)	33 7/8"	(861)	24 1/16"	(611)	12.62	(1.17)	6.65	(0.62)	16 1/2"	(420)	17.56	(1.63)
WA 30510◊	6.13	(0.57)	33 7/8"	(861)	26 1/16"	(661)	13.50	(1.25)	7.12	(0.66)	12 1/2"	(318)	18.61	(1.73)
WA 3062 ◊	6.60	(0.61)	33 7/8"	(861)	28 1/16"	(712)	14.38	(1.34)	7.59	(0.71)	8 1/2"	(216)	19.65	(1.83)
WA 34310	3.55	(0.33)	37 7/8"	(962)	13 1/2"	(343)	9.23	(0.86)	4.75	(0.44)	36 1/2"	(928)	13.60	(1.26)
WA3442	4.08	(0.38)	37 7/8"	(962)	15 1/2"	(394)	10.22	(0.95)	5.28	(0.49)	32 1/2"	(826)	14.76	(1.37)
WA3446	4.61	(0.43)	37 7/8"	(962)	17 1/2"	(445)	11.21	(1.04)	5.81	(0.54)	28 1/2"	(724)	15.91	(1.48)
WA 34410 WA 3452	5.13	(0.48)	37 7/8"	(962)	19 1/2"	(495)	12.20 13.19	(1.13)	6.33	(0.59)	24 1/2"	(623)	17.07	(1.59)
WA3452 WA3456	5.66 6.19	(0.53)	37 ⁷ / ₈ "	(962)	21 1/2"	(546)	14.18	(1.23)	6.86 7.38	(0.64)	20 ¹ / ₂ " 16 ¹ / ₂ "	(521)	19.38	(1.69)
WA34510 ◊	6.71	(0.62)	37 7/8	(962)	25 1/2"	(648)	15.17	(1.41)	7.91	(0.74)	10 1/2	(318)	20.54	(1.91)
WA3462 ◊	7.24	(0.67)	37 7/8"	(962)	27 1/2"	(699)	16.16	(1.50)	8.44	(0.78)	8 1/2"	(216)	21.69	(2.02)
WA 3842	4.36	(0.41)	41 7/8"	(1064)	15"	(380)	11.32	(1.05)	5.79	(0.54)	32 1/2"	(826)	16.12	(1.50)
WA 3846	4.94	(0.46)	41 7/8"	(1064)	17"	(431)	12.42	(1.15)	6.37	(0.59)	28 1/2"	(724)	17.39	(1.62)
WA 38410	5.52	(0.51)	41 7/8"	(1064)	19"	(482)	13.52	(1.26)	6.95	(0.65)	24 1/2"	(623)	18.65	(1.73)
WA 3852	6.10	(0.57)	41 7/8"	(1064)	21"	(533)	14.62	(1.36)	7.53	(0.70)	20 1/2"	(521)	19.92	(1.85)
WA 3856	6.68	(0.62)	41 7/8"	(1064)	23"	(583)	15.72	(1.46)	8.11	(0.75)	16 1/2"	(420)	21.19	(1.97)
WA 38510◊	7.26	(0.68)	41 7/8"	(1064)	25"	(634)	16.82	(1.56)	8.70	(0.81)	12 1/2"	(318)	22.46	(2.09)
WA 3862 ◊	7.85	(0.73)	41 7/8"	(1064)	27"	(685)	17.93	(1.67)	9.28	(0.86)	8 1/2"	(216)	23.72	(2.20)

^{• &}quot;Top of Subfloor to Top of Inside Sill Stop" is calculated based upon

Top of Subinor to top of inside Sili Stop 1 scalculated based upo a structural header height of 6'-10 ¹/²/" (2096).
 Dimensions in parentheses are in millimeters or square meters.
 Meet or exceed clear opening area of 5.7 sq. ft. or 0.53 m², clear opening width of 20" (508) and clear opening height of 24" (610).



Woodwright* Unequal Leg Arch Double-Hung Window Opening and Area Specifications

		,	Clear O	pening in	Full Open	Position					Top of S	Subfloor		
Window		Opening		_				ass		ent	to Top o	of Inside		Window
Number		rea t./(m²)		dth s/(mm)	Hei Inches	ght :/(mm)		rea t./(m²)		ea t./(m²)	Sill S Inches	Stop (mm)		ea t./(m²)
WU 1836	1.44	(0.13)	17 7/8"	(454)	11 5/8"	(295)	3.59	(0.33)	1.98	(0.18)	40 1/2"	(1029)	6.47	(0.60)
WU 18310	1.69	(0.16)	17 7/8"	(454)	13 5/8"	(346)	4.02	(0.37)	2.23	(0.21)	36 1/2"	(928)	7.07	(0.66)
WU 1842	1.94	(0.18)	17 7/8"	(454)	15 5/8"	(396)	4.46	(0.41)	2.48	(0.23)	32 1/2"	(826)	7.67	(0.71)
WU 1846	2.19	(0.20)	17 7/8"	(454)	17 5/8"	(447)	4.89	(0.45)	2.72	(0.25)	28 1/2"	(724)	8.27	(0.77)
WU 18410	2.44	(0.23)	17 7/8"	(454)	19 5/8"	(498)	5.32	(0.49)	2.97	(0.28)	24 1/2"	(623)	8.87	(0.82)
WU 1852	2.68	(0.25)	17 7/8"	(454)	21 5/8"	(549)	5.76	(0.53)	3.22	(0.30)	20 1/2"	(521)	9.47	(0.88)
WU 1856	2.93	(0.27)	17 7/8"	(454)	23 5/8"	(600)	6.19	(0.58)	3.47	(0.32)	16 1/2"	(420)	10.07	(0.94)
WU 18510	3.18	(0.30)	17 7/8"	(454)	25 5/8"	(650)	6.63	(0.62)	3.72	(0.35)	12 1/2"	(318)	10.67	(0.99)
WU 1862	3.43	(0.32)	17 7/8"	(454)	27 5/8"	(701)	7.06	(0.66)	3.97	(0.37)	8 1/2"	(216)	11.28	(1.05)
WU 20310	1.71	(0.16)	21 7/8"	(556)	11 1/4"	(286)	4.95	(0.46)	2.61	(0.24)	36 1/2"	(928)	8.24	(0.77)
WU 2042	2.02	(0.19)	21 7/8"	(556)	13 1/4"	(337)	5.50	(0.51)	2.91	(0.27)	32 1/2"	(826)	8.96	(0.83)
WU 2046	2.32	(0.22)	21 7/8"	(556)	15 1/4"	(388)	6.04	(0.56)	3.22	(0.30)	28 1/2"	(724)	9.67	(0.90)
WU 20410	2.62	(0.24)	21 7/8"	(556)	17 1/4"	(438)	6.59	(0.61)	3.52	(0.33)	24 1/2"	(623)	10.38	(0.96)
WU2052	2.93	(0.27)	21 7/8"	(556)	19 1/4"	(489)	7.13	(0.66)	3.83	(0.36)	20 1/2"	(521)	11.09	(1.03)
WU2056	3.23	(0.30)	21 7/8"	(556)	21 1/4"	(540)	7.68	(0.71)	4.13	(0.38)	16 1/2"	(420)	11.80	(1.10)
WU20510	3.54	(0.33)	21 7/8"	(556)	23 1/4"	(591)	8.22	(0.76)	4.44	(0.41)	12 1/2"	(318)	12.51	(1.16)
WU2062	3.84	(0.36)	21 7/8	(556)	25 1/4"	(642)	8.77	(0.70)	4.74	(0.41)	8 1/2"	(216)	13.23	(1.10)
WU2446	2.21	(0.36)	25 7/8"	(658)	12 1/4"	(312)	7.12	(0.66)	3.64	(0.44)	28 1/2"	(724)	10.99	(1.02)
WU24410	2.21	(0.21)	25 7/8"	(658)	14 1/4"	(363)	7.12	(0.72)	4.00	(0.34)	24 1/2"	(623)	11.81	(1.02)
WU2452	2.93	(0.27)	25 7/8"	(658)		(413)	8.44	(0.72)	4.36	(0.41)	20 1/2"	(521)	12.63	(1.17)
WU2452 WU2456E	3.29	(0.21)			16 ¹ / ₄ "		9.09	(0.78)	4.72	, ,		(420)	13.46	(1.17)
WU2450E WU24510			25 7/8"	(658)	-	(464)				(0.44)	16 1/2"		14.28	
	3.65	(0.34)	25 7/8"	(658)	20 1/4"	(515)	9.75	(0.91)	5.08	(0.47)	12 1/2"	(318)		(1.33)
WU2462	4.01	(0.37)	25 7/8"	(658)	22 1/4"	(566)	10.40	(0.97)	5.44	(0.51)	8 1/2"	(216)	15.10	(1.40)
WU26410	2.42	(0.23)	27 7/8"	(708)	12 1/2"	(318)	8.34	(0.78)	4.21	(0.39)	24 1/2"	(623)	12.49	(1.16)
WU2652	2.81	(0.26)	27 7/8"	(708)	14 1/2"	(368)	9.06	(0.84)	4.59	(0.43)	20 1/2"	(521)	13.37	(1.24)
WU2656	3.20	(0.30)	27 7/8"	(708)	16 1/2"	(419)	9.77	(0.91)	4.98	(0.46)	16 1/2"	(420)	14.25	(1.32)
WU 26510	3.58	(0.33)	27 7/8"	(708)	18 1/2"	(470)	10.48	(0.97)	5.37	(0.50)	12 1/2"	(318)	15.13	(1.41)
WU 2662	3.97	(0.37)	27 7/8"	(708)	20 1/2"	(521)	11.19	(1.04)	5.76	(0.53)	8 1/2"	(216)	16.01	(1.49)
WU2852	2.59	(0.24)	29 7/8"	(759)	12 1/2"	(317)	9.65	(0.90)	4.80	(0.45)	20 1/2"	(521)	14.08	(1.31)
WU2856	3.01	(0.28)	29 7/8"	(759)	14 1/2"	(368)	10.42	(0.97)	5.22	(0.48)	16 1/2"	(420)	15.01	(1.40)
WU 28510	3.42	(0.32)	29 7/8"	(759)	16 1/2"	(419)	11.19	(1.04)	5.63	(0.52)	12 1/2"	(318)	15.95	(1.48)
WU 2862	3.84	(0.36)	29 7/8"	(759)	18 1/2"	(470)	11.95	(1.11)	6.05	(0.56)	8 1/2"	(216)	16.88	(1.57)
WU 21042	3.13	(0.29)	31 7/8"	(810)	14 1/8"	(359)	8.35	(0.78)	4.31	(0.40)	32 1/2"	(826)	12.52	(1.16)
WU 21046	3.57	(0.33)	31 7/8"	(810)	16 1/8"	(409)	9.17	(0.85)	4.75	(0.44)	28 1/2"	(724)	13.51	(1.26)
WU 210410	4.01	(0.37)	31 7/8"	(810)	18 1/8"	(460)	10.00	(0.93)	5.19	(0.48)	24 1/2"	(623)	14.50	(1.35)
WU 21052	4.46	(0.41)	31 7/8"	(810)	20 1/8"	(511)	10.82	(1.01)	5.64	(0.52)	20 1/2"	(521)	15.49	(1.44)
WU 21056	4.90	(0.46)	31 7/8"	(810)	22 1/8"	(562)	11.64	(1.08)	6.08	(0.56)	16 1/2"	(420)	16.48	(1.53)
WU 210510	5.34	(0.50)	31 7/8"	(810)	24 1/8"	(613)	12.46	(1.16)	6.52	(0.61)	12 1/2"	(318)	17.47	(1.62)
WU 21062 ◊	5.78	(0.54)	31 7/8"	(810)	26 1/8"	(663)	13.29	(1.23)	6.96	(0.65)	8 1/2"	(216)	18.46	(1.72)
WU 3042	3.13	(0.29)	33 7/8"	(861)	13 5/16"	(338)	8.86	(0.82)	4.51	(0.42)	32 1/2"	(826)	13.15	(1.22)
WU 3046	3.60	(0.34)	33 7/8"	(861)	15 5/16"	(389)	9.73	(0.90)	4.98	(0.46)	28 1/2"	(724)	14.20	(1.32)
WU 30410	4.07	(0.38)	33 7/8"	(861)	17 5/16"	(440)	10.61	(0.99)	5.46	(0.51)	24 1/2"	(623)	15.24	(1.42)
WU 3052	4.54	(0.42)	33 7/8"	(861)	19 5/16"	(490)	11.49	(1.07)	5.93	(0.55)	20 1/2"	(521)	16.29	(1.51)
WU 3056	5.02	(0.47)	33 7/8"	(861)	21 5/16"	(541)	12.37	(1.15)	6.40	(0.59)	16 1/2"	(420)	17.33	(1.61)
WU 30510	5.49	(0.51)	33 7/8"	(861)	23 5/16"	(592)	13.25	(1.23)	6.87	(0.64)	12 1/2"	(318)	18.38	(1.71)
WU 3062 ◊	5.96	(0.55)	33 7/8"	(861)	25 5/16"	(643)	14.13	(1.31)	7.34	(0.68)	8 1/2"	(216)	19.42	(1.80)
WU 34410	4.09	(0.38)	37 7/8"	(962)	15 1/2"	(395)	11.81	(1.10)	5.95	(0.55)	24 1/2"	(623)	16.69	(1.55)
WU 3452	4.61	(0.43)	37 7/8"	(962)	17 1/2"	(445)	12.80	(1.19)	6.47	(0.60)	20 1/2"	(521)	17.85	(1.66)
WU 3456	5.14	(0.48)	37 7/8"	(962)	19 1/2"	(496)	13.79	(1.28)	7.00	(0.65)	16 1/2"	(420)	19.01	(1.77)
WU 34510	5.67	(0.53)	37 7/8"	(962)	21 1/2"	(547)	14.78	(1.37)	7.53	(0.70)	12 1/2"	(318)	20.16	(1.87)
WU 3462	6.19	(0.58)	37 7/8"	(962)	23 1/2"	(598)	15.77	(1.47)	8.05	(0.75)	8 1/2"	(216)	21.32	(1.98)
WU 3852	4.52	(0.42)	41 7/8"	(1064)	15 1/2"	(394)	14.06	(1.31)	6.97	(0.65)	20 1/2"	(521)	19.36	(1.80)
WU 3856	5.10	(0.47)	41 7/8"	(1064)	17 1/2"	(445)	15.16	(1.41)	7.55	(0.70)	16 1/2"	(420)	20.63	(1.92)
WU 38510	5.68	(0.53)	41 7/8"	(1064)	19 1/2"	(496)	16.27	(1.51)	8.13	(0.76)	12 1/2"	(318)	21.90	(2.03)
WU 3862	6.26	(0.58)	41 7/8"	(1064)	21 1/2"	(547)	17.37	(1.61)	8.71	(0.81)	8 1/2"	(216)	23.16	(2.15)

^{• &}quot;Top of Subfloor to Top of Inside Sill Stop" is calculated based upon a structural header height of 6'-10 1/2" (2096).
• Dimensions in parentheses are in millimeters or square meters.

♦ Meet or exceed clear opening area of 5.7 sq. ft. or 0.53 m², clear opening width of 20" (508) and clear opening height of 24" (610).

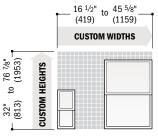
Custom Sizes

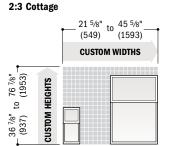


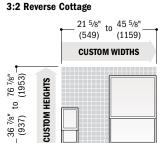
Available in 1/8" (3) increments between minimum and maximum widths and heights. Windows can also be custom sized to match standard sizes ending in a sixteenth of an inch. Some restrictions apply; contact your Andersen supplier. Measurement guide for custom-size windows can be found at andersenwindows.com/measure.

Woodwright® Double-Hung Windows

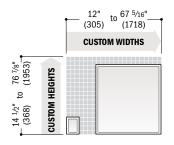
Equal

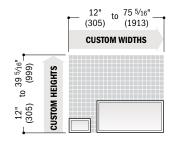




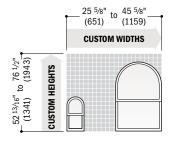


Woodwright® Picture and Transom Windows



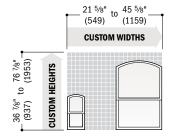


Woodwright® Springline™ Single-Hung Windows



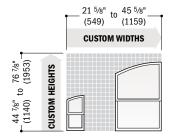
Side-by-side joining of two Springline windows is not recommended.

Woodwright® Arch Double-Hung Windows



Side-by-side joining of two arch windows is not recommended.

Woodwright® Unequal Leg Arch Double-Hung Windows



Short side joining of unequal leg arch windows is not recommended.

[·] Dimensions in parentheses are in millimeters.

For picture window patterns that require alignment with double- or single-hung

window patterns, identify the

sash style (equal, cottage or reverse cottage) when ordering. Number of lights

and overall pattern varies

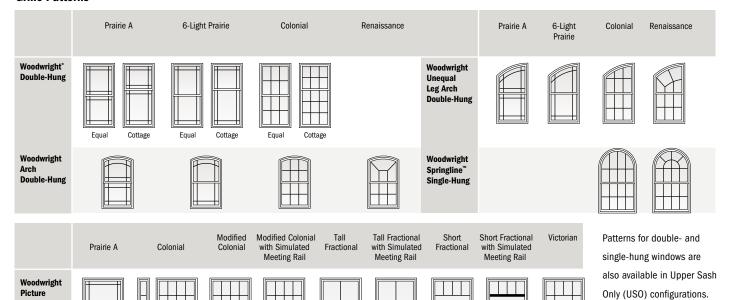
with window size. Patterns

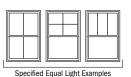
not available in all

configurations.

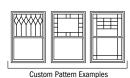


Grille Patterns





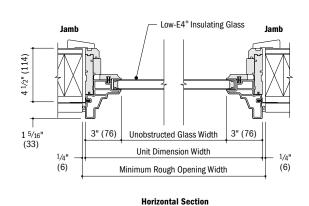
Woodwright **Transom**

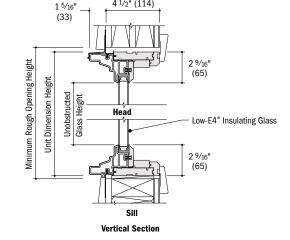


Specified equal light and custom patterns are also available. For more grille options, see page 14 or visit andersenwindows.com/grilles.

Woodwright® Transom Window Details

Scale $1^{1}/2$ " (38) = 1'-0" (305) - 1:8



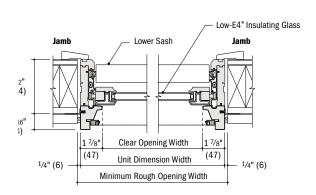


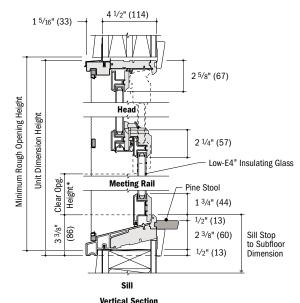
4 1/2" (114)

- Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 210-211.
 Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com.

Woodwright® Double-Hung Window Details

Scale $1^{1}/2^{1}$ (38) = 1'-0" (305) - 1:8

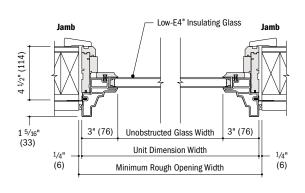




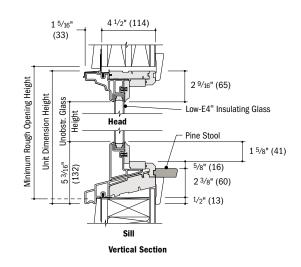
Horizontal Section

Woodwright® Picture Window Details

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8



Horizontal Section



[•] Light-colored areas are parts included with window. Dark-colored areas are additional Andersen® parts required to complete window assembly as shown.

[•] Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 210-211.
• Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com.

[•] Dimensions in parentheses are in millimeters.

^{*}Clear opening height dimension is less on arch, unequal leg arch and Springline™ hung windows.



Horizontal (stack) Joining Detail

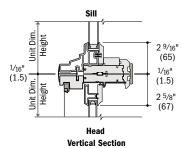
Scale $1^{1/2}$ " (38) = 1'-0" (305) -1:8

Overall Window Dimension Height

Sum of individual window heights plus 1/16" (1.5) for each join.

Overall Rough Opening Height

Overall window dimension height.*



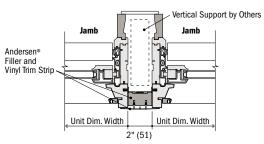
Woodwright® Transom (WTR) over Woodwright Double-Hung

For more joining information, see the combination designs section starting on page 181.

Separate Rough Openings Detail

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8

To meet structural requirements or to achieve a wider joined appearance, windows may be installed into separate rough openings having vertical support (by others) in combination with Andersen® exterior filler and exterior vinyl trim.



Horizontal Section

Woodwright® Double-Hung and Woodwright Double-Hung

Vertical (ribbon) Joining Detail

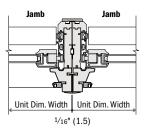
Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8

Overall Window Dimension Width

Sum of individual window widths plus 1/16" (1.5) for each join.

Overall Rough Opening Width

Overall window dimension width plus 1/2" (13).



Horizontal Section

Woodwright® Double-Hung to Woodwright Double-Hung

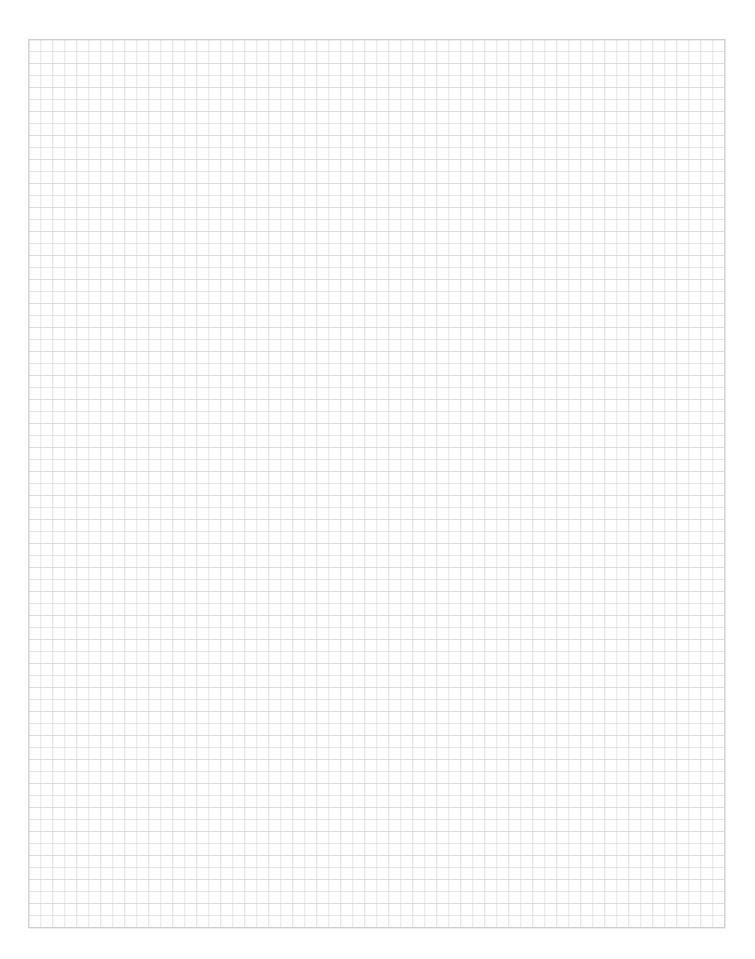
[•] Light-colored areas are parts included with window. Dark-colored areas are additional Andersen* parts required to complete window assembly as shown.
• Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 210-211.

Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com.

[·] Consult with an architect or structural engineer regarding minimum requirements for structural support members between adjacent rough openings.

[·] Dimensions in parentheses are in millimeters.

^{*}For stacks where bottom unit in combination is a double-hung or picture window with a sloped sill. If bottom window has a flat sill, add 1/2" (13) to the overall window dimension height.







WOODWRIGHT® DOUBLE-HUNG INSERT WINDOWS

FEATURES

FRAME

- ♠ A Fibrex[®] material exterior protects the frame – beautifully. Best of all, it's low maintenance and never needs painting.*
- **3** For exceptional long-lasting performance, sill members are constructed with a wood core and a Fibrex material exterior.
- © Natural wood stops are available in pine, maple, oak and prefinished white. Wood jamb liners add beauty and authenticity to the window interior.
- Multiple weatherstrip systems help provide a barrier against wind, rain and dust. The combination of spring-tension vinyl, rigid vinyl and flexible bulb weatherstrip is efficient and effective.
- **3** Exterior stop covers are specially designed to allow easy application of high-quality sealant.
- 3 1/4" (83) "pocket window" jamb depth allows convenient replacement without disturbing interior window trim for most double-hung replacement situations.
- For units with white exterior color, the exterior jamb liner is white. For all other units, the exterior jamb liner is gray.

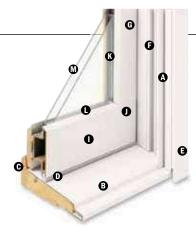
SASH

6 Balancers in the sash enable contractors to screw through the jamb during installation without interfering with the window's operation.

Wood Jamb Liner



- Natural wood sash interior with classic chamfer detailing. Available in pine, maple, oak or prefinished white.
- Low-maintenance sash exterior provides long-lasting* protection and performance. Sash exteriors on most units include Fibrex material.
- Sash joints simulate the look of traditional mortise-and-tenon construction inside and out.



GLASS

- **(b)** In addition to stainless steel glass spacers, black or white glass spacers are now available to allow the spacer to blend in with the unit color.
- Silicone bed glazing provides superior weathertightness and durability.
- M High-Performance options include:
- Low-E4® glass
- Low-E4 HeatLock® glass
- Low-E4 SmartSun[™] glass
- Low-E4 SmartSun HeatLock glass
- Low-E4 Sun glass

Tempered and other glass options are available. Contact your Andersen supplier.

A removable translucent film helps shield the glass from damage during delivery and construction, and simplifies finishing at the job site.

Patterned Glass

Patterned glass options are available. See page 12 for more details.

HARDWARE



Standard lock and keeper design provides an easy tilt-to-clean feature integrated into the lock.

SILL ANGLES

Three sill angles are available – 0,° 8° and 14° – to closely match the existing sill in window replacement applications. See page 71 for details.



0° Sill Angle



8° Sill Angle



14° Sill Angle

Sill Angle Finder App

Our Sill Angle Finder App lets you quickly and easily find the sill angle of existing double-hung windows.

Available for free for both iPhone® and Android™ smartphones. Download the app for iPhone from the App Store™ or for Android smartphones from the Google Play Store. The app is only available for smartphones, as tablets and other large devices are too bulky for measuring window sill angles.

INSTALLATION

Exterior Stop Cover



An exterior stop cover provides a clean transition from the new window to the existing window casing.

Included Installation Materials



Flat self-hanging shims, backer rod, installation screws and complete instructions are included with each insert window. See the measurement guide and worksheet at andersenwindows.com/measure.

SASH OPTIONS"



Cottage

Reverse Cottage



EXTERIOR & INTERIOR OPTIONS

EXTERIOR COLORS



INTERIOR OPTIONS



HARDWARE



Standard Lock & Keeper

Antique Brass | **Black** | Bright Brass Brushed Chrome | Distressed Bronze Distressed Nickel | Gold Dust Oil Rubbed Bronze | Polished Chrome Satin Nickel | Stone | White

OPTIONAL HARDWARE Sold Separately

CONTEMPORARY



Available in all hardware finishes. Shown in **Distressed Nickel**.

ESTATE™



Antique Brass | Bright Brass
Brushed Chrome | Distressed Bronze
Distressed Nickel | Oil Rubbed Bronze
Polished Chrome | **Satin Nickel**

TRADITIONAL









Finger Lifts

Antique Brass | Black | Bright Brass | Brushed Chrome

Distressed Bronze | Distressed Nickel | Gold Dust | **Oil Rubbed Bronze**Polished Chrome | Satin Nickel | Stone | White

CLASSIC SERIES™







Stone | White

Bold name denotes finish shown.

HARDWARE FINISHES



ACCESSORIES Sold Separately

FRAME

Wood Interior Stop



Optional interior stop with matching chamfer is available.

SASH

Window Opening Control Device



A window opening control device is available, which limits sash travel to less than 4" (102) when the window is first opened. Available factory applied, or as a field-applied kit in stone or white.

INSTALLATION

Coil Stock



Andersen® aluminum coil stock can be ordered to match any of our 11 trim colors. Made from .018" thick aluminum, Andersen coil stock is available in 24" (610) x 50' (15240) rolls. Color-matched 1 ½" (32)-long stainless steel trim nails are also available and can be ordered in 1 lb/.454 kg boxes.

INSECT SCREENS

Insect Screen Frames



Choose full insect screen or half insect screen. Half insect screen (shown above) allows ventilation without affecting the view through the upper sash. Frames are available in colors to match product exteriors.

TruScene® Insect Screens

Andersen TruScene insect screens let in over 25% more fresh air* and provide 50% greater clarity than conventional Andersen insect screens, all while keeping out unwanted small insects.

Conventional Insect Screens

Conventional insect screens have charcoal powder-coated aluminum screen mesh.

GRILLES

Grilles are available in a variety of configurations and widths. For doublehung grille patterns, see page 72.

CAUTION:

- Painting and staining may cause damage to rigid vinyl.
- 400 Series windows in Terratone color may be painted any color lighter than Terratone color using quality oil-based or latex paint.
- Do not paint 400 Series windows in white, canvas, Sandtone, dark bronze, forest green or black exterior colors.
- Andersen does not warrant the adhesion or performance of homeowner-applied paint over vinyl or other factory-coated surfaces.
- For vinyl painting instructions and preparation, contact your Andersen supplier.
- Do not paint weatherstrip.
- Creosote-based stains should not come in contact with Andersen products.
- Abrasive cleaners or solutions containing corrosive solvents should not be used on Andersen products.

 * TruScene insect screens let in over 25% more fresh air than standard Andersen fiberglass insect screens.

Dimensions in parentheses are in millimeters.

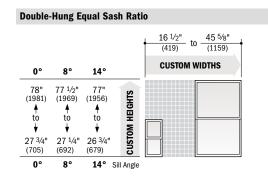
Printing limitations prevent exact replication of colors and finishes. See your Andersen supplier for actual color and finish samples.

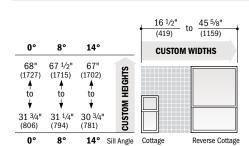
Naturally occurring variations in grain, color and texture of wood make each window one of a kind. All wood interiors are unfinished unless a finish is specified.

Distressed bronze and oil rubbed bronze are "living" finishes that will change with time and use.

WOODWRIGHT® DOUBLE-HUNG INSERT WINDOWS

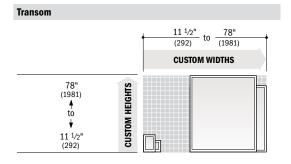
Woodwright® Double-Hung, Picture and Transom Insert Window Sizes





Double-Hung 2:3 Cottage and 3:2 Reverse Cottage Sash Ratio

Picture 11 ½" to 78" (292) (1918) **CUSTOM WIDTHS** 0° 80 14° 78" (1981) 77 1/2' **CUSTOM HEIGHTS** (1969)(1956)**∳** to ťo ťo 12 1/2" 12" 11 1/2 (318) (305) (292)14° Sill Angle



7

Available in ¹/8" (3) increments between minimum and maximum widths and heights. Height limits for double-hung and picture insert windows depend on new insert window sill angle.

For picture and transom insert windows, either height or width must be 68" (1727) or less, and height plus width cannot be less than 28" (711).

Measurement guide for customsized windows can be found at andersenwindows.com/measure. Grille patterns shown on page 72.

Woodwright® Double-Hung Insert Window Specification Formulas

010		207				
Clear Opening	width = window width - 3.4375" (
-1-	Height = Depends on sash ratio and spec	clear opening height	sil 14°	II angle ded 8°	uction	0°
	1:1 Equal	= (window height ÷ 2) - sill angle deduction	3.1875" (81)	3.4375" (8	7) 3.7	5" (95)
	2:3 Cottage	= (window height x 2) ÷ 5 - sill angle deduction	2.875" (73)	3.0625" (7	8) 3.2	5" (83)
- - - - - - - - - - 	3:2 Reverse Cottage	= (window height x 2) ÷ 5 - sill angle deduction	2.375" (60)	2.5625" (6	5) 2.81	.25" (71)
Vent Opening	width = window width - 3.4375" (87)				
	Height = Depends on sash ratio and spec	ific sill angle of insert window; see below.				
	sash ratio	vent opening height		sill a	ngle dedi 8°	uction 0°
	Equal, Height < 48" (1219) Equal, Height > 48" (1219)	= ((window height ÷ 2) - sill angle deduction) - 6 = ((window height ÷ 2) - sill angle deduction) - 3		2.75" (70)	2.9375" (75)	3.25" (83)
	Cottage, Height < 48" (1219) Cottage, Height > 48" (1219)	= ((window height x 2) ÷ 5 - sill angle deduction) = ((window height x 2) ÷ 5 - sill angle deduction)		1.9375" (49)	2.125" (54)	2.375" (60)
	Reverse Cottage, Height < 48" (1219) Reverse Cottage, Height > 48" (1219)	= ((window height x 2) ÷ 5 - sill angle deduction) = ((window height x 2) ÷ 5 - sill angle deduction)		3.5625" (90)	3.8125" (97)	4.8125" (122)
Unobst. Glass	width = window width - 6.0" (152) Height = Depends on sash ratio and spec					
-	sash ratio	unobstructed glass height	sil 14°	II angle ded 8°	uction	0°
	Equal Upper and Lower Sash	= (window height ÷ 2) - sill angle deduction	7.875" (200)	8.375" (21	3) 9.0)" (229)
	Cottage Upper Sash or Reverse Cottage Lower Sash	= (window height x 2) ÷ 5 - sill angle deduction	3.1875" (81)	3.375" (86	3.62	25" (92)
	Cottage Lower Sash or Reverse Cottage Upper Sash	= (window height x 2) ÷ 5 - sill angle deduction	4.75" (121)	5.0625" (12	9) 5.43	75" (138)

Woodwright® Picture and Transom Insert Window Specification Formulas

Unobst. Glass	Picture Insert				Transom Insert
	$w_{idth} = window width - 6.0" (152)$				width = window width -6.0 " (152)
+	Height = Depends on sash ratio and specific sill a	angle of insert win	dow; see below.		Height = Window Width - 6.0" (152)
+++	unobstructed glass height	si 14°	ll angle deduct 8°	ions 0°	
	= window height - sill angle deduction	5.816" (148)	6.285" (160)	6.890" (175)	

[•] Dimensions in parentheses are in millimeters.

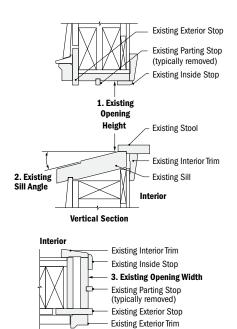
Clear Opening formulas provide dimensions for determining area available for egress. Vent Opening formulas provide dimensions for determining area available for passage of air. Unobst. Glass (unobstructed glass) formulas provide dimensions for determining area available for passage of light.
 Refer to andersenwindows.com/measure for detailed instructions on how to properly measure for insert windows.

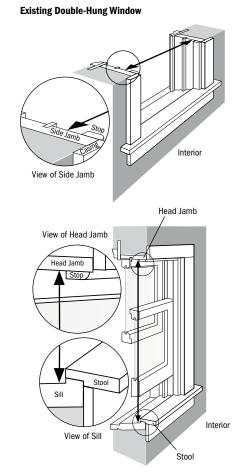


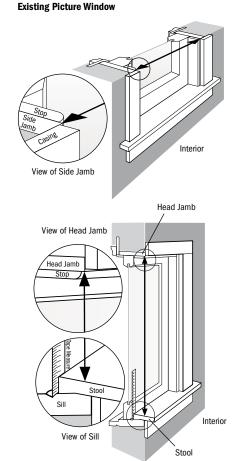
Existing Window Measurements

Required measurements:

- 1. Existing Opening Height
- 2. Existing Sill Angle
- 3. Existing Opening Width







Sill Angle Details

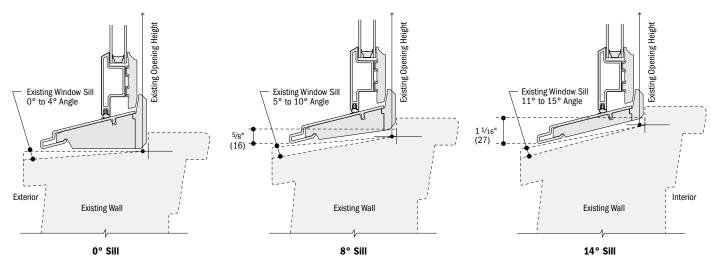
Scale 3" (76) = 1'-0" (305) - 1:4

Horizontal Section

Select a sill angle that most closely matches your existing sill angle.

Windows with a smaller sill angle will have a larger maximum height.

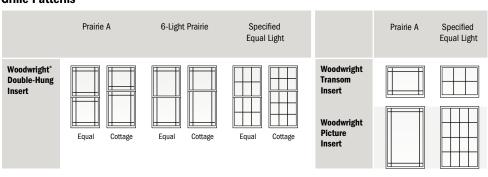
A "Sill Angle Finder App" is available; see page 68.



- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com.
 Dimensions in parentheses are in millimeters.
- Refer to andersenwindows.com/measure for detailed instructions on how to properly measure for insert windows.

WOODWRIGHT® DOUBLE-HUNG INSERT WINDOWS

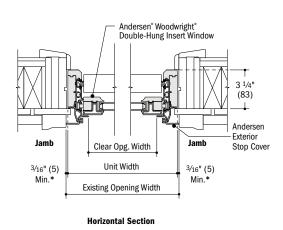
Grille Patterns

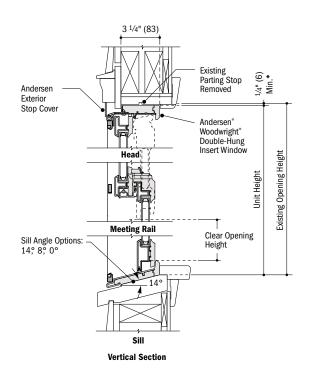


Patterns for double-hung windows are also available in Upper Sash Only (USO) configurations. For picture window patterns that require alignment with double-hung window patterns, identify the sash style (equal, cottage or reverse cottage) when ordering. Number of lights and overall pattern varies with window size. Patterns not available in all configurations. For more grille options, see page 14 or visit andersenwindows.com/grilles.

Woodwright® Double-Hung Insert Window Details

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8





Anders

oodv

[•] Light-colored areas are parts included with window. Dark-colored areas are additional Andersen® parts required to complete window assembly as shown.

Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com.

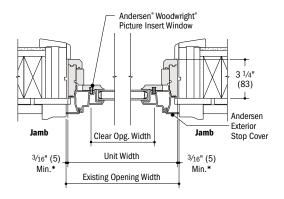
[•] Dimensions in parentheses are in millimeters.

 $^{{}^{*}\}text{Refer to andersenwindows.com/measure for detailed instructions on how to properly measure for insert windows.}$

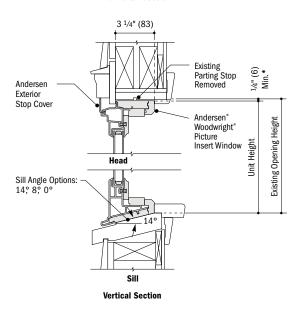


Woodwright® Picture Insert Window Details

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8

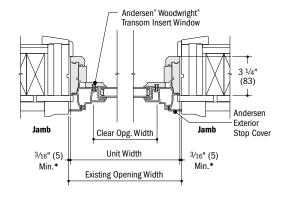


Horizontal Section

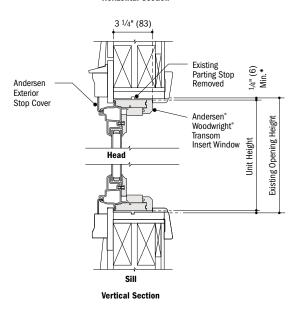


Woodwright® Transom Insert Window Details

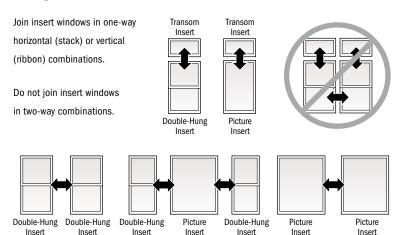
Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8



Horizontal Section

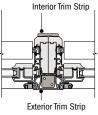


Joining Combinations



Vertical (ribbon) Joining Detail

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8



Horizontal Section

Woodwright* Double-Hung Insert to Woodwright Double-Hung Insert

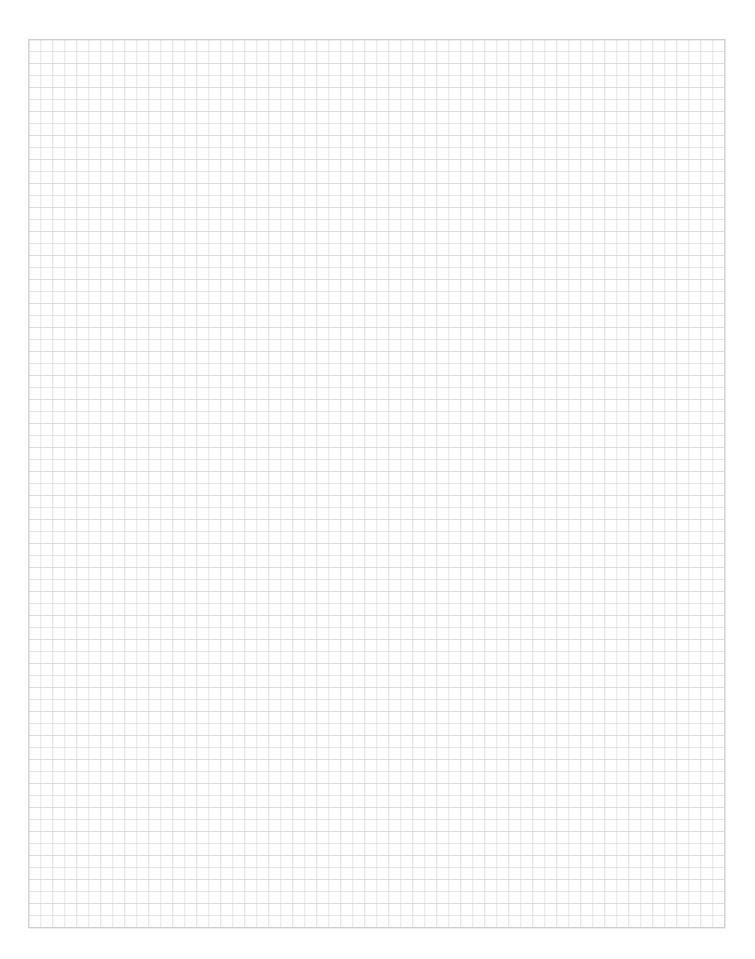
For more joining information, see the combination designs section starting on page 181.

[·] Light-colored areas are parts included with window. Dark-colored areas are additional Andersen® parts required to complete window assembly as shown.

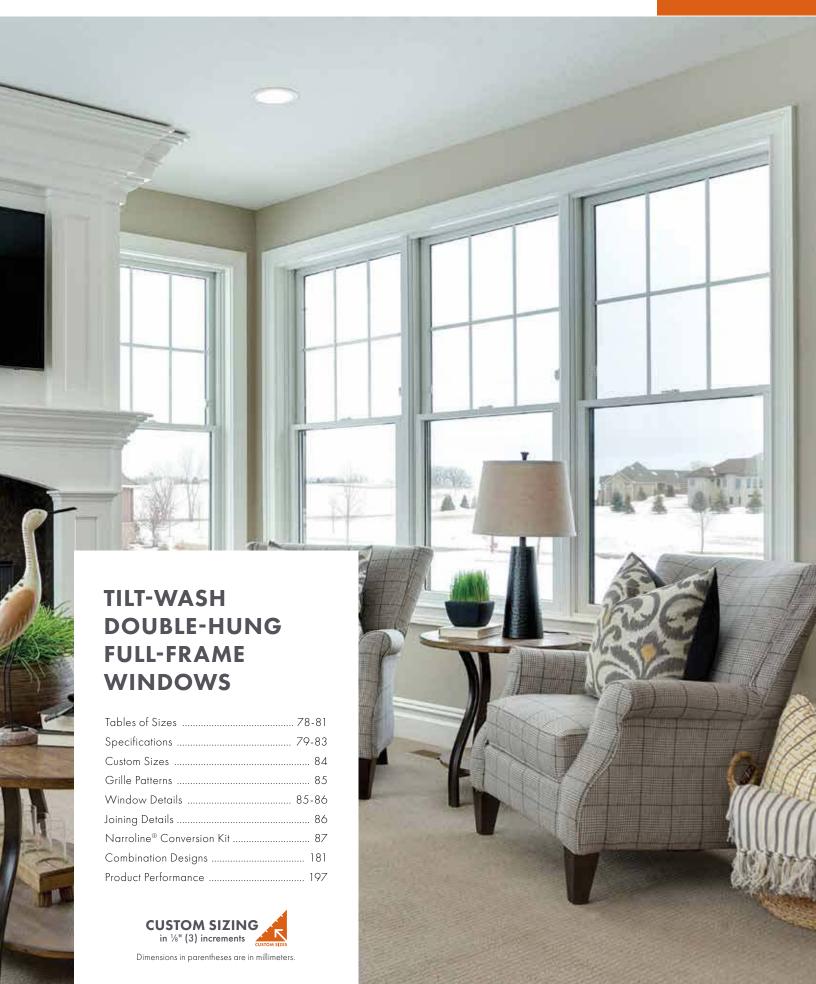
Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com.

[·] Dimensions in parentheses are in millimeters.

^{*}Refer to andersenwindows.com/measure for detailed instructions on how to properly measure for insert windows.



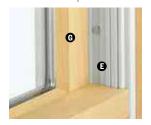




FEATURES

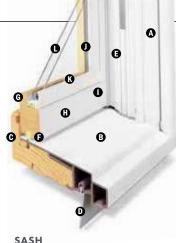
FRAME

- A Exterior outer frame members are covered with a Perma-Shield® rigid vinyl cladding, minimizing maintenance and providing an attractive appearance.
- B For exceptional long-lasting* performance, sill members are constructed with a wood core and a Fibrex® material exterior. Sill ends are protected and sealed with weather-resistant covers.
- Natural wood stops are available in pine, and prefinished white, dark bronze and black.**
- A factory-applied rigid vinyl anchoring flange on the head, sill and sides of the outer frame helps secure the unit to the structure.
- An extruded rigid vinyl jamb liner and fin provide a protective seal against the outer frame members. Exclusive slide wash assists make it easy to tilt the sash into wash mode position.



Unique block-and-tackle balancers feature sized-to-the-unit, rust-resistant springs that require no adjustment. Glass-reinforced nylon balancer shoes provide smooth, reliable sash operation. Sash can be removed, without tools, for drywall pass-through. Jamb liners are available in white or gray, and must be specified when ordering. Contact your Andersen supplier for details.

• Weatherstrip throughout the unit provides a long-lasting,* energyefficient, weather-resistant seal. For the top and bottom rails, an encased foam material is used. The head jamb liner and sill have a rigid vinyl rib that the weatherstrip material compresses against. At the meeting rail, compressible vinyl bulb material is used. Side jamb liners use leaf-type weatherstrip with foam inserts.



Wash assists make it easy to tilt the sash into wash mode.

- **@** Wood sash members are treated with a water-repellent preservative for long-lasting* protection and performance. Interior surfaces are unfinished pine. Lowmaintenance prefinished white interiors are also available.
- A polyester-stabilized coat with a Flexacron® finish is electrostatically applied to penetrate all exterior surfaces for maximum protection and a lustrous finish.
- Sash joints simulate the look of traditional mortise-and-tenon construction inside and out

- In addition to stainless steel glass spacers, black or white glass spacers are now available to allow the spacer to blend in with the unit color.
- Silicone bed glazing provides superior weathertightness and durability.
- High-Performance options include:
 - Low-E4® glass

 - Low-E4 HeatLock® glass
 Low-E4 SmartSun™ glass
 - Low-E4 SmartSun HeatLock glass
 - · Low-E4 Sun glass

Tempered and other glass options are available. Contact your Andersen supplier.

A removable translucent film helps shield the glass from damage during delivery and construction, and simplifies finishing at the job site.

Patterned Glass

Patterned glass options are available. See page 12 for more details.

- *Visit andersenwindows.com/warranty for details.
- **Products with dark bronze and black interiors have matching exteriors.
- "Flexacron" is a registered trademark of PPG Industries, Inc.

Dimensions in parentheses are in millimeters.

Printing limitations prevent exact replication of colors and finishes. See your Andersen supplier for actual color and finish samples.

Naturally occurring variations in grain, color and texture of wood make each window one of a kind. All wood interiors are unfinished unless a finish is specified.

Distressed bronze and oil rubbed bronze are "living" finishes that will change with time and use.

EXTERIOR & INTERIOR OPTIONS

EXTERIOR COLORS



INTERIOR OPTIONS



HARDWARE



Standard Lock & Keeper

Black | Gold Dust | Stone | White

Stone is standard with natural interior units. White comes with prefinished white interiors. Other finishes optional.

OPTIONAL HARDWARE Sold Separately

ESTATE"



Lock & Keeper

Antique Brass | Bright Brass Brushed Chrome | Distressed Bronze Distressed Nickel | Oil Rubbed Bronze Polished Chrome | Satin Nickel

Optional Estate lock and keeper reduces the clear opening height by %16" (14). Check with local building code officials to determine compliance with egress requirements.

CONTEMPORARY



Antique Brass | Black | Bright Brass Brushed Chrome | Distressed Bronze Distressed Nickel | Gold Dust Oil Rubbed Bronze | Polished Chrome Satin Nickel | Stone | White

TRADITIONAL









Bar Lift

Antique Brass | Black | Bright Brass | Brushed Chrome Distressed Bronze | Distressed Nickel | Gold Dust | Oil Rubbed Bronze Polished Chrome | Satin Nickel | Stone | White

Bold name denotes finish shown.

HARDWARE FINISHES





Storm WATCH

400 Series tilt-wash double-hung full-frame windows are available with Stormwatch® Protection. Visit andersenwindows.com/coastal for more details.

Performance Grade (PG) Upgrades

A high inside sill stop* with exterior sill brackets and hidden interior brackets is available to provide additional structural support for tilt-wash windows, allowing standard, non-impact glass units to achieve higher performance grade ratings. Performance Grade (PG) ratings are more comprehensive than Design Pressure (DP) ratings for measuring product performance. For up-todate performance information of individual products, please visit andersenwindows.com. Use of this option will subtract 5/8" (15) from the clear opening height. PG Upgrade not available for 72" (1829) and 76" (1930) heights. Contact your Andersen supplier for availability.

SASH OPTIONS



ACCESSORIES Sold Separately

FRAME

Extension Jambs



Standard jamb depth is 4 ½" (114). Extension jambs are available in unfinished pine or prefinished white. Some sizes may be veneered.

Factory-applied and non-applied interior extension jambs are available in $\frac{1}{10}$ (1.5) increments between $5\frac{1}{4}$ (133) and $7\frac{1}{8}$ (181). Extension jambs can be factory applied to either three sides (stool and apron application) or four sides (picture frame casing).

Pine Stool



A clear pine stool is available and ready for finishing. The tilt-wash stool is available in $4\,\%\text{Lo}^{\circ}$ (116) for use in wall depths up to $5\,\%^{\circ}$ (133), and $6\,\%\text{Lo}^{\circ}$ (167) for use in wall depths up to $7\,\%^{\circ}$ (181). Works with $2\,\%^{\circ}$ (187) and $2\,\%^{\circ}$ (64) casing widths.

HARDWARE

Window Opening Control Device



A recessed window opening control device is available factory applied. It limits the sash travel to less than 4" (102) when the window is first opened. Available in white, stone and black. A field-applied window opening control device kit is also available.

STORM/INSECT SCREEN COMBINATION UNIT"



A self-storing storm window combined with an insect screen provides greater energy efficiency, while allowing ventilation when needed.

Constructed with an aluminum frame, single-pane upper and lower glass panels, and charcoal powder-coated aluminum screen mesh. Available in white, Sandtone and Terratone to match product exteriors. Canvas, dark bronze, forest green and black are available by special order.

Combination units can improve Sound Transmission Class (STC) and Outdoor Indoor Transmission Class (OITC) ratings. Ideal for projects near airports, busy roadways or other noisy environments. For example, adding a combination unit to a 400 Series tilt-wash double-hung (3862) unit with Low-E4® glass will improve its STC rating from 26 to 32. Contact your Andersen supplier for additional STC and OITC rating information.

GLASS

Andersen® Art Glass

Available for 400 Series tilt-wash transom and picture units. Andersen art glass panels come in a variety of original patterns. See art glass section starting on page 173 for more information or visit andersenwindows.com/artglass.

INSECT SCREENS

Insect Screen Frames



Full and half insect screens are available for most unit sizes. Frame colors match product exteriors. Half insect screen (shown above) allows ventilation without affecting the view through the upper sash. Not available on windows with Stormwatch Protection.

TruScene® Insect Screens

Andersen TruScene insect screens let in over 25% more fresh air† and provide 50% greater clarity than conventional Andersen insect screens, all while keeping out unwanted small insects.

Conventional Insect Screens

Conventional insect screens have charcoal powder-coated aluminum screen mesh.

GRILLES

Grilles are available in a variety of configurations and widths. For doublehung grille patterns, see page 85.

EXTERIOR TRIM

Available with Andersen exterior trim. See exterior trim section starting on page 175.

CAUTION

- Painting and staining may cause damage to rigid vinyl.
- 400 Series windows in Terratone color may be painted any color lighter than Terratone color using quality oil-based or latex paint.
- Do not paint 400 Series windows in white, canvas, Sandtone, dark bronze, forest green or black exterior colors.
- Andersen does not warrant the adhesion or performance of homeowner-applied paint over vinyl or other factory-coated surfaces.
- For vinyl painting instructions and preparation, contact your Andersen supplier.
- Do not paint weatherstrip.
- Creosote-based stains should not come in contact with Andersen products.
- Abrasive cleaners or solutions containing corrosive solvents should not be used on Andersen products.

^{*}Infringes on the overall net clear opening. Unit clear operable area may not meet egress requirements. See your local building code official for more information.

^{**}Do not add combination units to windows with Low-E4 Sun glass unless window glass is tempered. Combination units may also reduce the overall clear operable area of the window. See your local code official for egress requirements in your area.

[†]TruScene insect screens let in over 25% more fresh air than standard Andersen fiberglass insect screens. Dimensions in parentheses are in millimeters.

Table of Tilt-Wash Double-Hung Window Sizes Scale $^{1}\!/\!_{8}"$ (3) = 1'-0" (305) - 1:96

Window Dimension	1'-9 5/8" 2'-	1 ⁵ /8" 2'-5 ⁵ /8" (752)	2'-7 ⁵ /8" (803)	2'-9 ⁵ /8" (854)	2'-11 ⁵ /8" (905)	3'-1 ⁵ /8" (956)	3'-5 ⁵ /8" (1057)	3'-9 ⁵ /8" (1159)	
Minimum Rough Opening		2 ¹ / ₈ " 2'-6 ¹ / ₈ " (765)	2'-8 ¹ /8" (816)	2'-10 ¹ /8" (867)	3'-0 ¹ /8" (917)	3'-2 1/8" (968)	3'-6 ¹ /8" (1070)	3'-10 ¹ /8" (1172)	\
Unobstructed Glass (lower sash only)	(381)	19" 23" (584)	25" (635)	27" (686)	29" (737)	31" (787)	35" (889)	39" (991)	7
_ 		HS - 21 5/8" to 45 5	/8"						
3'-0 7/8" (937) 3'-0 7/8" (937) 13 15/16" (354)		20210 TW 24210	TW26210	TW 28210	TW 210210	TW 30210	TW 34210	TW38210	Custom-size windows are available in $1/8$ " (3) increments.
3-4 7/8" (1038) 3-4 7/8" (1038) 15 15/16" (405) 3HTS - 36 7/8"									See page 84 for custom sizing. Grille patterns shown on page 85.
· • • • • • • • • • • • • • • • • • • •	TW1832 TW	/2032 TW 2432	TW 2632	TW 2832	TW 21032	TW 3032	TW 3432	TW 3832	dille patterns shown on page 65.
3'-8 7/8" (1140) 3'-8 7/8" (1140) 17 15/16" (456)									Cottage or reverse cottage sash ratio available for heights shown below in all widths. CUSTOM WIDTHS — 21 °/s" to 45 °/s"
W = 4	TW1836 TW	/2036 TW 2436	TW 2636	TW 2836	TW21036	TW 3036	TW 3436	TW 3836	CUSTOM HEIGHTS — 48 ⁷ /s" to 76 ⁷ /s"
4'-0 7/8" (1241) 4'-0 7/8" (1241) 19 7/16" (495)				TN22210	TW210210		THO 1010	TH 20240	
= = = = = = = = = = = = = = = = = = = =	TW18310 TW	20310 TW 24310	TW 26310	TW 28310	TW 210310	TW 30310	TW 34310	TW 38310	Cottage Reverse Cottage
4'-4 7/8" (1343) 4'-4 7/8" (1343) 21 15/16" (557)									
	TW1842 TW	/2042 TW 2442	TW 2642	TW 2842	TW 21042	TW 3042	TW 3442	TW 3842	
4'-8 7/8" (1445) 4'-8 7/8" (1445) 23 7/16" (596)									
(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)									
	TW1846 TW	72046 TW 2446	TW 2646	TW 2846	TW 21046	TW3046*	TW3446 ^o	TW 3846⁰	
5'-0 7/8" (1546) 5'-0 7/8" (1546) 25 15/16" (659)									
	TW18410 TW	20410 TW 24410	TW 26410	TW 28410	TW 210410♦	TW 30410⁰	TW 34410 [◊]	TW 38410 [◊]	
8) /8" /8" 8) (1)									
5'-47/8" (1648) 5'-47/8" (1648) 2715/16" (710)									
+ + +	TW1852 TW	/2052 TW 2452	TW 2652	TW 2852 ◊	TW21052*	TW3052 [♦]	TW 3452 ◊	TW 3852 [◊]	
5-8 7/8" (1749) 5-8 7/8" (1749) (760)									
5-8 7/8" (1749) 5-8 7/8" (1749) 29 15/16" (760)									
	TW1856 TW	/2056 TW 2456	TW2656	TW 2856 ◊	TW21056°	TW3056 ⁰	TW 3456 [◊]	TW 3856 [◊]	Size tables for windows with cottage or
7/8" (1) (1) (1) (1) (1) (1) (1)									reverse cottage sash are available at andersenwindows.com/sizing.
6-0 7/8" (1851) 6-0 7/8" (1851) 31 15/16" (811)									
	TW18510 TW	20510 TW 24510°	TW26510¢	TW28510°	TW 210510 ⁰	TW30510⁰	TW 34510⁰	TW 38510⁰	 "Window Dimension" always refers to outside frame-to-frame dimension. "Minimum Rough Opening" dimensions
"8 () (s									may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See
6'-4 7/8" (1953) 6'-4 7/8" (1953) 33 15/16" (862)									pages 210-211 for more details. • Dimensions in parentheses are in millimeters. Ø Meet or exceed clear opening area of
	TW1862 TW	/2062 TW 2462 °	TW2662*	TW2862 ⁰	TW21062*	TW3062 ^o	TW3462 [◊]	TW 3862 [◊]	5.7 sq. ft. or 0.53 m², clear opening width of 20" (508) and clear opening height of 24" (610). See tables on pages 82-83.
								ontinued on next page	



Table of Tilt-Wash Double-Hung Window Sizes (continued)

Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96

Window Dimension	1'-9 5/8" (549)	2'-1 5/8" (651)	2'-5 ⁵ /8" (752)	2'-7 ⁵ /8" (803)	2'-9 ⁵ / ₈ " (854)	2'-11 5/8" (905)	3'-1 ⁵ /8" (956)	3'-5 ⁵ /8" (1057)	3'-9 ⁵ / ₈ " (1159)
Minimum Rough Opening	1'-10 ¹ /8" (562)	2'-2 ¹ /8" (664)	2'-6 ¹ /8" (765)	2'-8 ¹ /8" (816)	2'-10 ¹ /8" (867)	3'-0 ¹ /8" (917)	3'-2 ¹ /8" (968)	3'-6 ¹ /8" (1070)	3'-10 ¹ /8" (1172)
Unobstructed Glass (lower sash only)	15" (381)	19" (483)	23" (584)	25" (635)	27" (686)	29" (737)	31" (787)	35" (889)	39" (991)
	CUSTOM V	VIDTHS – 2	1 ⁵ /8" to 45 ⁵	/8"					
7-4 78" (2257) 7-4 78" (2257) 39 15/16" (1014) HEIGHTS — 36 7/8" to 92 7/8"		TW2072 ⁰	TW2472°	TW2672°	TW2872°	TW 21072 [♦]	TW3072°	TW3472°	TW3872°
7-8 7/8" (2359) 7-8 7/8" (2359) 41 15/16" (1065)	TW1876	TW2076	TW2476°	TW2676°	TW2876 ^o	TW21076	TW3076°	TW3476°	TW3876 ⁶

^{• &}quot;Window Dimension" always refers to outside frame-to-frame dimension.



Custom-size windows are available in 1/8" (3) increments. See page 84 for custom sizing.

Windows 7'-4 ⁷/s" (2257) and 7'-8 ⁷/s" (2359) high have interior and exterior brackets. Interior brackets, located on both sides of the meeting rail, must be flipped up for proper product performance. Andersen° reinforced joining materials must be used when vertically joining 7'-4 ⁷/s" (2257) and 7'-8 ⁷/s" (2359) height windows.

Grille patterns shown on page 85.

Tilt-Wash Transom Window Area Specifications

Window Number	Ai	Glass Area Sq. Ft./(m²)		Window ea t./(m²)
TWT 1810	0.56	(0.05)	1.80	(0.17)
TWT 1815	1.32	(0.12)	2.90	(0.27)
TWT 1817	1.52	(0.14)	3.20	(0.30)
TWT 18111	1.94	(0.18)	3.80	(0.35)
TWT 1821	2.15	(0.20)	4.10	(0.38)
TWT 1823	2.35	(0.22)	4.40	(0.41)
TWT 1827	2.77	(0.26)	5.00	(0.47)
TWT 1831	3.39	(0.32)	5.90	(0.55)
TWT 2010	0.70	(0.07)	2.14	(0.20)
TWT 2015	1.67	(0.16)	3.44	(0.32)
TWT 2017	1.93	(0.18)	3.79	(0.35)
TWT 20111	2.46	(0.23)	4.50	(0.42)
TWT2021	2.72	(0.25)	4.86	(0.45)
TWT2023	2.98	(0.28)	5.22	(0.49)
TWT 2027	3.51	(0.33)	5.93	(0.55)
TWT 2031	4.30	(0.40)	7.00	(0.65)
TWT 2410	0.85	(80.0)	2.47	(0.23)
TWT 2415	2.02	(0.19)	3.97	(0.37)
TWT 2417	2.34	(0.22)	4.38	(0.41)
TWT24111	2.98	(0.28)	5.21	(0.48)
TWT2421	3.29	(0.31)	5.62	(0.52)
TWT2423	3.61	(0.34)	6.03	(0.56)
TWT2427	4.25	(0.40)	6.85	(0.64)
TWT2431	5.21	(0.48)	8.09	(0.75)
TWT 2610	0.93	(0.09)	2.64	(0.25)
TWT 2615	2.19	(0.20)	4.24	(0.39)
TWT 2617	2.54	(0.24)	4.68	(0.44)

Window Number	Ar	ass ea t./(m²)	Ar	Window ea t./(m²)
TWT 26111	3.23	(0.30)	5.56	(0.52)
TWT2621	3.58	(0.33)	6.00	(0.56)
TWT 2623	3.93	(0.37)	6.44	(0.60)
TWT2627	4.62	(0.43)	7.32	(0.68)
TWT 2631	5.66	(0.53)	8.63	(0.80)
TWT 2810	1.00	(0.09)	2.80	(0.26)
TWT 2815	2.37	(0.22)	4.51	(0.42)
TWT 2817	2.74	(0.26)	4.98	(0.46)
TWT 28111	3.49	(0.32)	5.91	(0.55)
TWT 2821	3.87	(0.36)	6.38	(0.59)
TWT2823	4.24	(0.39)	6.84	(0.64)
TWT 2827	4.99	(0.46)	7.78	(0.72)
TWT 2831	6.12	(0.57)	9.18	(0.85)
TWT 21010	1.07	(0.10)	2.97	(0.28)
TWT 21015	2.55	(0.24)	4.78	(0.44)
TWT 21017	2.95	(0.27)	5.27	(0.49)
TWT 210111	3.75	(0.35)	6.26	(0.58)
TWT 21021	4.15	(0.39)	6.76	(0.63)
TWT 21023	4.56	(0.42)	7.25	(0.67)
TWT 21027	5.36	(0.50)	8.24	(0.77)
TWT 21031	6.57	(0.61)	9.73	(0.90)
TWT 3010	1.15	(0.11)	3.14	(0.29)
TWT 3015	2.72	(0.25)	5.05	(0.47)
TWT 3017	3.15	(0.29)	5.57	(0.52)
TWT 30111	4.01	(0.37)	6.61	(0.61)
TWT 3021	4.44	(0.41)	7.14	(0.66)
TWT3023	4.87	(0.45)	7.66	(0.71)

Window Number	Glass Area Sq. Ft./(m²)		Ar	Window ea t./(m²)
TWT 3027	5.73	(0.53)	8.70	(0.81)
TWT3031	7.02	(0.65)	10.27	(0.95)
TWT 3410	1.30	(0.12)	3.47	(0.32)
TWT 3415	3.07	(0.29)	5.58	(0.52)
TWT 3417	3.56	(0.33)	6.16	(0.57)
TWT 34111	4.53	(0.42)	7.32	(0.68)
TWT 3421	5.02	(0.47)	7.89	(0.73)
TWT 3423	5.50	(0.51)	8.47	(0.79)
TWT 3427	6.47	(0.60)	9.63	(0.90)
TWT 3431	7.93	(0.74)	11.36	(1.06)
TWT 3810	1.45	(0.14)	3.80	(0.35)
TWT3815	3.42	(0.32)	6.12	(0.57)
TWT 3817	3.97	(0.37)	6.75	(0.63)
TWT 38111	5.05	(0.47)	8.02	(0.75)
TWT 3821	5.59	(0.52)	8.65	(0.80)
TWT 3823	6.13	(0.57)	9.29	(0.86)
TWT 3827	7.21	(0.67)	10.55	(0.98)
TWT 3831	8.84	(0.82)	12.46	(1.16)
TWT 31010	1.51	(0.14)	3.94	(0.37)
TWT 4210	1.66	(0.15)	4.28	(0.40)
TWT 41010	1.95	(0.18)	4.94	(0.46)
TWT 5610	2.25	(0.21)	5.61	(0.52)
TWT 6210	2.55	(0.24)	6.28	(0.58)

[•] Dimensions in parentheses are in square meters.

^{•&}quot;Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 210-211 for more details.

Dimensions in parentheses are in millimeters.

Meet or exceed clear opening area of 5.7 sq. ft. or 0.53 m², clear opening width of 20" (508) and clear opening height of 24" (610). See tables on pages 82-83.

Table of Tilt-Wash Transom Window Sizes

Scale $\frac{1}{8}$ " = 1'-0" (1:96)

(651)	2'-5 ⁵ /8" (752)	2'-7 ⁵ /8" (803)	2'-9 ⁵ /8" (854)	2'-11 5/8" (905)	3'-1 ⁵ /8" (956)	3'-5 ⁵ /8" (1057)	3'-9 ⁵ /8" (1159)	3'-11 ⁵ /16" 4'-3 (1202) (13	
2'-2 ¹ /8" (664)	2'-6 ¹ /8" (765)	2'-8 ¹ / ₈ " (816)	2'-10 ¹ /8" (867)	3'-0 1/8" (917)	3'-2 ¹ / ₈ " (968)	3'-6 ¹ /8" (1070)	3'-10 ¹ /8" (1172)		
19"	23" (583)	25" (635)	27" (685)	29" (737)	31" (787)	35" (888)	39" (990)		
WIDTHS - 21 5	5/8" to 75 5/16'	"							
TWT 2010	TWT2410 I	IWT 2610	TWT 2810	TWT 21010	TWT 3010	TWT 3410	TWT 3810	TWT31010 TWT4	1210
TWT 2015	TWT 2415	TWT2615	TWT 2815	TWT 21015	TWT 3015	TWT 3415	TWT 3815		
TWT 2017	TWT2417	IWI 2617	TWT 2817	TWT 21017	TWT 3017	TWT 3417	TWT 3817	7	
TWT20111 T	WT24111 T	WT 26111	TWT 28111	TWT 210111	TWT30111	TWT 34111	TWT 38111		
TWT 2021	TWT2421	TWT2621	TWT2821	TWT21021	TWT3021	TWT3421	TWT3821	increments. See p	. ,
									own
								on page 85.	
			TWT2827 TWT2831	TWT21027 TWT21031	TWT3027 TWT3031	TWT3427 TWT3431	TWT 3827		
	2'-2 1/6" (664) 19" (482)	(651) (752) 2'-2 1/8" (752) 2'-6 1/8" (765) 19" 23" (583) WIDTHS — 21 5/8" to 75 5/16 TWT2010 TWT2410 TWT2017 TWT2417 TWT2017 TWT2417 TWT2021 TWT2421 TWT2023 TWT2423 TWT2023 TWT2423	(651) (752) (803) 2'-2 1/8" (2'-6 1/8" (816) 19" (23" (583) (635) WIDTHS — 21 5/8" to 75 5/16" TWT2010 TWT2410 TWT2610 TWT2017 TWT2417 TWT2617 TWT2021 TWT2421 TWT2621 TWT2023 TWT2423 TWT2623 TWT2031 TWT2431 TWT2631	(651) (752) (803) (854) (2'-2 1/6" (664) (765) (816) (816) (867) (765) (816) (635) (635) (685) ((651) (752) (803) (854) (905) (905) (906) (906) (906) (906) (907) (906) (907)	(651) (752) (803) (854) (905) (956)	(651) (752) (803) (854) (905) (956) (1057) (2'-2 1/8" 2'-6 1/8" 2'-8 1/8" 2'-10 1/8" 3'-0 1/8" 3'-2 1/8" 3'-6 1/8" (664) (765) (816) (867) (917) (968) (1070	(651) (752) (803) (854) (905) (956) (1057) (1159) (2-2-1/8" 2-6-1/8" 2-8-1/8" (816) (867) (816) (867) (917) (968) (1070) (1172) (19" 23" 25" 27" 29" 31" 35" 39" (482) (583) (635) (685) (737) (787) (888) (990) (482) (583) (635) (685) (737) (787) (888) (990) (482) (583) (635) (685) (737) (787) (888) (990) (482) (583) (685) (737) (787) (787) (888) (990) (482) (583) (685) (737) (787) (888) (990) (482) (583) (685) (737) (787) (787) (888) (990) (482) (583) (685) (737) (787) (787) (888) (990) (482) (583) (685) (737) (787) (787) (888) (990) (482) (583) (685) (737) (787) (787) (888) (990) (482) (583) (685) (737) (787) (787) (787) (888) (990) (482) (583) (685) (737) (787) (787) (787) (888) (990) (482) (583) (685) (737) (787) ((651) (752) (803) (854) (905) (956) (1057) (1159) (1202) (13

Tilt-Wash Picture Window Area Specifications

Window Number	Glass Area Sq. Ft./(m²)		Ar	Window ea t./(m²)
DHP10310	2.03	(0.19)	4.07	(0.38)
DHP 1042	2.22	(0.21)	4.41	(0.41)
DHP 1046	2.42	(0.23)	4.74	(0.44)
DHP 10410	2.61	(0.24)	5.07	(0.47)
DHP1052	2.81	(0.26)	5.41	(0.50)
DHP1056	3.01	(0.28)	5.74	(0.53)
DHP10510	3.20	(0.30)	6.07	(0.56)
DHP1062	3.40	(0.32)	6.41	(0.60)
DHP30310	9.38	(0.87)	12.77	(1.19)
DHP3042	10.29	(0.96)	13.82	(1.28)
DHP3046	11.19	(1.04)	14.86	(1.38)
DHP30410	12.10	(1.12)	15.91	(1.48)
DHP3052	13.01	(1.21)	16.95	(1.58)
DHP3056	13.92	(1.29)	18.00	(1.67)
DHP30510	14.83	(1.38)	19.04	(1.77)
DHP3062	15.73	(1.46)	20.09	(1.87)
DHP34310	10.53	(0.98)	14.13	(1.31)
DHP3442	11.54	(1.07)	15.28	(1.42)
DHP3446	12.56	(1.17)	16.44	(1.53)

Window Number	Glass Area Sq. Ft./(m²)		Overall Window Area Sq. Ft./(m²)	
DHP 34410	13.58	(1.26)	17.60	(1.64)
DHP3452	14.60	(1.36)	18.75	(1.74)
DHP3456	15.62	(1.45)	19.91	(1.85)
DHP 34510	16.64	(1.55)	21.07	(1.96)
DHP3462	17.66	(1.64)	22.22	(2.06)
DHP310310	12.16	(1.13)	16.06	(1.49)
DHP31042	13.33	(1.24)	17.37	(1.61)
DHP 31046	14.51	(1.35)	18.69	(1.74)
DHP310410	15.69	(1.46)	20.00	(1.86)
DHP31052	16.87	(1.57)	21.32	(1.98)
DHP31056	18.04	(1.68)	22.63	(2.10)
DHP310510	19.22	(1.79)	23.94	(2.22)
DHP31062	20.40	(1.90)	25.26	(2.35)
DHP42310	13.30	(1.24)	17.42	(1.62)
DHP4242	14.56	(1.35)	18.83	(1.75)
DHP4246	15.88	(1.48)	20.27	(1.88)
DHP42410	17.17	(1.60)	21.69	(2.02)
DHP4252	18.46	(1.72)	23.12	(2.15)
DHP4256	19.75	(1.84)	24.54	(2.28)

Window Number	Ai	Glass Area Sq. Ft./(m²)				Window ea t./(m²)
DHP42510	21.03	(1.95)	25.97	(2.41)		
DHP4262	22.32	(2.07)	27.39	(2.55)		
DHP410310	15.60	(1.45)	20.13	(1.87)		
DHP 41042	17.11	(1.59)	21.78	(2.02)		
DHP 41046	18.62	(1.73)	23.43	(2.18)		
DHP 410410	20.13	(1.87)	25.07	(2.33)		
DHP41052	21.64	(2.01)	26.72	(2.48)		
DHP41056	23.15	(2.15)	28.37	(2.64)		
DHP 410510	24.66	(2.29)	30.02	(2.79)		
DHP41062	26.17	(2.43)	31.66	(2.94)		
DHP56310	17.89	(1.66)	22.85	(2.12)		
DHP5642	19.63	(1.82)	24.72	(2.30)		
DHP 5646	21.36	(1.98)	26.59	(2.47)		
DHP 56410	23.09	(2.15)	28.46	(2.64)		
DHP5652	24.83	(2.31)	30.33	(2.82)		
DHP5656	26.56	(2.47)	32.20	(2.99)		
DHP 56510	28.29	(2.63)	34.07	(3.17)		
DHP5662	30.02	(2.79)	35.93	(3.34)		

[•] Dimensions in parentheses are in square meters.

^{*}Window Dimension" always refers to outside frame-to-frame dimension.

*Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items.

See pages 210-211 for more details.

*Dimensions in parentheses are in millimeters.



	4'-11 5/16"	5'-7 5/16"	6'-3 5/16"
•	(1057)	(1710)	(1913)
	4'-11 7/8"	5'-7 7/8"	6'-3 7/8"
	(1070)	(1724)	(1927)
	52 ¹¹ /16"	60 11/16"	68 11/16"
_	(905)	(1556)	(1745)

L		
	TWT 41010	

TWT5610

TWT6210

Table of Tilt-Wash Picture Window Sizes Scale $^1\!/\!s"$ (3) = 1'-0" (305) - 1:96

Window Dimension	1'-0" 3'-1 ⁵ /8" (956)	3'-5 ⁵ /8" (1057)	3'-11 ⁵ /16" (1202)	4'-3 ⁵ / ₁₆ " (1303)	4'-11 ⁵ / ₁₆ " (1507)	5'-7 ⁵ / ₁₆ " (1710)
Minimum Rough Opening	1'-0 ¹ / ₂ " 3'-2 ¹ / ₈ " (318) (968)	3'-6 ¹ /8" (1070)	3'-11 ⁷ /8" (1216)	4'-3 ⁷ / ₈ " (1318)	4'-11 ⁷ /8" (1521)	5'-7 ⁷ /8" (1724)
Unobstructed Glass	7 1/16" 32 11/16" (830)	36 11/16" (932)	42 ³ /8" (1076)	46 3/8" (1178)	54 ³ / ₈ " (1381)	62 ³ /8" (1584)
4'.0 7/8" (1241) 4'.0 7/8" (1241) 41 5/16" (1049)						
4'-47/8" (1343) 4'-47/8" (1343) 45 5/16" (1151)	DHP10310 DHP30310	DHP 34310	DHP310310	DHP42310	DHP410310	DHP56310
	DHP1042 DHP3042	DHP3442	DHP31042	DHP4242	DHP41042	DHP5642
4'-8 7/8" (1445) 4'-8 7/8" (1445) 49 5/16" (1253)						
	DHP1046 DHP3046	DHP3446	DHP31046	DHP4246	DHP41046	DHP5646
5'-0 7/8" (1547) 5'-0 7/8" (1547) 53 5/16" (1355)						
	DHP10410 DHP30410	DHP34410	DHP 310410	DHP42410	DHP410410	DHP 56410
5'-4 7/8" (1648) 5'-4 7/8" (1648) 57 5/16" (1456)						
	DHP1052 DHP3052	DHP3452	DHP31052	DHP4252	DHP41052	DHP5652
5'-8 7/8" (1749) 5'-8 7/8" (1749) 61 ⁵ /16" (1557)						
	DHP1056 DHP3056	DHP3456	DHP31056	DHP4256	DHP41056	DHP5656
6'-0 7/8" (1851) 6-0 7/8" (1851) 65 5/16" (1659)						
	DHP10510 DHP30510	DHP 34510	DHP 310510	DHP42510	DHP410510	DHP 56510
6-4 7/8" (1953) 6-4 7/8" (1953) 69 5/16" (1761)						
	DHP1062 DHP3062	DHP 3462	DHP 31062	DHP 4262	DHP 41062	DHP5662



Custom-size windows are available in 1/8" (3) increments. See page 84 for custom sizing.

Grille patterns shown on page 85.

 [&]quot;Window Dimension" always refers to outside frame-to-frame dimension.
 "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning brackets, fasteners or other items. See pages 210-211 for more details.
 Dimensions in parentheses are in millimeters.

Tilt-Wash Double-Hung Window Opening and Area Specifications

Window Number	A	Clear Opening Area Sq. Ft./(m²) Unches/			Height Area Sq. Ft./(m²)			A	ent rea	Top of Subfloor to Top of Inside Sill Stop Inches/(mm)		Overall Window Area Sq. Ft./(m ²)		
DN10010										t./(m²)		, , ,		, , ,
W 18210 W 1832	1.77	(0.16)	17 7/8"	(454)	14 1/4"	(362)	2.90	(0.27)	1.78	(0.17)	48 1/2"	(1231)	5.53	(0.5
	2.02	(0.19)	17 7/8"	(454)	16 1/4"	(412)	3.32	(0.31)	2.03	(0.19)	44 1/2"	(1130)	6.14	(0.5
W1836	2.26	(0.21)	17 7/8"	(454)	18 1/4"	(463)	3.74	(0.35)	2.28	(0.21)	40 1/2"	(1028)	6.74	(0.6
W18310	2.51	(0.23)	17 7/8"	(454)	20 1/4"	(514)	4.15	(0.39)	2.53	(0.24)	36 1/2"	(926)	7.34	(0.6
W 1842	2.76	(0.26)	17 7/8"	(454)	22 1/4"	(565)	4.57	(0.43)	2.78	(0.26)	32 1/2"	(825)	7.94	(0.7
W 1846	3.07	(0.29)	17 7/8"	(454)	24 3/4"	(628)	4.98	(0.46)	3.03	(0.28)	28 1/2"	(711)	8.54	(0.7
W 18410	3.26	(0.30)	17 7/8"	(454)	26 1/4"	(666)	5.40	(0.50)	3.27	(0.30)	24 1/2"	(622)	9.14	(0.8
W 1852	3.51	(0.33)	17 7/8"	(454)	28 1/4"	(717)	5.81	(0.54)	3.52	(0.33)	20 1/2"	(520)	9.74	(0.9
W 1856	3.75	(0.35)	17 7/8"	(454)	30 1/4"	(768)	6.23	(0.58)	3.77	(0.35)	16 1/2"	(418)	10.34	(0.9
W 18510	4.00	(0.37)	17 7/8"	(454)	32 1/4"	(819)	6.65	(0.62)	4.02	(0.37)	12 1/2"	(317)	10.94	(1.0
W 1862	4.12	(0.38)	17 7/8"	(454)	33 1/4"	(843)	7.06	(0.66)	4.24	(0.39)	8 1/2"	(203)	11.54	(1.0
W 1872	5.00	(0.46)	17 7/8"	(454)	40 1/4"	(1022)	8.32	(0.77)	5.03	(0.47)	10 1/4" *	(260)*	13.35	(1.2
W 1876	5.24	(0.49)	17 7/8"	(454)	42 1/4"	(1073)	8.74	(0.81)	5.27	(0.49)	6 1/4" *	(159)*	13.95	(1.3
W 20210	2.16	(0.20)	21 7/8"	(556)	14 1/4"	(362)	3.68	(0.34)	2.18	(0.20)	48 1/2"	(1231)	6.56	(0.0
W 2032	2.47	(0.23)	21 7/8"	(556)	16 1/4"	(412)	4.21	(0.39)	2.48	(0.23)	44 1/2"	(1130)	7.27	(0.6
W 2036	2.77	(0.26)	21 7/8"	(556)	18 1/4"	(463)	4.73	(0.44)	2.79	(0.26)	40 1/2"	(1028)	7.98	(0.7
W 20310	3.07	(0.29)	21 7/8"	(556)	20 1/4"	(514)	5.26	(0.49)	3.09	(0.29)	36 1/2"	(926)	8.69	(0.8
W 2042	3.38	(0.31)	21 7/8"	(556)	22 1/4"	(565)	5.79	(0.54)	3.40	(0.32)	32 1/2"	(825)	9.41	(0.8
W 2046	3.76	(0.35)	21 7/8"	(556)	24 3/4"	(628)	6.31	(0.59)	3.71	(0.34)	28 1/2"	(711)	10.12	(0.
W 20410	3.99	(0.37)	21 7/8"	(556)	26 1/4"	(666)	6.84	(0.64)	4.00	(0.37)	24 1/2"	(622)	10.83	(1.
W 2052	4.29	(0.40)	21 7/8"	(556)	28 1/4"	(717)	7.37	(0.69)	4.31	(0.40)	20 1/2"	(520)	11.54	(1.
W 2056	4.59	(0.43)	21 7/8"	(556)	30 1/4"	(768)	7.89	(0.73)	4.61	(0.43)	16 1/2"	(418)	12.25	(1.
W 20510	4.90	(0.46)	21 7/8"	(556)	32 1/4"	(819)	8.42	(0.78)	4.92	(0.46)	12 1/2"	(317)	12.96	(1.
W 2062	5.04	(0.47)	21 7/8"	(556)	33 1/4"	(843)	8.95	(0.83)	5.18	(0.48)	8 1/2"	(203)	13.68	(1.:
N 2072 ◊	6.11	(0.57)	21 7/8"	(556)	40 1/4"	(1022)	10.54	(0.98)	6.14	(0.57)	10 1/4" *	(260)*	15.82	(1.
V2076♦	6.42	(0.60)	21 7/8"	(556)	42 1/4"	(1073)	11.06	(1.03)	6.45	(0.60)	6 1/4" *	(159)*	16.53	(1.
V24210	2.56	(0.24)	25 7/8"	(657)	14 1/4"	(362)	4.46	(0.41)	2.58	(0.24)	48 1/2"	(1231)	7.58	(0.
N2432	2.92	(0.27)	25 7/8"	(657)	16 1/4"	(412)	5.09	(0.47)	2.94	(0.27)	44 1/2"	(1130)	8.40	(0.
V 2436	3.28	(0.31)	25 7/8"	(657)	18 1/4"	(463)	5.73	(0.53)	3.30	(0.31)	40 1/2"	(1028)	9.23	(0.
W24310	3.64	(0.34)	25 7/8"	(657)	-	(514)	6.37	(0.59)	3.66	(0.34)	36 1/2"	(926)	10.05	(0.
W24310 W2442	4.00		-		20 1/4"		7.01		4.02			(825)		
W2446	4.44	(0.37)	25 ⁷ / ₈ " 25 ⁷ / ₈ "	(657)	22 1/4"	(565)	7.65	(0.65)	4.02	(0.37)	32 ¹ / ₂ " 28 ¹ / ₂ "	(711)	10.87	(1.
W 24410	4.71				24 3/4"				4.74				_	
		(0.44)	25 7/8"	(657)	26 1/4"	(666)	8.28	(0.77)		(0.44)	24 1/2"	(622)	12.52	(1.
W2452	5.07	(0.47)	25 7/8"	(657)	28 1/4"	(717)	8.92	(0.83)	5.10	(0.47)	20 1/2"	(520)	13.34	(1.
W 2456	5.43	(0.51)	25 7/8"	(657)	30 1/4"	(768)	9.56	(0.89)	5.46	(0.51)	16 1/2"	(418)	14.17	(1.
N 24510 ◊	5.79	(0.54)	25 7/8"	(657)	32 1/4"	(819)	10.20	(0.95)	5.81	(0.54)	12 1/2"	(317)	14.99	(1.
N 2462 ♦	5.97	(0.55)	25 7/8"	(657)	33 1/4"	(843)	10.84	(1.01)	6.13	(0.57)	8 1/2"	(203)	15.81	(1.
N 2472 ◊	7.23	(0.67)	25 7/8"	(657)	40 1/4"	(1022)	12.76	(1.19)	7.26	(0.68)	10 1/4" *	(260)*	18.28	(1.
N 2476♦	7.59	(0.71)	25 7/8"	(657)	42 1/4"	(1073)	13.40	(1.25)	7.62	(0.71)	6 1/4" *	(159)*	19.11	(1.
W 26210	2.76	(0.26)	27 7/8"	(708)	14 1/4"	(362)	4.84	(0.45)	2.78	(0.26)	48 1/2"	(1231)	8.09	(0.
N 2632	3.14	(0.29)	27 7/8"	(708)	16 ¹ / ₄ "	(412)	5.54	(0.52)	3.17	(0.30)	44 1/2"	(1130)	8.97	(0.
W 2636	3.53	(0.33)	27 7/8"	(708)	18 1/4"	(463)	6.23	(0.58)	3.55	(0.33)	40 1/2"	(1028)	9.85	(0.
N 26310	3.92	(0.36)	27 7/8"	(708)	20 1/4"	(514)	6.92	(0.64)	3.94	(0.37)	36 1/2"	(926)	10.73	(1.
N 2642	4.30	(0.40)	27 7/8"	(708)	22 1/4"	(565)	7.62	(0.71)	4.33	(0.40)	32 1/2"	(825)	11.61	(1.
N 2646	4.79	(0.44)	27 7/8"	(708)	24 3/4"	(628)	8.31	(0.77)	4.73	(0.44)	28 1/2"	(711)	12.49	(1.
N 26410	5.08	(0.47)	27 7/8"	(708)	26 1/4"	(666)	9.01	(0.84)	5.10	(0.47)	24 1/2"	(622)	13.36	(1.
N 2652	5.47	(0.51)	27 7/8"	(708)	28 1/4"	(717)	9.70	(0.90)	5.49	(0.51)	20 1/2"	(520)	14.24	(1.
N 2656♦	5.85	(0.54)	27 7/8"	(708)	30 1/4"	(768)	10.39	(0.96)	5.88	(0.55)	16 1/2"	(418)	15.12	(1.
V 26510♦	6.24	(0.58)	27 7/8"	(708)	32 1/4"	(819)	11.09	(1.03)	6.26	(0.58)	12 1/2"	(317)	16.00	(1.
V 2662 ◊	6.43	(0.60)	27 7/8"	(708)	33 1/4"	(843)	11.78	(1.09)	6.61	(0.61)	8 1/2"	(203)	16.88	(1.
V 2672 ◊	7.79	(0.72)	27 7/8"	(708)	40 1/4"	(1022)	13.86	(1.29)	7.82	(0.73)	10 1/4" *	(260)*	19.52	(1.
V 2676♦	8.18	(0.76)	27 7/8"	(708)	42 1/4"	(1073)	14.56	(1.35)	8.21	(0.76)	6 1/4" *	(159)*	20.40	(1.
V 28210	2.95	(0.27)	29 7/8"	(759)	14 1/4"	(362)	5.23	(0.49)	2.98	(0.28)	48 1/2"	(1231)	8.61	(0.
V 2832	3.37	(0.31)	29 7/8"	(759)	16 1/4"	(412)	5.98	(0.56)	3.39	(0.32)	44 1/2"	(1130)	9.54	(0.
V 2836	3.78	(0.35)	29 7/8"	(759)	18 1/4"	(463)	6.73	(0.63)	3.81	(0.35)	40 1/2"	(1028)	10.47	(0.
V 28310	4.20	(0.39)	29 7/8"	(759)	20 1/4"	(514)	7.48	(0.70)	4.22	(0.39)	36 1/2"	(926)	11.41	(1.
N 2842	4.61	(0.43)	29 7/8"	(759)	20 /4	(565)	8.23	(0.77)	4.64	(0.43)	32 1/2"	(825)	12.34	(1.
N 2846	5.13	(0.43)	29 7/8"	(759)	24 3/4"	(628)	8.98	(0.77)	5.07	(0.43)	28 1/2"	(711)	13.28	(1.
W 28410	5.44	(0.48)	29 7/8"	(759)			9.73	(0.90)		(0.47)				
					26 1/4"	(666)			5.47		24 1/2"	(622)	14.21	(1.

Opening calculations change when using PG Upgrade sill stop.

For opening specifications for windows with Stormwatch* Protection, visit andersenwindows.com/openingspecs.

For cottage and reverse cottage sash opening specifications, visit andersenwindows.com/openingspecs.

continued on next page

^{• &}quot;Top of Subfloor to Top of Inside Sill Stop" is calculated based upon a structural header height of 6'-10 $^{1}/_{2}$ " (2096) except for $^{7.5}$ " and $^{7.9}$ heights which are calculated using a header height of 8' (2438).

Dimensions in parentheses are in millimeters or square meters.

meters. • Meet or exceed clear opening area of 5.7 sq. ft. or 0.53 m², clear opening width of 20" (508) and clear opening height of 24" (610).

opening height of 24" (610).
*Calculated based upon a structural header height of 8' (2438).



Tilt-Wash Double-Hung Window Opening and Area Specifications (continued)

Window Number	Aı	Opening rea		pening in dth		Position ight	Ar	ass ea	Aı	ent rea	Top of S to Top o Sill S	f Inside Stop		rea
	Sq. Ft	/(m²)	Inches	s/(mm)		/(mm)	Sq. Ft	./(m²)	Sq. Ft	/(m²)	Inches	/(mm)	Sq. Ft	./(m²)
TW2856 ◊	6.27	(0.58)	29 7/8"	(759)	30 1/4"	(768)	11.22	(1.04)	6.30	(0.59)	16 1/2"	(418)	16.08	(1.49
TW28510 ◊	6.69	(0.62)	29 7/8"	(759)	32 1/4"	(819)	11.97	(1.11)	6.71	(0.62)	12 1/2"	(317)	17.01	(1.58
rw2862 ◊	6.89	(0.64)	29 7/8"	(759)	33 1/4"	(843)	12.72	(1.18)	7.08	(0.66)	8 1/2"	(203)	17.95	(1.6
rw2872 ◊	8.35	(0.78)	29 7/8"	(759)	40 1/4"	(1022)	14.98	(1.39)	8.38	(0.78)	10 1/4" *	(260)*	20.75	(1.93
TW2876♦	8.77	(0.81)	29 7/8"	(759)	42 1/4"	(1073)	15.72	(1.46)	8.80	(0.82)	6 1/4" *	(159)*	21.69	(2.0
TW210210	3.15	(0.29)	31 7/8"	(809)	14 1/4"	(362)	5.62	(0.52)	3.18	(0.30)	48 1/2"	(1231)	9.12	(0.8
TW21032	3.59	(0.33)	31 7/8"	(809)	16 1/4"	(412)	6.42	(0.60)	3.62	(0.34)	44 1/2"	(1130)	10.11	(0.9
TW 21036	4.04	(0.38)	31 7/8"	(809)	18 1/4"	(463)	7.23	(0.67)	4.06	(0.38)	40 1/2"	(1028)	11.10	(1.0
TW210310	4.48	(0.42)	31 7/8"	(809)	20 1/4"	(514)	8.03	(0.75)	4.51	(0.42)	36 1/2"	(926)	12.09	(1.1
TW 21042	4.92	(0.46)	31 7/8"	(809)	22 1/4"	(565)	8.84	(0.82)	4.95	(0.46)	32 1/2"	(825)	13.08	(1.2
TW 21046	5.48	(0.51)	31 7/8"	(809)	24 3/4"	(628)	9.64	(0.90)	5.41	(0.50)	28 1/2"	(711)	14.07	(1.3
TW 210410♦	5.81	(0.54)	31 7/8"	(809)	26 1/4"	(666)	10.45	(0.97)	5.83	(0.54)	24 1/2"	(622)	15.05	(1.4
TW21052◊	6.25	(0.58)	31 7/8"	(809)	28 1/4"	(717)	11.25	(1.05)	6.28	(0.58)	20 1/2"	(520)	16.04	(1.4
TW21056◊	6.69	(0.62)	31 7/8"	(809)	30 1/4"	(768)	12.06	(1.12)	6.72	(0.62)	16 1/2"	(418)	17.03	(1.5
TW210510 ◊	7.14	(0.66)	31 7/8"	(809)	32 1/4"	(819)	12.86	(1.20)	7.16	(0.67)	12 1/2"	(317)	18.02	(1.6
TW21062♦	7.35	(0.68)	31 7/8"	(809)	33 1/4"	(843)	13.67	(1.27)	7.55	(0.70)	8 1/2"	(203)	19.01	(1.7
TW21072 ◊	8.91	(0.83)	31 7/8"	(810)	40 1/4"	(1022)	16.08	(1.49)	8.94	(0.70)	10 1/4" *	(260)*	21.99	(2.0
TW21076♦	9.35	(0.87)	31 7/8	(810)	40 1/4	(1022)	16.90	(1.43)	9.38	(0.87)	6 1/4" *	(159)*	22.98	(2.1
TW30210	3.35						6.01		3.38	(0.31)			9.63	
		(0.31)	33 7/8"	(860)	14 1/4"	(362)		(0.56)			48 1/2"	(1231)		(0.9
TW3032	3.82	(0.36)	33 7/8"	(860)	16 1/4"	(412)	6.87	(0.64)	3.85	(0.36)	44 1/2"	(1130)	10.67	(0.9
TW3036	4.29	(0.40)	33 7/8"	(860)	18 1/4"	(463)	7.73	(0.72)	4.32	(0.40)	40 1/2"	(1028)	11.72	(1.0
TW30310	4.76	(0.44)	33 7/8"	(860)	20 1/4"	(514)	8.59	(0.80)	4.79	(0.45)	36 1/2"	(926)	12.76	(1.1
rw 3042	5.23	(0.49)	33 7/8"	(860)	22 1/4"	(565)	9.45	(0.88)	5.26	(0.49)	32 1/2"	(825)	13.81	(1.2
TW3046 ♦	5.82	(0.54)	33 7/8"	(860)	24 3/4"	(628)	10.31	(0.96)	5.75	(0.53)	28 1/2"	(711)	14.85	(1.3
rw30410♦	6.17	(0.57)	33 7/8"	(860)	26 1/4"	(666)	11.17	(1.04)	6.20	(0.58)	24 1/2"	(622)	15.90	(1.4
TW3052 ◊	6.64	(0.62)	33 7/8"	(860)	28 1/4"	(717)	12.03	(1.12)	6.67	(0.62)	20 1/2"	(520)	16.95	(1.5
TW3056 ♦	7.11	(0.66)	33 7/8"	(860)	30 1/4"	(768)	12.89	(1.20)	7.14	(0.66)	16 1/2"	(418)	17.99	(1.6
TW30510♦	7.58	(0.70)	33 7/8"	(860)	32 1/4"	(819)	13.75	(1.28)	7.61	(0.71)	12 1/2"	(317)	19.04	(1.7
TW3062 ♦	7.81	(0.73)	33 7/8"	(860)	33 1/4"	(843)	14.61	(1.36)	8.03	(0.75)	8 1/2"	(203)	20.08	(1.8
TW3072 ◊	9.47	(0.88)	33 7/8"	(860)	40 1/4"	(1022)	17.20	(1.60)	9.50	(0.88)	10 1/4" *	(260)*	23.22	(2.1
TW3076♦	9.94	(0.92)	33 7/8"	(860)	42 1/4"	(1073)	18.06	(1.68)	9.97	(0.93)	6 1/4" *	(159)*	24.27	(2.2
TW 34210	3.74	(0.35)	37 7/8"	(962)	14 1/4"	(362)	6.79	(0.63)	3.78	(0.35)	48 1/2"	(1231)	10.65	(0.9
TW3432	4.27	(0.40)	37 7/8"	(962)	16 ¹ / ₄ "	(412)	7.76	(0.72)	4.30	(0.40)	44 1/2"	(1130)	11.81	(1.1
TW3436	4.80	(0.45)	37 7/8"	(962)	18 1/4"	(463)	8.73	(0.81)	4.83	(0.45)	40 1/2"	(1028)	12.97	(1.2
TW34310	5.32	(0.49)	37 7/8"	(962)	20 1/4"	(514)	9.70	(0.90)	5.35	(0.50)	36 1/2"	(926)	14.12	(1.3
TW3442	5.85	(0.54)	37 7/8"	(962)	22 1/4"	(565)	10.67	(0.99)	5.88	(0.55)	32 1/2"	(825)	15.28	(1.4
TW3446 ◊	6.51	(0.60)	37 7/8"	(962)	24 3/4"	(628)	11.64	(1.08)	6.42	(0.60)	28 1/2"	(711)	16.43	(1.5
TW34410♦	6.90						12.61		6.93		-		17.59	
		(0.64)	37 7/8"	(962)	26 1/4"	(666)		(1.17)		(0.64)	24 1/2"	(622)		(1.6
TW3452 ◊	7.43	(0.69)	37 7/8"	(962)	28 1/4"	(717)	13.58	(1.26)	7.46	(0.69)	20 1/2"	(520)	18.75	(1.7
TW3456 ♦	7.95	(0.74)	37 7/8"	(962)	30 1/4"	(768)	14.55	(1.35)	7.98	(0.74)	16 1/2"	(418)	19.90	(1.8
TW34510♦	8.48	(0.79)	37 7/8"	(962)	32 1/4"	(819)	15.53	(1.44)	8.51	(0.79)	12 1/2"	(317)	21.06	(1.9
TW3462 ◊	8.73	(0.81)	37 7/8"	(962)	33 1/4"	(843)	16.50	(1.53)	8.98	(0.83)	8 1/2"	(203)	22.22	(2.0
TW3472 ◊	10.59	(0.98)	37 7/8"	(962)	40 1/4"	(1022)	19.42	(1.80)	10.62	(0.99)	10 1/4" *	(260)*	25.69	(2.3
TW3476 ◊	11.11	(1.03)	37 7/8"	(962)	42 1/4"	(1073)	20.38	(1.89)	11.14	(1.04)	6 1/4" *	(159)*	26.85	(2.4
TW38210	4.14	(0.39)	41 7/8"	(1064)	14 1/4"	(362)	7.56	(0.70)	4.17	(0.39)	48 1/2"	(1231)	11.68	(1.0
TW3832	4.72	(0.44)	41 7/8"	(1064)	16 1/4"	(412)	8.64	(0.80)	4.76	(0.44)	44 1/2"	(1130)	12.94	(1.2
TW3836	5.30	(0.49)	41 7/8"	(1064)	18 1/4"	(463)	9.72	(0.90)	5.34	(0.50)	40 1/2"	(1028)	14.21	(1.3
TW38310	5.88	(0.55)	41 7/8"	(1064)	20 1/4"	(514)	10.81	(1.00)	5.92	(0.55)	36 1/2"	(926)	15.48	(1.4
TW3842	6.47	(0.60)	41 7/8"	(1064)	22 1/4"	(565)	11.89	(1.11)	6.50	(0.60)	32 1/2"	(825)	16.75	(1.5
r w 3846♦	7.19	(0.67)	41 7/8"	(1064)	24 3/4"	(628)	12.97	(1.21)	7.10	(0.66)	28 1/2"	(711)	18.01	(1.6
rw 38410 ◊	7.63	(0.71)	41 7/8"	(1064)	26 1/4"	(666)	14.05	(1.31)	7.66	(0.71)	24 1/2"	(622)	19.28	(1.7
TW3852 ◊	8.21	(0.76)	41 7/8"	(1064)	28 1/4"	(717)	15.14	(1.41)	8.25	(0.77)	20 1/2"	(520)	20.55	(1.9
TW3856 ◊	8.79	(0.82)	41 7/8"	(1064)	30 1/4"	(768)	16.22	(1.51)	8.83	(0.82)	16 1/2"	(418)	21.62	(2.0
TW38510♦	9.37	(0.87)	41 7/8"	(1064)	32 1/4"	(819)	17.30	(1.61)	9.41	(0.87)	12 1/2"	(317)	23.08	(2.1
TW3862 ◊	9.66	(0.90)	41 7/8"	(1064)	33 1/4"	(843)	18.38	(1.71)	9.92	(0.92)	8 1/2"	(203)	24.35	(2.2
				(1064)										
rw3872 ◊	11.70	(1.09)	41 7/8"	(1004)	40 1/4"	(1022)	21.64	(2.01)	11.73	(1.09)	10 1/4" *	(260)*	28.16	(2.2

^{• &}quot;Top of Subfloor to Top of Inside Sill Stop" is calculated based upon a structural header height of 6'-10 1/2" (2096) except for 7'-5" and 7'-9" heights which are calculated using a header height of 8' (2438).
• Dimensions in parentheses are in millimeters or square meters.

Opening calculations change when using PG Upgrade sill stop.

For opening specifications for windows with Stormwatch® Protection, visit andersenwindows.com/openingspecs.

For cottage and reverse cottage sash opening specifications, visit andersen windows. com/opening specs.

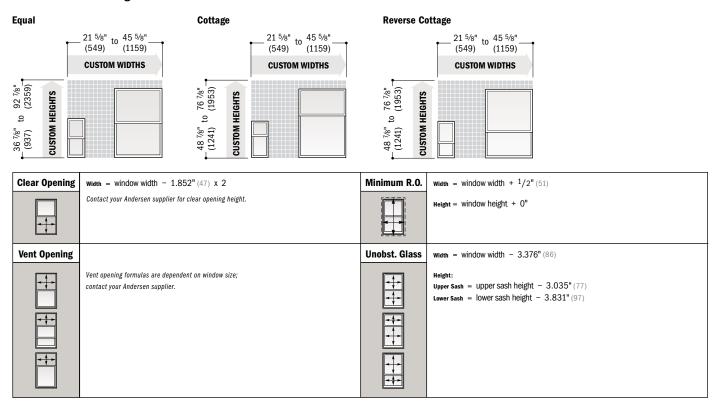
^{\$} Meet or exceed clear opening area of 5.7 sq. ft. or 0.53 m², clear opening width of 20" (508) and clear opening height of 24" (610).
*Calculated based upon a structural header height of 8' (2438).

Custom Sizes and Specification Formulas



Available in 1/8" (3) increments between minimum and maximum widths and heights. Some restrictions apply; contact your Andersen supplier. For minimum rough opening dimensions for joined windows, see specific joining instruction guides. Measurement guide for custom-size windows can be found at andersenwindows.com/measure.

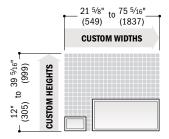
Tilt-Wash Double-Hung Windows



Tilt-Wash Picture Windows

12" to 67 5/16" (305) to (1710) **CUSTOM WIDTHS** to 76 7/8" (1953) **CUSTOM HEIGHTS** 48 7/8" (1241)

Tilt-Wash Transom Windows

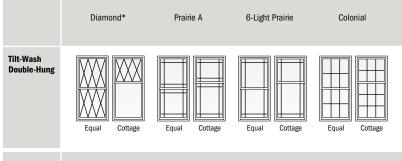


Minimum R.O.	Width = window width + 1/2" (51)	Unobst. Glass	Picture Window	Transom Window
	Height = window height + 0	A	width = window width - 4.924" (125)	Width = window width - 6.625" (168)
			Height = window height - 7.531" (191)	Height = Window height - 6.625" (168)

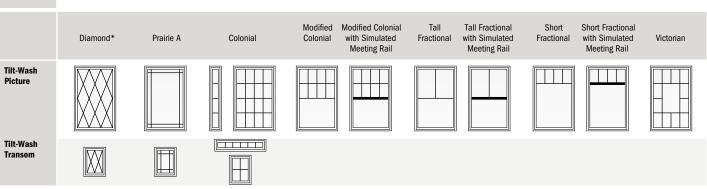
[•] Dimensions in parentheses are in millimeters.
• Clear Opening formulas provide dimensions for determining area available for egress. Vent Opening formulas provide dimensions for determining area available for passage of air. Minimum R.O. (minimum rough opening) formulas provide minimum rough opening width and height dimensions. Unobst. Glass (unobstructed glass) formulas provide dimensions for determining area available for passage of light.



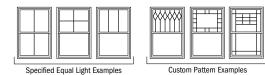
Grille Patterns



Patterns for double-hung windows are also available in Upper Sash Only (USO) configurations. For picture window patterns that require alignment with double-hung window patterns, identify the sash style (equal, cottage or reverse cottage) when ordering. Number of lights and overall pattern varies with window size. Patterns not available in all configurations.



^{*}Available only in Simulated Divided Light (SDL) configuration and only in $^3/_4$ " (19) and $^7/_8$ " (22) widths.



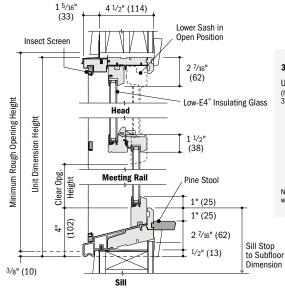
Specified equal light and custom patterns are also available. For more grille options, see page 14 or visit andersenwindows.com/grilles.

Tilt-Wash Double-Hung Window Details

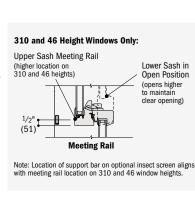
Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8

3 5/16 Upper Sash (84) 1 5/16" (33)Jamb 1 7/8" 1 7/8" Clear Opg. Width (37) (37) Unit Dim. Width 1/4" (6) 1/4" (6) Min. Min. Minimum Rough Opening Width

Horizontal Section



Vertical Section
All window heights except 310 & 46



^{*}Light-colored areas are parts included with window. Dark-colored areas are additional Andersen* parts required to complete window assembly as shown

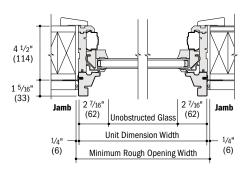
[•] Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 210-211.

Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com

Dimensions in parentheses are in millimeters

Tilt-Wash Picture Window Details

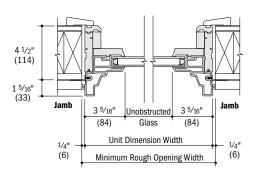
Scale $1^{1}/2$ " (38) = 1'-0" (305) - 1:8



Horizontal Section

Tilt-Wash Transom Window Details

Scale $1^{1}/2$ " (38) = 1'-0" (305) - 1:8



Horizontal Section

Horizontal (stack) Joining Detail

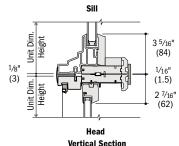
Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8

Overall Window Dimension Height

Sum of individual window heights plus $\frac{1}{16}$ " (1.5) for each join.

Overall Rough Opening Height

Overall window dimension height.*



Transom (**TWT**) over Tilt-Wash Double-Hung

Vertical (ribbon) Joining Detail

Scale $1^{1}/2^{1}$ (38) = 1'-0'' (305) - 1:8

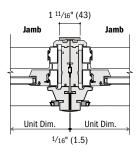
Overall Window Dimension Width

Sum of individual window widths plus $\frac{1}{16}$ " (1.5) for each join.

Overall Rough Opening Width

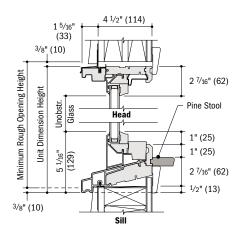
Overall window dimension width plus 1/2" (13).

For more joining information, see the combination designs section starting on page 181.

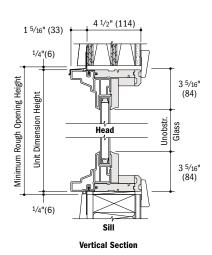


Horizontal Section

Tilt-Wash Double-Hung to Tilt-Wash Double-Hung



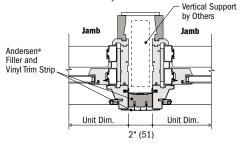
Vertical Section



Separate Rough Openings Detail

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8

To meet structural requirements or to achieve a wider joined appearance, windows may be installed into separate rough openings having vertical support (by others) in combination with Andersen* exterior filler and exterior vinyl trim.



Horizontal Section

Tilt-Wash Double-Hung and Tilt-Wash Double-Hung

- Light-colored areas are parts included with window. Dark-colored areas are additional Andersen® parts required to complete window assembly as shown.
- Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 210-211.
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com.
- Consult with an architect or structural engineer regarding minimum requirements for structural support members between adjacent rough openings.
- Dimensions in parentheses are in millimeters.
 *For stacks where bottom unit in combination is
- *For stacks where bottom unit in combination is a double-hung or picture window with a sloped sill. If bottom window has a flat sill add $^{1}/_{2}^{n}$ (13) to the overall window dimension height.



FEATURES

NARROLINE® DOUBLE-HUNG WINDOW CONVERSION KIT

Narroline double-hung window conversion kits are designed specifically to update existing Narroline double-hung windows (made from 1968 to 2013) to till-wash double-hung windows. They provide quick and easy installation with less mess than traditional window replacement because there are no window frame tear-out or trim modifications.

Each kit includes:

- Upper and lower sash with your choice of Low-E4® glass options
- Jamb liners
- Balancers
- · Lock and keeper

GLASS

In addition to stainless steel glass spacers, black or white glass spacers are now available to allow the spacer to blend in with the unit color.

High-Performance options include:

- · Low-E4 glass
- · Low-E4 HeatLock® glass
- Low-E4 SmartSun[™] glass
- Low-E4 SmartSun HeatLock glass
- Low-E4 Sun glass

Tempered and other glass options are available. Contact your Andersen supplier.

A removable translucent film helps shield the glass from damage during delivery and construction, and simplifies finishing at the job site.

High-Performance Low-E4 glass is 45% more energy efficient than ordinary dual-pane glass in winter and 56% more energy efficient in summer.*

LOW MAINTENANCE

Sash tilt inward for easy cleaning of window exteriors from inside the home (no need for ladders).





See videos of Narroline double-hung window conversion kit features and installation at andersenwindows.com/narroline.

EXTERIOR & INTERIOR OPTIONS

EXTERIOR COLORS







White Sandtone Terratone

INTERIOR OPTIONS





Pine

ne White

Dimensions in parentheses are in millimeters.

Printing limitations prevent exact replication of colors and finishes. See your Andersen supplier for actual color and finish samples.

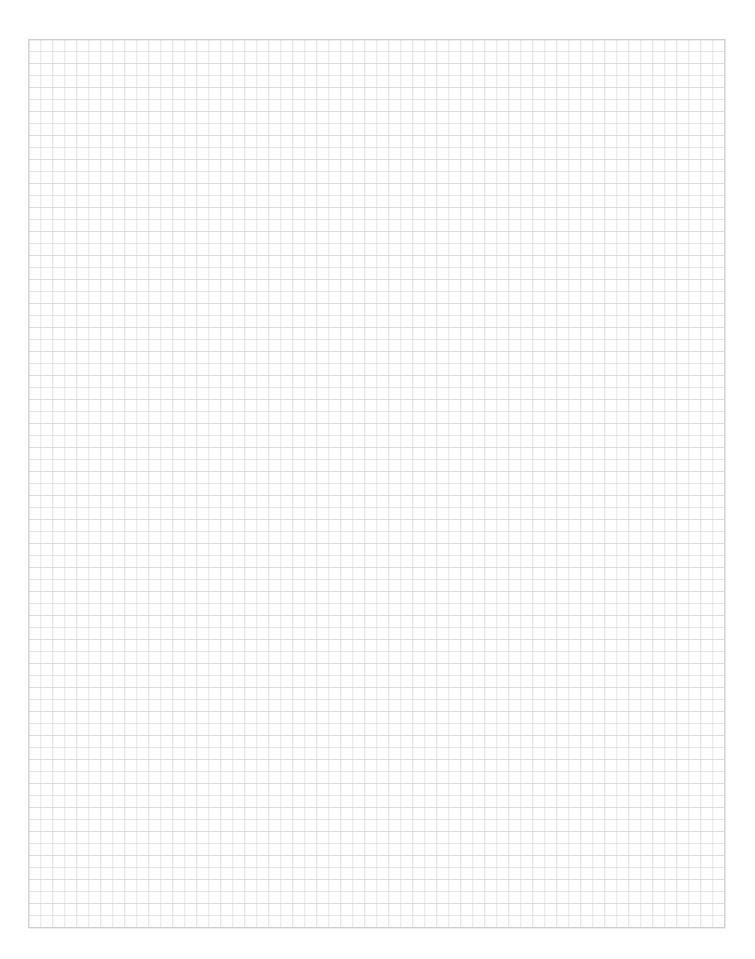
Naturally occurring variations in grain, color and texture of wood make each window one of a kind. All wood interiors are unfinished unless a finish is specified.

Narroline Double-Hung Window Identification

Narronne	Doubl	e-Hung w	inaow	Identification
Unobstru Glass W Inches/(idth	Unobstri Glass He Inches/i	eight**	Window Number
16 7/16"	(418)	13 15/16"	(354)	18210
16 7/16"	(418)	15 15/16"	(405)	1832
16 7/16"	(418)	19 15/16"	(506)	18310
16 7/16"	(418)	21 15/16"	(557)	1842
16 7/16"	(418)	23 15/16"	(608)	1846
16 7/16	(418)	27 15/16"	(710)	1852
16 7/16	(418)	35 15/16	(913)	1856
16 7/16	(418)	33 15/16"	(862)	1862
20 7/16	(519)	13 15/16"	(354)	20210
20 7/16	(519)	15 15/16	(405)	2032
20 7/16	(519)	19 15/16"	(506)	20310
	(519)	21 15/16	(557)	2042
20 7/16"		23 15/16		2046
20 7/16"	(519)		(608)	2052
20 7/16"	(519)	27 15/16"	(710)	2056
20 7/16"	(519)	35 15/ "	(913)	
20 7/16"	(519)	33 15/18"	(862)	2062
24 7/16"	(621)	13 15/18"	(354)	24210 2432
24 7/16"	(621)	15 15/18"	(405)	
24 7/16"	(621)	19 15/18"	(506)	24310
24 7/16"	(621)	21 15/18"	(557)	2442
24 7/16"	(621)	23 15/16"	(608)	2446
24 7/16"	(621)	27 15/16"	(710)	2452
24 7/16"	(621)	35 15/16"	(913)	2456
24 7/16"	(621)	33 15/16"	(862)	2462
28 7/16"	(722)	13 15/16"	(354)	28210
28 7/16"	(722)	15 15/16"	(405)	2832
28 7/16"	(722)	19 15/16"	(506)	28310
28 7/16"	(722)	21 15/16"	(557)	2842
28 7/16"	(722)	23 15/16"	(608)	2846
28 7/16"	(722)	27 15/16"	(710)	2852
28 7/16"	(722)	35 15/16"	(913)	2856
28 7/16"	(722)	33 15/16"	(862)	2862
32 7/16"	(824)	13 15/16"	(354)	30210
32 7/16"	(824)	15 15/16"	(405)	3032
32 7/16"	(824)	19 15/16"	(506)	30310
32 7/16"	(824)	21 15/16"	(557)	3042
32 7/16"	(824)	23 15/16"	(608)	3046
32 7/16"	(824)	27 15/16"	(710)	3052
32 7/16"	(824)	35 15/16"	(913)	3056
32 7/16"	(824)	33 15/16"	(862)	3062
36 7/16	(926)	13 15/18"	(354)	34210
36 7/16"	(926)	15 15/16"	(405)	3432
36 7/16"	(926)	19 15/16"	(506)	34310
36 7/16"	(926)	21 15/16"	(557)	3442
36 7/16"	(926)	23 15/16"	(608)	3446
36 7/16"	(926)	27 15/16"	(710)	3452
36 7/16"	(926)	35 15/16"	(913)	3456
36 7/16"	(926)	33 15/18"	(862)	3462
40 7/16"	(1027)	13 15/16"	(354)	38210
40 7/16"	(1027)	15 15/16"	(405)	3832
40 7/16"	(1027)	19 15/16"	(506)	38310
40 7/16"	(1027)	21 15/16"	(557)	3842
40 7/16"	(1027)	23 15/16"	(608)	3846
40 7/16"	(1027)	27 15/16"	(710)	3852
40 7/16"	(1027)	35 15/16"	(913)	3856
40 7/16"	(1027)	33 15/16"	(862)	3862

^{*}Values are based on comparison of Andersen® double-hung window conversion kit U-Factor to the U-Factor for clear dual-pane glass non-metal frame default values from the 2006, 2009, 2012, 2015 and 2018
International Energy Conservation Code "Glazed Fenestration" Default Tables.

 $[\]hbox{$^{**"}$Unobstructed Glass Height" dimensions in table are for lower sash only.}$







TILT-WASH DOUBLE-HUNG INSERT WINDOWS

FEATURES

FRAME

- ♠ A Fibrex® material exterior protects the frame – beautifully. Best of all, it's low maintenance and never needs painting.*
- For exceptional long-lasting performance, sill members are constructed with a wood core and a Fibrex material exterior. Sill ends are protected and sealed with weather-resistant covers.
- Natural wood stops are available in pine, and prefinished white, dark bronze and black.**
- Weatherstrip throughout the unit provides a long-lasting, energy-efficient, weather-resistant seal. For the top and bottom rails, an encased foam material is used. The head jamb liner and sill have a rigid vinyl rib that the weatherstrip material compresses against. At the meeting rail, compressible vinyl bulb material is used. Side jamb liners use leaf-type weatherstrip with foam inserts.
- **G** Exterior stop covers are specially designed to allow easy application of high-quality sealant.
- 3 1/4" (83) "pocket window" jamb depth allows convenient replacement without disturbing interior window trim for most double-hung replacement situations.
- **6** Jamb liners are available in white or gray, and must be specified when ordering. Contact your Andersen supplier for details.



Unique block-and-tackle balancers feature sized-to-the-unit, rust-resistant springs that require no adjustment.
Glass-reinforced nylon balancer shoes provide smooth, reliable sash operation.
They automatically lock the balancer into position when sash are tilted into wash mode.



SASH

Wash assists make it easy to tilt the sash into wash mode.

- **6** Wood sash members are treated with a water-repellent preservative for long-lasting protection and performance. Interior surfaces are unfinished pine. Low-maintenance prefinished white interiors are also available.
- A polyester-stabilized coat with a Flexacron® finish is electrostatically applied to penetrate all exterior surfaces for maximum protection and a lustrous finish.
- Sash joints simulate the look of traditional mortise-and-tenon construction inside and out.

GLASS

- In addition to stainless steel glass spacers, black or white glass spacers are now available to allow the spacer to blend in with the unit color.
- Silicone bed glazing provides superior weathertightness and durability.
- High-Performance options include:
- Low-E4® glass
- Low-E4 HeatLock® glass
- Low-E4 SmartSun™ glass
- Low-E4 SmartSun HeatLock glass
- Low-E4 Sun glass

Tempered and other glass options are available. Contact your Andersen supplier.

A removable translucent film helps shield the glass from damage during delivery and construction, and simplifies finishing at the job site.

Patterned Glass

Patterned glass options are available. See page 12 for more details.

SILL

Sill Angles

Three sill angles are available – 0,° 8° and 14° – to closely match the existing sill in window replacement applications. See page 93 for details.



0° Sill Angle



8° Sill Angle



14° Sill Angle

Sill Angle Finder App

Our Sill Angle Finder App lets you quickly and easily find the sill angle of existing double-hung windows.

Available for free for both iPhone® and Android™ smartphones. Download the app for iPhone from the App Store™ or for Android smartphones from the Google Play Store. The app is only available for smartphones, as tablets and other large devices are too bulky for measuring window sill angles.

INSTALLATION

Exterior Stop Cover



An exterior stop cover provides a clean transition from the new window to the existing window casing.

Included Installation Materials



Flat self-hanging shims, backer rod, installation screws and complete instructions are included with each insert window. See the measurement guide and worksheet at andersenwindows.com/measure.

SASH OPTIONS[†]



Cottage

Reverse Cottage

*Visit andersenwindows.com/warranty for details.

**Products with dark bronze and black interiors have matching exteriors.

†Shown on 400 Series tilt-wash double-hung full-frame windows.

"Flexacron" is a registered trademark of PPG Industries, Inc.

"iPhone" and "App Store" are registered trademarks of Apple Inc. "Android" is a trademark of Google Inc.

Dimensions in parentheses are in millimeters.



EXTERIOR & INTERIOR OPTIONS

EXTERIOR COLORS



INTERIOR OPTIONS



Bronze'

HARDWARE



Standard Lock & Keeper

Black | Gold Dust | Stone | White

Stone is standard with natural interior units. White comes with prefinished white interiors. Other finishes optional.

OPTIONAL HARDWARE Sold Separately

ESTATE™

Lock & Keepe



Antique Brass | Bright Brass Brushed Chrome | Distressed Bronze Distressed Nickel | Oil Rubbed Bronze Polished Chrome | Satin Nickel

Optional Estate lock and keeper reduces the clear opening height by %16" (14). Check with local building code officials to determine compliance with egress requirements.

CONTEMPORARY



Antique Brass | Black | Bright Brass Brushed Chrome | Distressed Bronze Distressed Nickel | Gold Dust Oil Rubbed Bronze | Polished Chrome Satin Nickel | Stone | White

TRADITIONAL









Bar Lift

Antique Brass | Black | Bright Brass | Brushed Chrome Distressed Bronze | Distressed Nickel | Gold Dust | Oil Rubbed Bronze Polished Chrome | Satin Nickel | Stone | White

Bold name denotes finish shown.

HARDWARE FINISHES



ACCESSORIES Sold Separately

SASH

Window Opening Control Device



A recessed window opening control device is available factory applied. It limits the sash travel to less than 4" (102) when the window is first opened. Available in white, stone and black. A field-applied window opening control device kit is also available.

INSTALLATION

Coil Stock



Andersen® aluminum coil stock can be ordered to match any of our 11 trim colors. Made from .018" thick aluminum. Andersen coil stock is available in 24" (610) x 50' (15240) rolls. Color-matched 1 1/4" (32)-long stainless steel trim nails are also available and can be ordered in 1 lb/.454 kg boxes.

GLASS

Andersen Art Glass

Available for 400 Series tilt-wash transom and picture units. Andersen art glass panels come in a variety of original patterns. See art glass section starting on page 173 for more information or visit andersenwindows.com/artalass.

INSECT SCREENS

Insect Screen Frames



Choose full insect screen or half insect screen. Half insect screen (shown above) allows ventilation without affecting the view through the upper sash. Frames are available in colors to match product exteriors.

TruScene® Insect Screens

Andersen TruScene insect screens let in over 25% more fresh air** and provide 50% greater clarity than conventional Andersen insect screens, all while keeping out unwanted small insects.

Conventional Insect Screens

Conventional insect screens have charcoal powder-coated aluminum screen mesh.

GRILLES

Grilles are available in a variety of configurations and widths. For doublehung grille patterns, see page 94.

CAUTION:

- Painting and staining may cause damage to rigid vinyl.
- · 400 Series windows in Terratone color may be painted any color lighter than Terratone color using auglity oil-based or latex paint.
- · Do not paint 400 Series windows in white, canvas, Sandtone, dark bronze, forest green or black exterior colors.
- · Andersen does not warrant the adhesion or performance of homeowner-applied paint over vinyl or other factory-coated surfaces.
- · For vinyl painting instructions and preparation, contact your Andersen supplier.
- Do not paint weatherstrip.
- Creosote-based stains should not come in contact with Andersen products.
- · Abrasive cleaners or solutions containing corrosive solvents should not be used on Andersen products.
- *Products with dark bronze and black interiors have matching exteriors.
- **TruScene insect screens let in over 25% more fresh air than standard Andersen fiberglass insect screens.

Dimensions in parentheses are in millimeters.

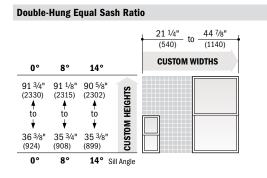
Printing limitations prevent exact replication of colors and finishes. See your Andersen supplier for actual color and finish samples.

Naturally occurring variations in grain, color and texture of wood make each window one of a kind. All wood interiors are unfinished unless a finish is specified.

Distressed bronze and oil rubbed bronze are "living" finishes that will change with time and use.

TILT-WASH DOUBLE-HUNG INSERT WINDOWS

Tilt-Wash Double-Hung, Picture and Transom Insert Window Sizes



21 1/4" 44 7/8" to -(540) (1140) 0° 8° 14° **CUSTOM WIDTHS** 77 3/4" 77 1/4" 76 3/4 HEIGHTS (1975) (1962) (1949) to to to CUSTOM 43 3/8" 42 3/4" 42 1/4" (1102)(1086)(1073)0° 8° 14° Sill Angle Reverse Cottage

Double-Hung 2:3 Cottage and 3:2 Reverse Cottage Sash Ratio



Available in ¹/8" (3) increments between minimum and maximum widths and heights. Height limits for double-hung and picture insert windows depend on new insert window sill angle.

For picture and transom insert windows, either height or width must be 68" (1727) or less, and height plus width cannot be less than 28" (711).

Measurement guide for customsized windows can be found at andersenwindows.com/measure. Grille patterns shown on page 94.

Picture 11 ¹/2" 78" to (292) (1981) **CUSTOM WIDTHS** 0° 8° 14° 78' 77 1/2' 77' **CUSTOM HEIGHTS** (1981) to (1969)(1956)ťo to ¥ 11 1/2" 12 1/2" 12" (318)(305)(292)89 14° Sill Angle

Transom		
		11 ¹ /2" to 78" (1981)
		CUSTOM WIDTHS
78" (1981) • to	сизтом неіснтя	
11 ^{1/} 2" (292)	CUST	

Tilt-Wash Double-Hung Insert Window Specification Formulas

Vent Opening	Width = window width - 3.798" (9	6)									
	Height = Depends on sash ratio and spec	ific sill angle of insert window; see below.									
	sash ratio	clear opening height	sill 14°	angle deductio	on O°						
	1:1 Equal	= (window height ÷ 2) - sill angle deduction	3.602" (91)	3.836" (97)	4.138" (105)						
	2:3 Cottage	= (window height x 2) ÷ 5 - sill angle deduction	2.879" (73)	3.066" (78)	3.308" (84)						
	3:2 Reverse Cottage	= (window height x 2) ÷ 5 - sill angle deduction	2.083" (53)	2.270" (58)	2.512" (64)						
Unobst. Glass	width = window width - 6.219" (1	Width = window width - 6.219" (158)									
	Height = Depends on sash ratio and spec	ific sill angle of insert window; see below.									
				angle deducti							
	sash ratio	unobstructed glass height	14°	8°	0°						
+++	Equal Upper and Lower Sash	= (window height ÷ 2) - sill angle deduction	3.625 (92)	3.844" (98)	4.156" (106)						
	Cottage Upper Sash or Reverse Cottage Lower Sash	= (window height x 2) ÷ 5 - sill angle deduction	2.891" (73)	3.078" (78)	3.328" (85)						
	Cottage Lower Sash or Reverse Cottage Upper Sash	= (window height x 2) ÷ 5 - sill angle deduction	4.344" (110)	4.625" (117)	4.984" (127)						

Optional Estate™ hardware will reduce vent opening height by ⁷/32" (6).

For clear opening specifications, contact your Andersen supplier.

Tilt-Wash Picture and Transom Insert Window Specification Formulas

Unobst. Glass	Picture Insert				Transom Insert						
41-	Width = window width - 6.0" (152)	th = window width - 6.0" (152)									
<u> </u>	Height = Depends on sash ratio and specific sill a		Height = window width - 6.0" (152)								
- -		sill	angle deducti	ons							
	unobstructed glass height	14°	8°	0°							
	= window height - sill angle deduction	5.816" (148)	6.285" (160)	6.890" (175)							

[•] Dimensions in parentheses are in millimeters.

[•] Clear Opening formulas provide dimensions for determining area available for egress. Vent Opening formulas provide dimensions for determining area available for passage of air. Unobst. Glass (unobstructed glass) formulas provide dimensions for determining area available for passage of light.

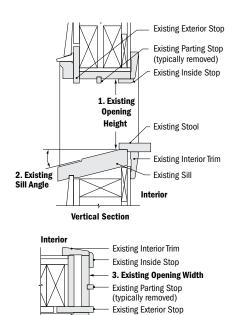
[•] Refer to andersenwindows.com/measure for detailed instructions on how to properly measure for insert windows.

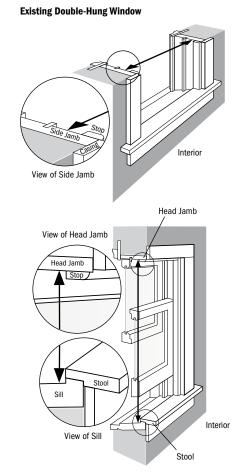


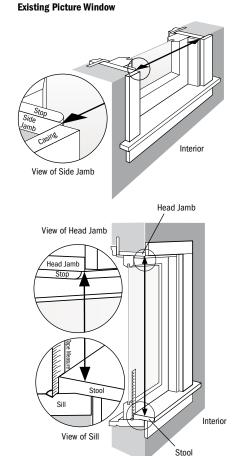
Existing Window Measurements

Required measurements:

- 1. Existing Opening Height
- 2. Existing Sill Angle
- 3. Existing Opening Width







Sill Angle Details

Scale 3" (76) = 1'-0" (305) - 1:4

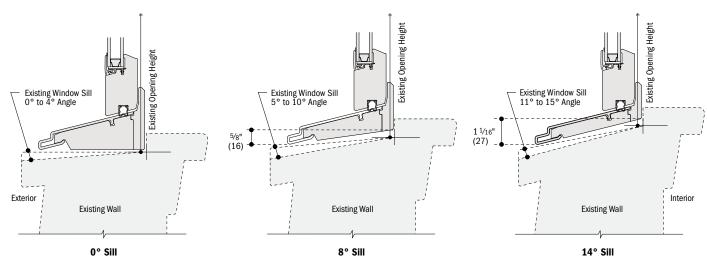
Horizontal Section

Select a sill angle that most closely matches your existing sill angle.

Existing Exterior Trim

Windows with a smaller sill angle will have a larger maximum height.

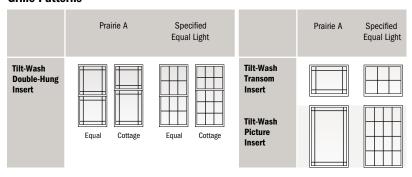
A "Sill Angle Finder App" is available, see page 90.



- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com.
 Dimensions in parentheses are in millimeters.
- Refer to andersenwindows.com/measure for detailed instructions on how to properly measure for insert windows.

TILT-WASH DOUBLE-HUNG INSERT WINDOWS

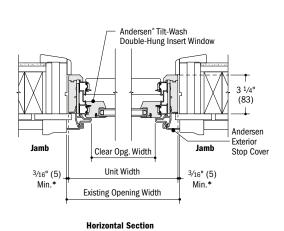
Grille Patterns

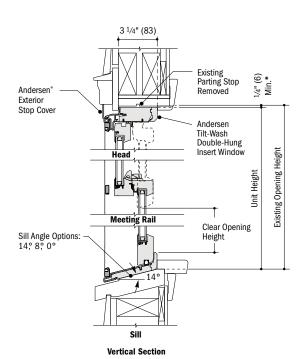


Patterns for double-hung windows are also available in Upper Sash Only (USO) configurations. For picture window patterns that require alignment with double-hung window patterns, identify the sash style (equal, cottage or reverse cottage) when ordering. Number of lights and overall pattern varies with window size. Patterns not available in all configurations. For more grille options, see page 14 or visit andersenwindows.com/grilles.

Tilt-Wash Double-Hung Insert Window Details

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8





[•] Light-colored areas are parts included with window. Dark-colored areas are additional Andersen* parts required to complete window assembly as shown.

Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com.

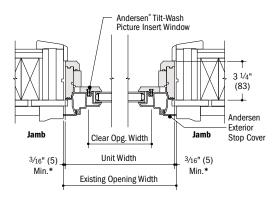
Dimensions in parentheses are in millimeters.

^{*}Refer to andersenwindows.com/measure for detailed instructions on how to properly measure for insert windows.

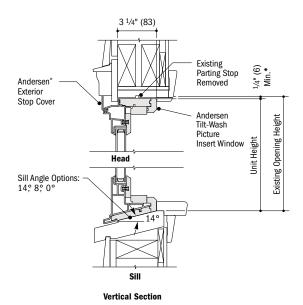


Tilt-Wash Picture Insert Window Details

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8

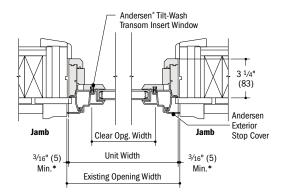


Horizontal Section

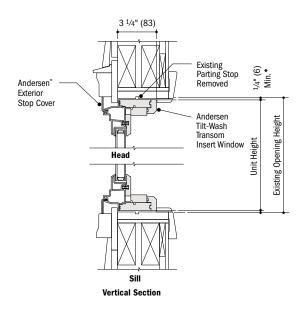


Tilt-Wash Transom Insert Window Details

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8



Horizontal Section

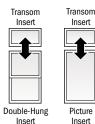


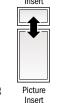
Joining Combinations

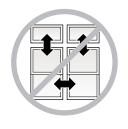
Join insert windows in one-way horizontal (stack) or vertical (ribbon) combinations.

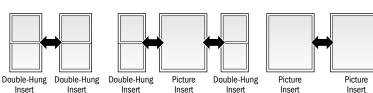
Do not join insert windows in two-way combinations.

Insert



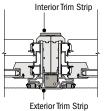






Vertical (ribbon) Joining Detail

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8



Horizontal Section

Tilt-Wash Double-Hung Insert to Tilt-Wash Double-Hung Insert

For more joining information, see the combination designs section starting on page 181.

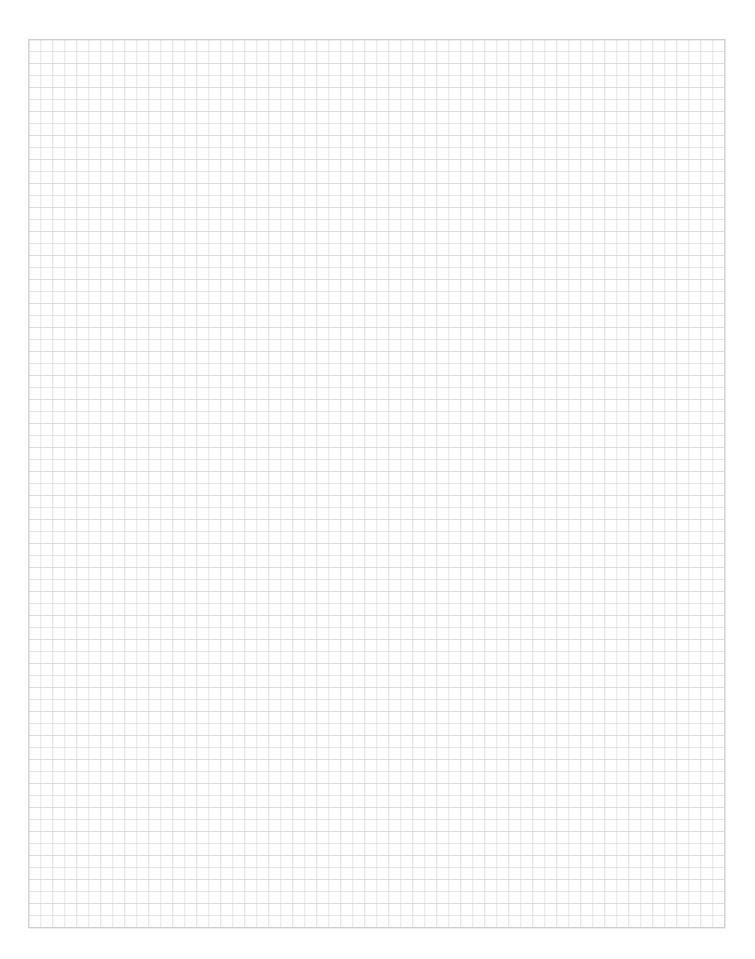
Insert

[·] Light-colored areas are parts included with window. Dark-colored areas are additional Andersen* parts required to complete window assembly as shown.

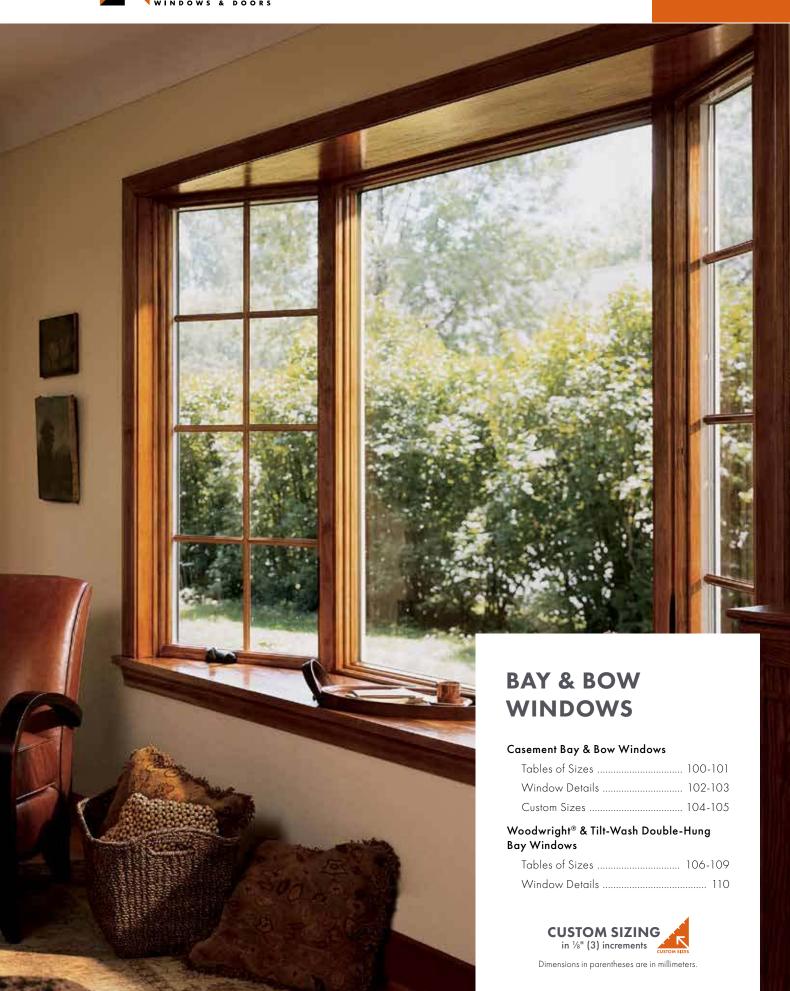
Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com.

[·] Dimensions in parentheses are in millimeters.

^{*}Refer to andersenwindows.com/measure for detailed instructions on how to properly measure for insert windows.







FEATURES

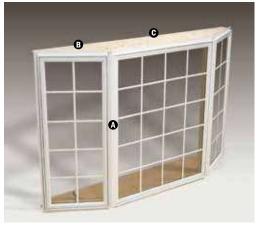
CASEMENT BAY & BOW WINDOWS

Constructed using basic casement windows. Some options must be specified to complete an order. These include color, glass and hardware.

- Pre-milled mullion posts join individual casement windows together into 30° angle bay, 45° angle bay, 90° box bay and 10° bow window units. Mullion posts lock into a channel in each adjoining casement window for a sturdy, easy-to-install unit. The exterior is sheathed with vinyl cladding; the interior is trimmed in natural wood, which can be finished to enhance any décor.
- (3) Andersen® auxiliary casing is supplied as trim to finish the top of 30° angle bay, 45° angle bay and 10° bow windows. Auxiliary casing is an option for 90° box bay windows.
- © Platforms made of 3/4" (19) plywood at the head and sill of bay and bow windows provide added strength to the assembly.

Custom bay and bow windows are available in a wide variety of unit configurations. See pages 104-105. Contact your Andersen supplier for details.





Casement 30° Angle Bay Window



Casement 90° Box Bay Window



Casement 10° Bow Window

For casement window colors and hardware options, see page 20.

WOODWRIGHT® & TILT-WASH DOUBLE-HUNG BAY WINDOWS

Constructed using basic double-hung windows. Some options must be specified to complete an order. These include color and glass.

- Pre-milled mullion posts join individual units together into 30° angle bay and 45° angle bay window units for a sturdy, easy-to-install unit. The exterior is sheathed with vinyl cladding; the interior is trimmed in natural wood, which can be finished to enhance any décor.
- ♠ Andersen auxiliary casing is mitered, joined and installed as trim to finish the top of 30° and 45° angle bay windows. Cellular Fibrex® is covered in vinyl cladding.
- Platforms made of 3/4" (19) plywood at the head and sill of bay and bow windows provide added strength to the assembly.



Double-Hung 45° Angle Bay Window

For Woodwright double-hung window colors and hardware options, see page 48. For tilt-wash double-hung window colors and hardware options, see page 76.

Dimensions in parentheses are in millimeters.

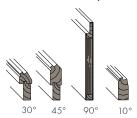
Installation of custom bay units having a projection greater than 24" (610) requires the expertise of a structural engineer to determine needed structural support. Failure to use sufficient structural support could result in personal injury or damage to windows or other property. Each cable within the system can support a maximum load of 500 lbs/227 kg. If the section of the window unit requiring support exceeds 1000 lbs/554 kg, additional support is needed.



ACCESSORIES Sold Separately. Please refer to individual product sections for a full list of options and accessories.

CASEMENT FRAME

Casement Extension Jambs & Extension Jamb Adaptors

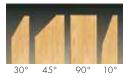


Extension jambs and extension jamb adaptors are available in unfinished pine and prefinished white, dark bronze and black

For 30° and 45° bay windows, extension jambs are available in $\frac{1}{8}$ " (3) increments between 4% (116) and $7\frac{1}{8}$ " (181). Some sizes may be veneered.

For box bay and bow windows, extension jambs are available in $\frac{1}{100}$ (1.5) increments between $5\frac{1}{100}$ (133) and $7\frac{1}{100}$ (181). For wall depths less than $5\frac{1}{100}$ (133), order $5\frac{1}{100}$ (133) extension jambs and trips to fit

Casement Head & Seat Boards



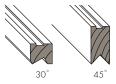
Head and seat boards are available in unfinished pine, maple, oak and prefinished white, dark bronze and black.

For 30° and 45° bay windows, head and seat boards are available in $\frac{1}{16}$ " (1.5) increments between 4%/6" (116) and $7\frac{1}{8}$ " (181).

For box bay and bow windows, head and seat boards are available in ½6" (1.5) increments between 5½" (133) and 7½" (181). For wall depths less than 5½" (133), order 5½" (133) head and seat boards and trim to fit.

DOUBLE-HUNG FRAME

Double-Hung Extension Jambs & Extension Jamb Adaptors



Extension jambs and extension jamb adaptors are available in unfinished pine and prefinished white, dark bronze and black.

Jamb depth of the unit plus extension jamb adaptor is $4\frac{1}{2}$ " (114). Extension jambs are available in $\frac{1}{10}$ " (1.5) increments between $5\frac{1}{4}$ " (133) and $7\frac{1}{8}$ " (181). Some sizes may be veneered.

Double-Hung Head & Seat Boards

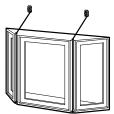


30° 45°

Head and seat boards are available in unfinished pine, maple, oak and prefinished white, dark bronze and black. Available in ½6" (1.5) increments to match wall thicknesses between 5½" (133) and 7½" (181). Some sizes may be veneered.

INSTALLATION

Cable Support



A cable provides additional support. Recommended for installations that extend out from the structure without a framed support wall beneath the unit. Each cable within the system can support a maximum load of 500 lbs/227 kg. If the section of the window unit requiring support exceeds 1000 lbs/554 kg, additional support is necessary. Failure to use sufficient structural support could result in personal injury or damage to windows or other property.

A WARNING

Proper support of projecting bow and bay windows is required, see installation instructions. Failure to do so may result in injury, product or property damage.

CAUTION:

- Painting and staining may cause damage to rigid vinyl.
- 400 Series windows in Terratone color may be painted any color lighter than Terratone color using quality oil-based or latex paint.
- Do not paint 400 Series windows in white, canvas, Sandtone, dark bronze, forest green or black exterior colors
- Andersen does not warrant the adhesion or performance of homeowner-applied paint over vinyl or other factory-coated surfaces.
- For vinyl painting instructions and preparation, contact your Andersen supplier.
- · Do not paint weatherstrip.
- Creosote-based stains should not come in contact with Andersen products.
- Abrasive cleaners or solutions containing corrosive solvents should not be used on Andersen products.

Table of Casement 30° Angle Bay Windows

	Projection	13 3/4" (349)	13 3/4" (349)	13 3/4" (349)	13 3/4" (349)	13 3/4" (349)
	WIDTHS					
	Bay Window	5'-10"	7'-9 7/8"	7'-9 7/8"	9'-9 3/4"	9'-9 3/4"
	Dimension	(1778)	(2384)	(2384)	(2991)	(2991)
	Minimum	5'-9 ¹ /8"	7'-9"	7'-9"	9'-8 7/8"	9'-8 7/8"
	Rough Opening	(1756)	(2362)	(2362)	(2969)	(2969)
	3'-1 ⁷ / ₁₆ " (951) 3'-2" (965)	30- C 13-20	30- C 23-20	30- P 4030-20	30- c 33-20	30- P 6030-20
	3'-6 ⁵ / ₁₆ " (1075) 3'-6 ⁷ / ₈ " (1089)	30- C 135-20	30- c 235-20	30- P 4035-20	30- C 335-20	30- P 6035-20
ныснтѕ	4'-1 ¹ / ₂ " (1257) 4'-2" (1270)	30 -C 14-20	30- C 24-20	30- P 4040-20	30- c 34-20	30- P 6040-20
Ŧ	4'-6 ⁵ / ₁₆ " (1380) 4'-6 ⁷ / ₈ " (1394)	30- C 145-20	30- C 245-20	30- P 4045-20	30- C 345-20	30- P 6045-20
	5'-1 ³ /8" (1559) 5'-1 ⁷ /8" (1572)	30 -C 15-20	30- c 25-20	30- P 4050-20	30- c 35-20	30- P 6050-20
	5'-6 ⁵ / ₁₆ " (1684) 5'-6 ⁷ / ₈ " (1699)	30- C 155-20	30- C 255-20	30- P 4055-20		
	6'-1 ³ /8" (1864) 6'-1 ⁷ /8" (1876)	30- C 16-20	30- C 26-20	30- P 4060-20		

Table of Casement 45° Angle Bay Windows

	ı	Projection	19 3/16" (487)	19 3/16" (487)	19 3/16" (487)	19 3/16" (487)	19 3/16" (487)
	WIDTHS						
	Bay Windo	***	5'-4 1/8"	7'-3 7/8"	7'-3 7/8"	9'-3 3/4"	9'-3 3/4"
	Dimension		(1629)	(2232)	(2232)	(2838)	(2838)
	Minimum		5'-2 5/8"	7'-2 ¹ /2"	7'-2 1/2"	9'-2 3/8"	9'-2 3/8"
	Rough Op	ening	(1591)	(2197)	(2197)	(2804)	(2804)
	3'-1 7/16"	(951)	45- C 13-20	45- c 23-20	45- P 4030-20	45- C 33-20	45- P 6030-20
	3'-2"	(965)	45-015-20	45-025-20	43-14030-20	45-055-20	43-1-0030-20
	3'-6 5/16"	(1075)	45- C 135-20	45- C 235-20	45- P 4035-20	45- c 335-20	45- P 6035-20
	3'-6 7/8"	(1089)	10 0100 20	10 0200 20	10 1 1000 20	10 2000 20	10 1 0000 20
2	4'-1 1/2"	(1257)	45- C 14-20	45 -c 24-20	45- P 4040-20	45- C 34-20	45- P 6040-20
HEIGHTS	4'-2"	(1270)					
뽀	4'-6 5/16"	(1380)	45- C 145-20	45- C 245-20	45- P 4045-20	45- C 345-20	45- P 6045-20
	4'-6 7/8"	(1394)					
	5'-1 3/8"	(1559)	45- C 15-20	45- C 25-20	45- P 4050-20	45- C 35-20	45- P 6050-20
-	5'-1 7/8"	(1572)					
	5'-6 ⁵ /16"	(1684)	45- C 155-20	45- C 255-20	45- P 4055-20		
-	5'-6 ⁷ /8"	(1699)					
	6'-1 3/8"	(1864)	45- C 16-20	45- C 26-20	45- P 4060-20	Custom-size windows a	are available
	6'-1 ⁷ /8"	(1876)					
						in $1/8$ " (3) increments.	See pages

A WARNING

Proper support of projecting bow and bay windows is required, see installation instructions. Failure to do so may result in injury, product or property damage.

104-105 for more information.



In addition to venting shown in tables, other standard configurations are available. Choose left venting, right venting or stationary as viewed from the exterior.

^{• &}quot;Projection" refers to outside of the exterior sheathing to the outer edge of the window.

^{• &}quot;Window Dimension" always refers to outside frame-to-frame dimension.
• "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 210-211 for more details.

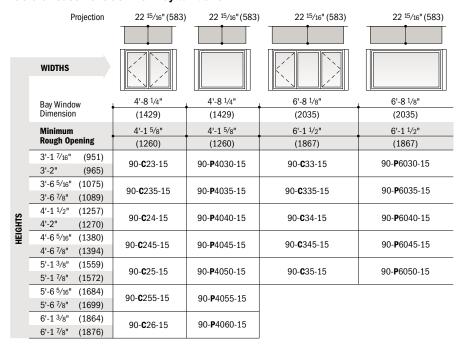
[•] One Andersen* cable kit, with two cables, is included with the unit for proper installation. Each cable supports a maximum load of 500 lbs/227 kg; additional support is necessary for loads exceeding 1000 lbs/454 kg.

Angle bay and bow windows include only the basic unit. Roof and other installation materials provided by other manufacturers.
 For walkout angle bay and bow window details and installation guidelines, contact your Andersen supplier.

[•] Dimensions in parentheses are in millimeters.



Table of Casement 90° Box Bay Windows

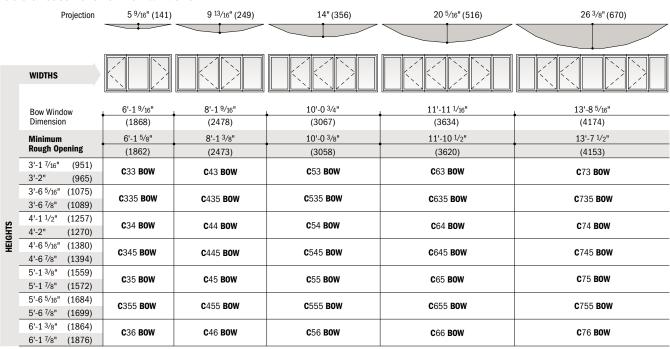




Custom-size windows are available in 1/8" (3) increments. See pages 104-105 for more information.

In addition to venting shown in tables, other standard configurations are available. Choose left venting, right venting or stationary as viewed from the exterior.

Table of Casement 10° Bow Windows



A WARNING

Proper support of projecting bow and bay windows is required, see installation instructions. Failure to do so may result in injury, product or property damage.

^{· &}quot;Projection" refers to outside of the exterior sheathing to the outer edge of the window.

^{* &}quot;Window Dimension" always refers to outside frame-to-frame dimension.
* "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 210-211 for more details.

[•] One Andersen* cable kit, with two cables, is included with the unit for proper installation. Each cable supports a maximum load of 500 lbs/227 kg; additional support is necessary for loads exceeding 1000 lbs/454 kg.

[•] Angle bay and bow windows include only the basic unit. Roof and other installation materials provided by other manufacturers.

[·] For walkout angle bay and bow window details and installation guidelines, contact your Andersen supplier. · Dimensions in parentheses are in millimeters.

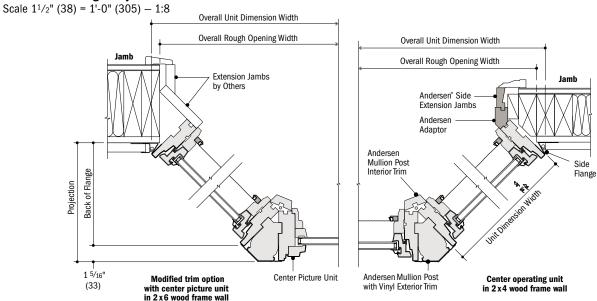
BAY & BOW WINDOWS

Casement 30° Angle Bay Window Detail

Scale $1^{1}/2^{1}$ (38) = 1'-0'' (305) - 1:8 Overall Unit Dimension Width Overall Unit Dimension Width Overall Rough Opening Width Overall Rough Opening Width Jamb Jamb Extension Jambs by Others Andersen® Side Extension Jambs Andersen Mullion Post Interior Trim Back of Projection Angled Side Unit Dimension Width Flange 1 5/16" Center Picture Unit Andersen Mullion Post **Modified trim option** Center operating unit with Vinyl Exterior Trim (33)with center picture unit in 2 x 6 wood frame wall in 2 x 4 wood frame wall

Horizontal Section

Casement 45° Angle Bay Window Detail



Horizontal Section

Casement 10° Bow Window Detail

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8 Overall Unit Dimension Width Overall Rough Opening Width Jamb Jamb Interior Trim by Others Mullion Post Interior Casing Projection Unit Dim. Width

- · Light-colored areas are parts included with window. Dark-colored areas are additional Andersen® parts required to complete window assembly as shown
- Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 210-211.
 Details are for illustration only and are not intended to represent product installation methods or materials. Refer to unit installation guides at andersenwindows.com.

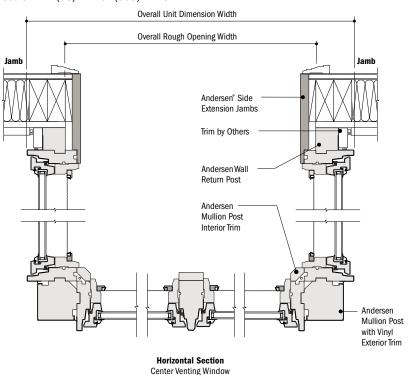
Horizontal Section

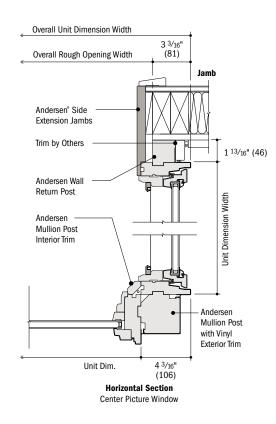
[·] Dimensions in parentheses are in millimeters.



Casement 90° Box Bay Window Details

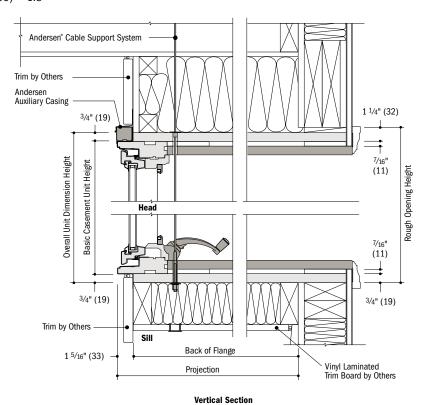
Scale $1^{1}/2$ " (38) = 1'-0" (305) - 1:8





Casement 30° and 45° Angle Bay, 10° Bow and 90° Box Bay Window Detail

Scale $1^{1}/2^{1}$ (38) = 1'-0" (305) - 1:8



[·] Light-colored areas are parts included with window. Dark-colored areas are additional Andersen* parts required to complete window assembly as shown.

[•] Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 210-211.
• Details are for illustration only and are not intended to represent product installation methods or materials. Refer to unit installation guides at andersenwindows.com.

[·] Dimensions in parentheses are in millimeters.

BAY & BOW WINDOWS



Individual window units are available custom sized in 1/8" (3) increments.

In addition to venting shown in tables, other standard configurations are available.

Choose left venting, right venting or stationary as viewed from the exterior.

Measurement guide can be found at andersenwindows.com/measure.

Custom Casement 30° Angle Bay Window Size and Projection Range

		Center Window Venting Configuration Venting or Stationary Venting or Stationary Picture Picture Picture		Bay Wi	ndow Din	nension		Proje	ection
Sash R Window	atio v Configuration		Minimum Width Inches/(mm)	Maximum Width Inches/(mm)		Minimum Height Inches/(mm)	Maximum Height Inches/(mm)	Minimum Inches/(mm)	Maximum Inches/(mm)
1:1:1	<i>t</i> 1		50" (1270)	101 ½" (2578)	x	26 ¹ / ₈ " (664)	73 ⁷ / ₈ " (1876)	10 ¹ / ₄ " (260)	19 ⁵ / ₈ " (498)
1:2:1	2		67 ³ / ₈ " (1711)	137 ½" (3493)	x	26 ¹ / ₈ " (664)	73 ⁷ / ₈ " (1876)	10 ¹ / ₄ " (260)	19 ⁵ / ₈ " (498)
1:2:1		Diaturo	70 ⁷ / ₈ " (1800)	115 ½/4" (2927)	x	38" (965)	73 ⁷ / ₈ " (1876)	10 ³ / ₄ " (273)	16 ⁵ / ₈ " (422)
1.2.1	2	ricule	115 ½/4" (2927)	137 ⁵ / ₈ " (3496)	х	38" (965)	61 ⁷ / ₈ " (1571)	16 ⁵ / ₈ " (422)	19 ⁵ / ₈ " (498)
1:3:1	7		84 ¹ / ₂ " (2146)	144" (3658)	х	26 ¹ / ₈ " (664)	73 ⁷ / ₈ " (1876)	10 ¹ / ₄ " (260)	16 ½" (419)
1,2,1		Diaturo	83 ⁷ / ₈ " (2130)	97 ⁷ / ₈ " (2486)	х	38" (965)	73 ⁷ / ₈ " (1876)	10 ¹ / ₄ " (260)	11 ⁵ / ₈ " (295)
1.3:1	3:1	ricule	97 ⁷ / ₈ " (2486)	116 ⁷ / ₈ " (2969)	x	38" (965)	61 ⁷ / ₈ " (1571)	11 ⁵ / ₈ " (295)	13 ⁵ / ₈ " (346)

Custom Casement 45° Angle Bay Window Size and Projection Range

					Bay Wi	ndow Din	nension		Proje	ection
Sash Ra Window	atio Configuration	Center Win Venting Co	dow nfiguration	Minimum Width Inches/(mm)	Maximum Width Inches/(mm)		Minimum Height Inches/(mm)	Maximum Height Inches/(mm)	Minimum Inches/(mm)	Maximum Inches/(mm)
1:1:1	1	Venting or Stationary		45 ³ / ₄ " (1162)	91 ¹ / ₄ " (2318)	х	26 ¹ / ₈ " (664)	73 ⁷ / ₈ " (1876)	14 ³ / ₁₆ " (360)	27 ¹ / ₂ " (699)
1:2:1	2	Venting or Stationary		63" (1600)	127 ¹ / ₄ " (3232)	х	26 ¹ / ₈ " (664)	73 ⁷ / ₈ " (1876)	14 ¹/₄" (362)	27 ¹ / ₂ " (699)
1:2:1	2:1	Picture		66" (1676)	106 ⁷ / ₈ " (2715)	х	38" (965)	73 ⁷ / ₈ " (1876)	14 ⁷ / ₈ " (378)	23 ¹ / ₄ " (591)
1.2.1	2	ricture		106 ⁷ / ₈ " (2715)	127 ¹ / ₄ " (3232)	х	38" (965)	61 ⁷ / ₈ " (1571)	23 ½" (591)	27 ¹ / ₂ " (699)
1:3:1	3	Venting or Stationary		80 ¹ / ₈ " (2035)	144" (3658)	х	26 ¹ / ₈ " (664)	73 ⁷ / ₈ " (1876)	14 ¹/₄" (362)	24 ⁵ / ₁₆ " (618)
1:3:1		Picture		79 ⁵ / ₈ " (2023)	92 ³ / ₄ " (2356)	х	38" (965)	73 ⁷ / ₈ " (1876)	14 ³ / ₁₆ " (360)	16 ¹ / ₄ " (413)
1:5:1	3:1			92 ³ / ₄ " (2356)	110 ³ / ₈ " (2804)	х	38" (965)	61 ⁷ / ₈ " (1571)	16 ¹ / ₄ " (413)	19" (483)

A WARNING

Proper support of projecting bow and bay windows is required, see installation instructions. Failure to do so may result in injury, product or property damage.

- "Projection" refers to outside of the exterior sheathing to the outer edge of the window.
- *"Window Dimension" always refers to outside frame-to-frame dimension.

 *"Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 210-211 for more details.
- •One Andersen* cable kit, with two cables, is included with the unit for proper installation. Each cable supports a maximum load of 500 lbs/227 kg; additional support is necessary for loads exceeding 1000 lbs/454 kg.
 •Angle bay and bow windows include only the basic unit. Roof and other installation materials provided by other manufacturers.
- For walkout angle bay and bow window details and installation guidelines, contact your Andersen supplier.
- Refer to andersenvindows.com/measure for detailed instructions on how to properly measure for custom-size windows
- · Dimensions in parentheses are in millimeters.





Individual window units are available custom sized in 1/8" (3) increments.

In addition to venting shown in tables, other standard configurations are available.

Choose left venting, right venting or stationary as viewed from the exterior.

Measurement guide can be found at andersenwindows.com/measure.

Custom Casement 90° Box Bay Window Size and Projection Range

			Bay Wi	ndow Dir	mension		Fla	nker	Proje	ection
Window Configuration	Center Window Venting Configuration	Minimum Width Inches/(mm)	Maximum Width Inches/(mm)		Minimum Height Inches/(mm)	Maximum Height Inches/(mm)	Minimum Width Inches/(mm)	Maximum Width Inches/(mm)	Minimum Depth Inches/(mm)	Maximum Depth Inches/(mm)
	Picture	38 ½" (972)	61 ⁷ / ₈ " (1572)	х	38" (965)	73 ⁷ / ₈ " (1876)	17" (432)	35 ⁷ / ₈ " (911)	21 ¹ / ₂ " (546)	40 ³ / ₈ " (1026)
	Picture	61 ⁷ / ₈ " (1572)	74 ¹/ ₈ " (1883)	х	38" (965)	61 ⁷ / ₈ " (1572)	17" (432)	35 ⁷ / ₈ " (911)	21 ¹ / ₂ " (546)	40 ³ / ₈ " (1026)
	Venting or Stationary	36 ³ / ₈ " (924)	74 ¹ / ₄ " (1886)	х	26 ¹ / ₈ " (664)	73 ⁷ / ₈ " (1876)	17" (432)	35 ⁷ / ₈ " (911)	21 ¹ / ₂ " (546)	40 ³ / ₈ " (1026)
	Venting or Stationary	53 ½" (1359)	110 ³ / ₈ " (2804)	х	26 ½" (664)	73 ⁷ / ₈ " (1876)	17" (432)	35 ⁷ / ₈ " (911)	21 ¹ / ₂ " (546)	40 ³ / ₈ " (1026)

Custom Casement 10° Bow Window Size and Projection Range

	Bow Window Dimension					Projection		
Window Configuration	Center Window Venting Configuration	Minimum Width Inches/(mm)	Maximum Width Inches/(mm)		Minimum Height Inches/(mm)	Maximum Height Inches/(mm)	Minimum Depth Inches/(mm)	Maximum Depth Inches/(mm)
3-Wide	Venting or Stationary	52 ¹ / ₂ " (1334)	108 ⁷ / ₈ " (2765)	х	26 ½" (664)	73 ⁷ / ₈ " (1876)	4 ³ / ₈ " (111)	7 ⁵ / ₈ " (194)
4-Wide	Venting or Stationary	69 ¹ / ₂ " (1765)	143 ⁷ / ₈ " (3654)	х	26 ¹ / ₈ " (664)	73 ⁷ / ₈ " (1876)	7 ³ / ₈ " (187)	13 ⁷ / ₈ " (352)
5-Wide	Venting or Stationary	85 ⁷ / ₈ " (2181)	164 ½" (4172)	х	26 ¹ / ₈ " (664)	73 ⁷ / ₈ " (1876)	10 ³ / ₈ " (264)	18 ⁵ / ₈ " (473)
6-Wide	Venting or Stationary	101 ⁵ / ₈ " (2581)	164 ½" (4172)	х	26 ¹ / ₈ " (664)	73 ⁷ / ₈ " (1876)	14 ⁷ / ₈ " (378)	23 ³ / ₁₆ " (589)
7-Wide	Venting or Stationary	116 ⁵ / ₈ " (2962)	164 ¹ / ₄ " (4172)	Х	26 ½" (664)	73 ⁷ / ₈ " (1876)	19 ³ / ₁₆ " (487)	26 ³ / ₈ " (670)

A WARNING

Proper support of projecting bow and bay windows is required, see installation instructions. Failure to do so may result in injury, product or property damage.

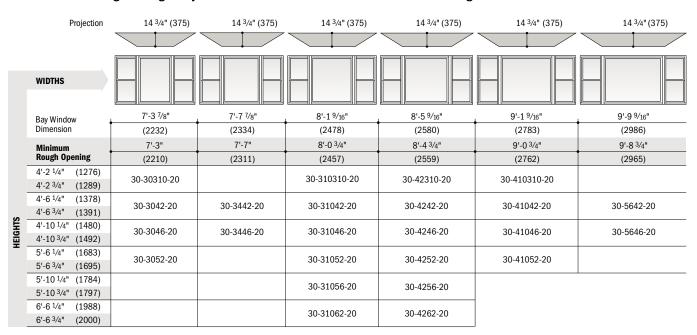
- · "Projection" refers to outside of the exterior sheathing to the outer edge of the window.
- "Window Dimension" always refers to outside frame-to-frame dimension.
- **Minimum Rough Opening* dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 210-211 for more details.

 One Andersen cable kit, with two cables, is included with the unit for proper installation. Each cable supports a maximum load of 500 lbs/227 kg; additional support is necessary for loads exceeding 1000 lbs/454 kg.
- Angle bay and bow windows include only the basic unit. Roof and other installation materials provided by other manufacturers.
- For walkout angle bay and bow window details and installation guidelines, contact your Andersen supplier.
 Refer to andersenwindows.com/measure for detailed instructions on how to properly measure for custom-size windows.
- · Dimensions in parentheses are in millimeters.

Table of Double-Hung 30° Angle Bay Window Sizes with Picture Window and 1-8 Flanking Windows

	Projection	12 3/4" (324)	12 3/4" (324)	12 3/4" (324)	12 3/4" (324)	12 3/4" (324)	12 3/4" (324)	
	WIDTHS							
	Bay Window	6'-8 15/16"	7'-0 ¹⁵ / ₁₆ "	7'-6 ⁵ /8"	7'-10 5/8"	8'-6 5/8"	9'-2 5/8"	
HEIGHTS	Dimension	(2056)	(2157)	(2302)	(2403)	(2607)	(2810)	
	Minimum	6'-8 1/8"	7'-0 ¹ /8"	7'-5 ³ /4"	7'-9 3/4"	8'-5 3/4"	9'-1 3/4"	
	Rough Opening	(2035)	(2137)	(2280)	(2381)	(2584)	(2788)	
	4'-2 ¹ / ₄ " (1276) 4'-2 ³ / ₄ " (1289)	30-30310-18		30-310310-18	30-42310-18	30-410310-18		
	4'-6 ¹ / ₄ " (1378) 4'-6 ³ / ₄ " (1391)	30-3042-18	30-3442-18	30-31042-18	30-4242-18	30-41042-18	30-5642-18	
	4'-10 ¹ / ₄ " (1480) 4'-10 ³ / ₄ " (1492)	30-3046-18	30-3446-18	30-31046-18	30-4246-18	30-41046-18	30-5646-18	
	5'-6 ¹ / ₄ " (1683) 5'-6 ³ / ₄ " (1695)	30-3052-18		30-31052-18	30-4252-18	30-41052-18		
	5'-10 ¹ / ₄ " (1784) 5'-10 ³ / ₄ " (1797)			30-31056-18	30-4256-18			
	6'-6 ¹ /4" (1988) 6'-6 ³ /4" (2000)			30-31062-18	30-4262-18			

Table of Double-Hung 30° Angle Bay Window Sizes with Picture Window and 2-0 Flanking Windows



A WARNING

Proper support of projecting bow and bay windows is required, see installation instructions. Failure to do so may result in injury, product or property damage.

Ordering Prefix:

WDH 400 Series Woodwright® Double-Hung Window WPW 400 Series Woodwright Picture Window 400 Series Tilt-Wash Double-Hung Window DHP 400 Series Tilt-Wash Picture Window

^{• &}quot;Projection" refers to outside of the exterior sheathing to the outer edge of the window.

^{• &}quot;Window Dimension" always refers to outside frame-to-frame dimension.
• "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 210-211 for more details.

^{*} One Andersen* cable kit, with two cables, is included with the unit for proper installation. Each cable supports a maximum load of 500 lbs/227 kg; additional support is necessary for loads exceeding 1000 lbs/454 kg.

Angle bay and bow windows include only the basic unit. Roof and other installation materials provided by other manufacturers.
 For walkout angle bay and bow window details and installation guidelines, contact your Andersen supplier.

[·] Dimensions in parentheses are in millimeters.



Table of Double-Hung 30° Angle Bay Window Sizes with 1-8 Flanking Double-Hung Windows

	Projection	12 3/4" (324)	12 3/4" (324)	12 3/4" (324)	12 3/4" (324)	12 3/4" (324)
	WIDTHS					
		7'-0 ¹⁵ /16"	7'-10 ⁵ /8"	8'-6 ⁵ /8"	9'-2 5/8"	9'-10 5/8"
		(2157)	(2403)	(2599)	(2810)	(3013)
	Minimum	7'-0 ¹ /8"	7'-9 ³ /4"	8'-5 ³ /4"	9'-1 3/4"	9'-9 3/4"
_	Rough Opening	(2137)	(2581)	(2584)	(2788)	(2991)
	4'-2 ¹ / ₄ " (1276) 4'-2 ³ / ₄ " (1289)	30-34310-18	30-20310-2-18	30-24310-2-18	30-28310-2-18	30-30310-2-18
	4'-6 ¹ / ₄ " (1378) 4'-6 ³ / ₄ " (1391)	30-3442-18	30-2042-2-18	30-2442-2-18	30-2842-2-18	30-3042-2-18
HEIGHTS	4'-10 ¹ / ₄ " (1480) 4'-10 ³ / ₄ " (1492)	30-3446-18	30-2046-2-18	30-2446-2-18	30-2846-2-18	30-3046-2-18
	5'-6 ¹ / ₄ " (1683) 5'-6 ³ / ₄ " (1695)	30-3452-18	30-2052-2-18	30-2452-2-18	30-2852-2-18	30-3052-2-18
	5'-10 ¹ / ₄ " (1784) 5'-10 ³ / ₄ " (1797)	30-3456-18	30-2056-2-18	30-2456-2-18	30-2856-2-18	30-3056-2-18
	6'-6 ¹ /4" (1988) 6'-6 ³ /4" (2000)	30-3462-18	30-2062-2-18	30-2462-2-18	30-2862-2-18	30-3062-2-18

Table of Double-Hung 30° Angle Bay Window Sizes with 2-0 Flanking Double-Hung Windows

	Projection	14 ³ /4" (375)	14 3/4" (375)	14 ³ /4" (375)	14 ³ /4" (375)	14 ³ /4" (375)
	3					
	WIDTHS					
		7'-7 7/8"	8'-5 ⁹ /16"	9'-1 9/16"	9'-9 9/16"	10'-5 9/16"
		(2334)	(2580)	(2783)	(2986)	(3189)
	Minimum	7'-7"	8'-4 3/4"	9'-0 3/4"	9'-8 3/4"	10'-4 ³ /4"
_	Rough Opening	(2311)	(2559)	(2762)	(2965)	(3169)
	4'-2 ¹ / ₄ " (1276) 4'-2 ³ / ₄ " (1289)	30-34310-20	30-20310-2-20	30-24310-2-20	30-28310-2-20	30-30310-2-20
	4'-6 ¹ / ₄ " (1378) 4'-6 ³ / ₄ " (1391)	30-3442-20	30-2042-2-20	30-2442-2-20	30-2842-2-20	30-3042-2-20
HEIGHTS	4'-10 ¹ /4" (1480) 4'-10 ³ /4" (1492)	30-3446-20	30-2046-2-20	30-2446-2-20	30-2846-2-20	30-3046-2-20
Ι-	5'-6 ¹ / ₄ " (1683) 5'-6 ³ / ₄ " (1695)	30-3452-20	30-2052-2-20	30-2452-2-20	30-2852-2-20	30-3052-2-20
	5'-10 ¹ / ₄ " (1784) 5'-10 ³ / ₄ " (1797)	30-3456-20	30-2056-2-20	30-2456-2-20	30-2856-2-20	30-3056-2-20
	6'-6 ¹ /4" (1988) 6'-6 ³ /4" (2000)	30-3462-20	30-2062-2-20	30-2462-2-20	30-2862-2-20	30-3062-2-20

A WARNING

Proper support of projecting bow and bay windows is required, see installation instructions. Failure to do so may result in injury, product or property damage.

Ordering Prefix:

WDH 400 Series Woodwright® Double-Hung Window WPW 400 Series Woodwright Picture Window 400 Series Tilt-Wash Double-Hung Window DHP 400 Series Tilt-Wash Picture Window

^{• &}quot;Projection" refers to outside of the exterior sheathing to the outer edge of the window.

^{*&}quot;Window Dimension" always refers to outside frame-to-frame dimension.
*"Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 210-211 for more details.

^{*}One Andersen* cable kit, with two cables, is included with the unit for proper installation. Each cable supports a maximum load of 500 lbs/227 kg, additional support is necessary for loads exceeding 1000 lbs/454 kg.

Angle bay and bow windows include only the basic unit. Roof and other installation materials provided by other manufacturers.
 For walkout angle bay and bow window details and installation guidelines, contact your Andersen supplier.

[•] Dimensions in parentheses are in millimeters.

Table of Double-Hung 45° Angle Bay Window Sizes with Picture Window and 1-8 Flanking Windows

	Projection	17 15/16" (456)	17 15/16" (456)	17 15/16" (456)	17 15/16" (456)	17 15/16" (456)	17 15/16" (456)
	WIDTHS						
	Bay Window	6'-4 ⁷ /16"	6'-8 7/16"	7'-2 1/8"	7'-6 ¹ /8"	8'-2 ¹ /8"	8'-10 1/8"
	Dimension	(1942)	(2043)	(2188)	(2289)	(2492)	(2696)
	Minimum	6'-3 ¹ /8"	6'-7 ¹ /8"	7'-0 ³ /4"	7'-4 ³ /4"	8'-0 ³ /4"	8'-8 3/4"
	Rough Opening	(1908)	(2010)	(2153)	(2254)	(2457)	(2661)
	4'-2 ¹ / ₄ " (1276) 4'-2 ³ / ₄ " (1289)	45-30310-18		45-310310-18	45-42310-18	45-410310-18	
	4'-6 ¹ / ₄ " (1378) 4'-6 ³ / ₄ " (1391)	45-3042-18	45-3442-18	45-31042-18	45-4242-18	45-41042-18	45-5642-18
HEIGHTS	4'-10 ¹ / ₄ " (1480) 4'-10 ³ / ₄ " (1492)	45-3046-18	45-3446-18	45-31046-18	45-4246-18	45-41046-18	45-5646-18
Ι.	5'-6 ¹ / ₄ " (1683) 5'-6 ³ / ₄ " (1695)	45-3052-18		45-31052-18	45-4252-18	45-41052-18	
	5'-10 ¹ / ₄ " (1784) 5'-10 ³ / ₄ " (1797)			45-31056-18	45-4256-18		
	6'-6 ¹ /4" (1988) 6'-6 ³ /4" (2000)			45-31062-18	45-4262-18		

Table of Double-Hung 45° Angle Bay Window Sizes with Picture Window and 2-0 Flanking Windows

	Projection	20 3/4" (527)	20 3/4" (527)	20 3/4" (527)	20 3/4" (527)	20 3/4" (527)	20 3/4" (527)
	WIDTHS						
	Bay Window	6'-10 ¹ /8"	7'-2 ¹ /8"	7'-7 ¹³ /16"	7'-11 ¹³ /16"	8'-7 ¹³ / ₁₆ "	9'-3 13/16"
	Dimension	(2086)	(2188)	(2332)	(2434)	(2637)	(2840)
	Minimum	6'-8 ³ /4"	7'-0 3/4"	7'-6 ¹ /2"	7'-10 ¹ /2"	8'-6 ¹ /2"	9'-2 1/2"
	Rough Opening	(2051)	(2153)	(2299)	(2400)	(2604)	(2807)
	4'-2 ¹ / ₄ " (1276) 4'-2 ³ / ₄ " (1289)	45-30310-20		45-310310-20	45-42310-20	45-410310-20	
	4'-6 ¹ / ₄ " (1378) 4'-6 ³ / ₄ " (1391)	45-3042-20	45-3442-20	45-31042-20	45-4242-20	45-41042-20	45-5642-20
HEIGHTS	4'-10 ¹ / ₄ " (1480) 4'-10 ³ / ₄ " (1492)	45-3046-20	45-3446-20	45-31046-20	45-4246-20	45-41046-20	45-5646-20
T	5'-6 ¹ / ₄ " (1683) 5'-6 ³ / ₄ " (1695)	45-3052-20		45-31052-20	45-4252-20	45-41052-20	
•	5'-10 ¹ / ₄ " (1784) 5'-10 ³ / ₄ " (1797)			45-31056-20	45-4256-20		
	6'-6 ¹ / ₄ " (1988) 6'-6 ³ / ₄ " (2000)			45-31062-20	45-4262-20		

A WARNING

Proper support of projecting bow and bay windows is required, see installation instructions. Failure to do so may result in injury, product or property damage.

WDH 400 Series Woodwright* Double-Hung Window

WPW 400 Series Woodwright Picture Window TW 400 Series Tilt-Wash Double-Hung Window

400 Series Tilt-Wash Picture Window

^{• &}quot;Projection" refers to outside of the exterior sheathing to the outer edge of the window.

^{• &}quot;Window Dimension" always refers to outside frame-to-frame dimension.
• "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 210-211 for more details.

^{*}One Andersen* cable kit, with two cables, is included with the unit for proper installation. Each cable supports a maximum load of 500 lbs/227 kg; additional support is necessary for loads exceeding 1000 lbs/454 kg.

Angle bay and bow windows include only the basic unit. Roof and other installation materials provided by other manufacturers.
 For walkout angle bay and bow window details and installation guidelines, contact your Andersen supplier.

[•] Dimensions in parentheses are in millimeters.



Table of Double-Hung 45° Angle Bay Window Sizes with 1-8 Flanking Windows

	Projection	17 15/16" (456)	17 15/16" (456)	17 15/16" (465)	17 15/16" (456)	17 15/16" (456)
	WIDTHS					
	Bay Window	6'-8 7/16"	7'-6 ¹ /8"	8'-2 1/8"	8'-10 ¹ /8"	9'-6 1/8"
	Dimension	(2043)	(2289)	(2492)	(2696)	(2899)
	Minimum	6'-7 ¹ /8"	7'-4 ⁷ /8"	8'-0 3/4"	8'-8 3/4"	9'-4 3/4"
_	Rough Opening	(2010)	(2257)	(2445)	(2661)	(2864)
	4'-2 ¹ / ₄ " (1276) 4'-2 ³ / ₄ " (1289)	45-34310-18	45-20310-2-18	45-24310-2-18	45-28310-2-18	45-30310-2-18
HEIGHTS	4'-6 ¹ /4" (1378) 4'-6 ³ /4" (1391)	45-3442-18	45-2042-2-18	45-2442-2-18	45-2842-2-18	45-3042-2-18
Ē	4'-10 ¹ /4" (1480)	45-3446-18	45-2046-2-18	45-2446-2-18	45-2846-2-18	45-3046-2-18
	4'-10 3/4" (1492)	45-5440-16	43-2040-2-16	40-2440-2-16	40-2040-2-10	40-3040-2-16
	5'-6 ¹ /4" (1683)	45-3452-18	45-2052-2-18	45-2452-2-18	45-2852-2-18	45-3052-2-18
_	5'-6 3/4" (1695)	45 5452 10	10 2002 2 10	10 2 102 2 10	10 2002 2 10	
	5'-10 ¹ / ₄ " (1784)	45-3456-18	45-2056-2-18	45-2456-2-18	45-2856-2-18	45-3056-2-18
_	5'-10 ³ / ₄ " (1797)	.5 5 .50 10	.5 2550 2 10	.5 2 .50 2 10	10 2030 2 10	10 0000 2 10
	6'-6 ¹ / ₄ " (1988) 6'-6 ³ / ₄ " (2000)	45-3462-18	45-2062-2-18	45-2462-2-18	45-2862-2-18	45-3062-2-18

Table of Double-Hung 45° Angle Bay Window Sizes with 2-0 Flanking Windows

	Projection	20 3/4" (257)	20 3/4" (257)	20 3/4" (257)	20 3/4" (257)	20 3/4" (257)
	WIDTHS					
	Bay Window	7'-2 1/8"	7'-11 ¹³ /16"	8'-7 ¹³ / ₁₆ "	9'-3 13/16"	9'-11 13/16"
	Dimension	(2188)	(2434)	(2637)	(2840)	(3043)
	Minimum	7'-0 3/4"	7'-10 ¹ /2"	8'-6 1/2"	9'-2 1/2"	9'-10 1/2"
_	Rough Opening	(2153)	(2400)	(2604)	(2807)	(3010)
	4'-2 ¹ /4" (1276)	45-34310-20	45-20310-2-20	45-24310-2-20	45-28310-2-20	45-30310-2-20
-	4'-2 3/4" (1289)					
	4'-6 ¹ / ₄ " (1378)	45-3442-20	45-2042-2-20	45-2442-2-20	45-2842-2-20	45-3042-2-20
დ -	4'-6 3/4" (1391)					
HEIGHTS	4'-10 ¹ / ₄ " (1480) 4'-10 ³ / ₄ " (1492)	45-3446-20	45-2046-2-20	45-2446-2-20	45-2846-2-20	45-3046-2-20
뿔 -	5'-6 1/4" (1683)					
	5'-6 ³ / ₄ " (1695)	45-3452-20	45-2052-2-20	45-2452-2-20	45-2852-2-20	45-3052-2-20
_	5'-10 ¹ / ₄ " (1784)					
	5'-10 3/4" (1797)	45-3456-20	45-2056-2-20	45-2456-2-20	45-2856-2-20	45-3056-2-20
	6'-6 ¹ /4" (1988) 6'-6 ³ /4" (2000)	45-3462-20	45-2062-2-20	45-2462-2-20	45-2862-2-20	45-3062-2-20

A WARNING

Proper support of projecting bow and bay windows is required, see installation instructions. Failure to do so may result in injury, product or property damage.

Ordering Prefix:

400 Series Woodwright® Double-Hung Window **WPW** 400 Series Woodwright Picture Window 400 Series Tilt-Wash Double-Hung Window DHP 400 Series Tilt-Wash Picture Window

^{• &}quot;Projection" refers to outside of the exterior sheathing to the outer edge of the window.

^{*&}quot;Window Dimension" always refers to outside frame-to-frame dimension.
*"Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 210-211 for more details.

^{*}One Andersen* cable kit, with two cables, is included with the unit for proper installation. Each cable supports a maximum load of 500 lbs/227 kg; additional support is necessary for loads exceeding 1000 lbs/454 kg.

Angle bay and bow windows include only the basic unit. Roof and other installation materials provided by other manufacturers.
 For walkout angle bay and bow window details and installation guidelines, contact your Andersen supplier.

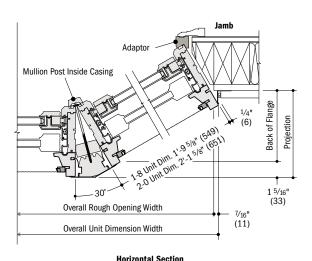
[•] Dimensions in parentheses are in millimeters.

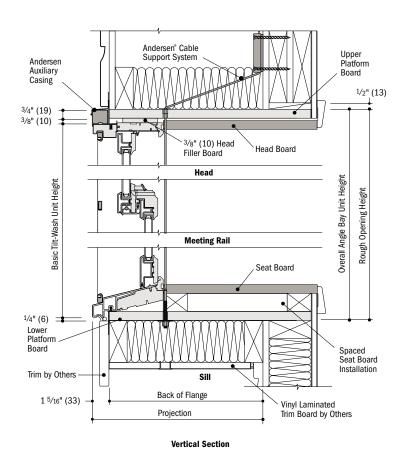
BAY & BOW WINDOWS

Double-Hung 30° Angle Bay Window Details

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8

Woodwright® double-hung 30° angle bay window shown. Tilt-wash double-hung 30° angle bay window installation is similar.

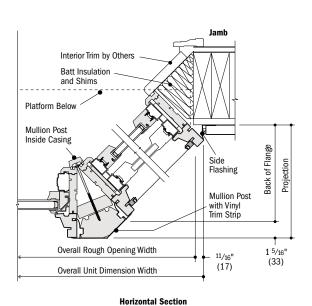


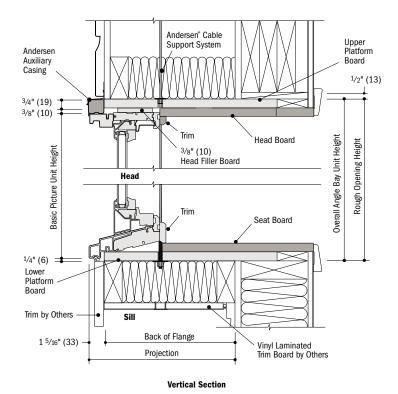


Double-Hung 45° Angle Bay Window Details

Scale $1^{1/2}$ " (38) = 1'-0" (305) -1:8

Tilt-wash double-hung 30° angle bay window shown. Woodwright double-hung $30^{\,\text{o}}$ angle bay window installation is similar.





[·] Light-colored areas are parts included with window. Dark-colored areas are additional Andersen® parts required to complete window assembly as shown

^{*} Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 210-211.

Details are for illustration only and are not intended to represent product installation methods or materials. Refer to unit installation guides at andersenwindows.com





FEATURES

FRAME

- The exterior of the frame is covered with fiberglass to maintain an attractive appearance while minimizing maintenance.
- (3) Wood frame members are treated with a water-repellent preservative for long-lasting protection and performance.
- Flexible bulb weatherstrip and spring-tension vinyl are installed at the factory, and help provide a tight seal between the sash and frame.
- \bigcirc Fold-out-and-lock installation flanges accommodate 4 $\frac{1}{2}$ " (114) and 4 $\frac{1}{8}$ " (105) wall construction.

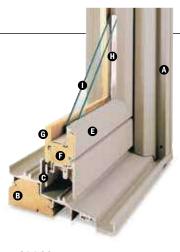
SASH

- **(3)** For improved ventilation, both sash are operable. Rigid vinyl encases the entire sash. A vinyl weld protects each sash corner for superior weathertightness to maintain an attractive appearance and minimize maintenance.
- Natural wood sash members help provide excellent structural stability and energy efficiency.
- **G** Interior stops are unfinished pine. Low-maintenance prefinished white, Sandtone, dark bronze and black** interiors are also available.

Delrin® Glides



Teflon®-infused Delrin glides are self-lubricating and require only 8 lbs/3.6 kg of force to operate. A stainless steel spring within the glide provides years* of reliable operation – even in harsh environments.



GLASS

- ① In addition to stainless steel glass spacers, black or white glass spacers are now available to allow the spacer to blend in with the unit color.
- High-Performance options include:
- · Low-E4® glass
- Low-E4 HeatLock® glass
- Low-E4 SmartSun[™] glass
- Low-E4 SmartSun HeatLock glass
- Low-E4 Sun glass

Tempered and other glass options are available. Contact your Andersen supplier.

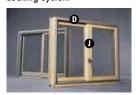
A removable translucent film helps shield the glass from damage during delivery and construction, and simplifies finishing at the job site.

Patterned Glass

Patterned glass options are available. See page 12 for more details.

HARDWARE

Locking System



• For an added measure of security and increased weathertightness, the locking system pulls the sash firmly closed while pushing the sash tight to the side jambs. This lock is single-point on 2' (610) tall windows, two-point on 3' (914) tall windows, and three-point on 3'-6" (1067), 4' (1219) and 5' (1524) tall windows.

EXTERIOR & INTERIOR OPTIONS

EXTERIOR COLORS



INTERIOR OPTIONS



HARDWARE OPTIONS Sold Separately



Antique Brass | Black | Bright Brass Brushed Chrome | Distressed Bronze Distressed Nickel | Oil Rubbed Bronze Polished Chrome | **Satin Nickel** Stone | White

Bold name denotes finish shown.

Rotating Sash Handle

HARDWARE FINISHES



*Visit andersenwindows.com/warranty for details.

**Sandtone interior available with Sandtone, canvas, Terratone, dark bronze and black exteriors.

†Products with white, dark bronze and black interiors have matching exteriors.

"Delrin" and "Teflon" are registered trademarks of E.I. du Pont de Nemours and Company.

Dimensions in parentheses are in millimeters.

Printing limitations prevent exact replication of colors and finishes. See your Andersen supplier for actual color and finish samples.

Naturally occurring variations in grain, color and texture of wood make each window one of a kind. All wood interiors are unfinished unless a finish is specified.

Distressed bronze and oil rubbed bronze are "living" finishes that will change with time and use.



ACCESSORIES Sold Separately

FRAME

Extension Jambs



Standard jamb depth is 4 % (116). Extension jambs are available in unfinished pine, or prefinished white, dark bronze and black. Some sizes may be veneered.

Factory-applied and non-applied interior extension jambs are available in 1/16" (1.5) increments between 5 1/16" (129) and 7 1/4" (181).

HARDWARE

Passive Sash Handle



Attaches to the passive sash to aid in operation. Available in Sandtone.

Window Opening Control Device



A window opening control device is available, which limits sash travel to less than 4" (102) when the window is first opened. Available in factory applied, or as a field-applied kit in stone or white. Device shown above on a 200 Series gliding window.

INSECT SCREENS

Choose fixed, full insect screens or gliding pass-through insect screens. Frames are available in colors to match product exteriors.

TruScene® Insect Screens

Andersen® TruScene insect screens let in over 25% more fresh air* and provide 50% greater clarity than conventional Andersen insect screens, all while keeping out unwanted small insects.

Conventional Insect Screens

Conventional insect screens have charcoal powder-coated aluminum screen mesh.

GRILLES

Grilles are available in a variety of configurations and widths. For gliding window grille patterns, see page 115.

EXTERIOR TRIM

Available with Andersen exterior trim. See exterior trim section starting on page 175.

CAUTION:

- Painting and staining may cause damage to rigid vinyl.
- 400 Series windows in Terratone color may be painted any color lighter than Terratone color using quality oil-based or latex paint.
- Do not paint 400 Series windows in white, canvas, Sandtone, dark bronze, forest green or black exterior colors.
- Andersen does not warrant the adhesion or performance of homeowner-applied paint over vinyl or other factory-coated surfaces.
- For vinyl painting instructions and preparation, contact your Andersen supplier.
- · Do not paint weatherstrip.
- Creosote-based stains should not come in contact with Andersen products.
- Abrasive cleaners or solutions containing corrosive solvents should not be used on Andersen products.

^{*}TruScene insect screens let in over 25% more fresh air than standard Andersen fiberglass insect screens. Dimensions in parentheses are in millimeters.

GLIDING WINDOWS

Table of Gliding Window Sizes

Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96

Window Dimension	2'-11 ¹ / ₄ " (895)	3'-11 ¹ / ₄ " (1200)	4'-11 ½" (1505)	5'-11 ¹ / ₄ " (1810)
Minimum Rough Opening	3'-0" (914)	4'-0" (1219)	5'-0" (1524)	6'-0" (1829)
Unobstructed Glass (single sash only)	12 ^{9/} 16" (319)	18 ⁹ / ₁₆ " (472)	24 ⁹ / ₁₆ " (624)	30 ⁹ / ₁₆ " (776)
1'-10 1/4" (565) 1'-11" (584) 14 1/8"	G 32	G 42	G 52	G 62
2'-11 1/4" (895) 3'-0" (914) 27 1/8" 689)		→ ←	+ (=)	+
3'-5 1/4" (1048) 3'-6" (1067) 33 1/8"	G 33	G 43	G 53 → ←	G 63 [◊]
31-5	G 336	G 436	G 536 ⁰	G 636 ^o
3'-11 1/4" (1200) 4'-0" (1219) 39 1/8"	→	→ ←	→ ←	→ ←
	G 34	G 44 [◊]	G 54◊	G 64◊
4-11 1/4" (1505) 5'-0" (1524) 51 1/8"		→	→	→
	G 35	G 45◊	G 55◊	G 65◊



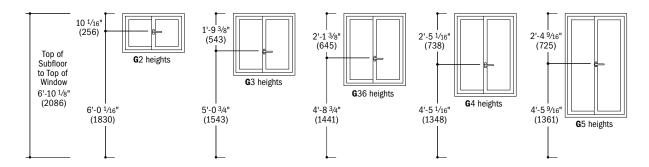
Viewed from the exterior. Passive sash will open after active sash has been opened.

Grille patterns shown on page 115.

Handle Location

Operational force of handle is equal to 8 lbs/3.6 kg.

Dimensions shown are from top of handle in open position.



^{. &}quot;Window Dimension" always refers to outside frame-to-frame dimension.

^{• &}quot;Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 210-211 for more details.

Dimensions in parentheses are in millimeters.
 Meet or exceed clear opening area of 5.7 sq. ft. or 0.53 m², clear opening width of 20" (508) and clear opening height of 24" (610). See table on page 115.

[•] Dimensions in parentheses are in millimeters.

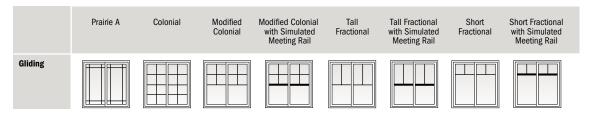


Gliding Window Opening and Area Specifications

			Clear O	pening in	Full Open I	Position					Top of 9	Subfloor		
Window Number	Clear O Are Sq. Ft.	ea C	Wid Inches,	dth	He	ight :/(mm)	Gla Are Sq. Ft.	ea	Ve An Sq. Ft	ea	to Top Partin	of Sill g Stop /(mm)	Overall \ Are Sq. Ft.	ea
G 32	1.70	(0.16)	14 9/32"	(363)	17 1/8"	(435)	2.5	(0.23)	1.70	(0.16)	62 9/16"	(1589)	5.45	(0.51)
G 33	3.00	(0.28)	14 9/32"	(363)	30 1/8"	(765)	4.7	(0.44)	3.00	(0.28)	49 9/16"	(1259)	8.63	(0.80)
G 336	3.58	(0.33)	14 9/32"	(363)	36 1/8"	(918)	5.7	(0.53)	3.58	(0.33)	43 9/16"	(1107)	10.10	(0.94)
G 34	4.18	(0.39)	14 9/32"	(363)	42 1/8"	(1070)	6.8	(0.63)	4.18	(0.39)	37 9/16"	(954)	11.57	(1.08)
G 35	5.40	(0.50)	14 9/32"	(363)	54 1/8"	(1375)	8.9	(0.83)	5.40	(0.50)	25 9/16"	(649)	14.50	(1.35)
G 42	2.40	(0.22)	20 9/32"	(515)	17 1/8"	(435)	3.6	(0.33)	2.40	(0.22)	62 9/16"	(1589)	7.30	(0.68)
G 43	4.40	(0.41)	20 9/32"	(515)	30 1/8"	(765)	7.0	(0.65)	4.40	(0.41)	49 9/16"	(1259)	11.57	(1.08)
G 436	5.10	(0.47)	20 9/32"	(515)	36 1/8"	(918)	8.5	(0.79)	5.10	(0.47)	43 9/16"	(1107)	13.54	(1.26)
G 44♦	6.00	(0.56)	20 9/32"	(515)	42 1/8"	(1070)	10.0	(0.93)	6.00	(0.56)	37 9/16"	(954)	15.50	(1.44)
G 45♦	7.62	(0.71)	20 9/32"	(515)	54 1/8"	(1375)	13.1	(1.22)	7.62	(0.71)	25 9/16"	(649)	19.44	(1.81)
G 52	3.13	(0.29)	26 ⁹ / ₃₂ "	(668)	17 1/8"	(435)	4.8	(0.45)	3.13	(0.29)	62 9/16"	(1589)	9.15	(0.85)
G 53	5.50	(0.51)	26 ⁹ / ₃₂ "	(668)	30 1/8"	(765)	9.2	(0.86)	5.50	(0.51)	49 9/16"	(1259)	14.50	(1.35)
G 536♦	6.60	(0.61)	26 ⁹ / ₃₂ "	(668)	36 1/8"	(918)	11.3	(1.05)	6.60	(0.61)	43 9/16"	(1107)	16.97	(1.58)
G 54♦	7.70	(0.72)	26 ⁹ / ₃₂ "	(668)	42 1/8"	(1070)	13.3	(1.24)	7.70	(0.72)	37 9/16"	(954)	19.44	(1.81)
G 55♦	9.90	(0.92)	26 ⁹ / ₃₂ "	(668)	54 1/8"	(1375)	17.4	(1.62)	9.90	(0.92)	25 9/16"	(649)	24.38	(2.27)
G 62	3.84	(0.36)	32 9/32"	(820)	17 1/8"	(435)	6.0	(0.56)	3.84	(0.36)	62 9/16"	(1589)	11.01	(1.02)
G 63 ◊	6.75	(0.63)	32 9/32"	(820)	30 1/8"	(765)	11.5	(1.07)	6.75	(0.63)	49 9/16"	(1259)	17.44	(1.62)
G 636♦	8.10	(0.75)	32 9/32"	(820)	36 1/8"	(918)	14.0	(1.30)	8.10	(0.75)	43 9/16"	(1107)	20.41	(1.90)
G 64♦	9.44	(0.88)	32 9/32"	(820)	42 1/8"	(1070)	16.6	(1.54)	9.44	(0.88)	37 9/16"	(954)	23.38	(2.17)
G 65◊	12.13	(1.13)	32 9/32"	(820)	54 1/8"	(1375)	21.7	(2.02)	12.13	(1.13)	25 9/16"	(649)	29.32	(2.72)

^{• &}quot;Top of Subfloor to Top of Inside Sill Stop" is calculated based upon a structural header height of 6'-10 1/2" (2096).

Grille Patterns

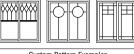


Number of lights and overall pattern varies with window size. Patterns not available in all configurations.

Specified equal light and custom patterns are also available. For more grille options, see page 14 or visit andersenwindows.com/grilles.



Specified Equal Light Examples



Custom Pattern Examples

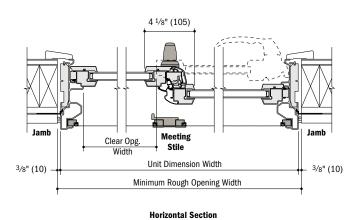
[•] Dimensions in parentheses are in millimeters or square meters.

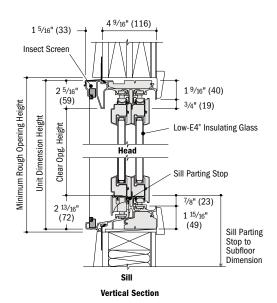
[•] Meet or exceed clear opening area of 5.7 sq. ft. or 0.53 m², clear opening width of 20" (508) and clear opening height of 24" (610).

GLIDING WINDOWS

Gliding Window Details

Scale $1^{1}/2$ " (38) = 1'-0" (305) - 1:8

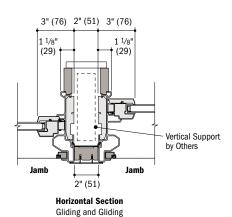




Separate Rough Openings Detail

Scale $1^{1/2}$ " (38) = 1'-0" (305) -1:8

To meet structural requirements or to achieve a wider joined appearance, windows may be installed into separate rough openings having vertical support (by others) in combination with Andersen® exterior filler and exterior vinyl trim.



[•] Light-colored areas are parts included with window. Dark-colored areas are additional Andersen* parts required to complete window assembly as shown.

^{*} Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 210-211.

Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com.

Consult with an architect or structural engineer regarding minimum requirements for structural support members between adjacent rough openings.

Dimensions in parentheses are in millimeters.





Half Circle, Quarter Circle, Eyebrow, Elliptical, Circle, Oval, Extended Gothic, Octagon, Monumental Circle and Monumental Quarter Circle Windows

Custom Arch Windows 127
Joining Details 126
Window Details 124-125
Grille Patterns 122
Specifications 121-122
Tables of Sizes 120-123

Arch, Springline™ & Springline Flanker Windows

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Grille Patterns	132
Window Details	133

$Flexiframe^{\it @}\ Windows$

Shapes & Custom Sizing	134
Window Detail	135
Joining Details 135	-136
Combination Designs	181
Product Performance	197



Dimensions in parentheses are in millimeters.

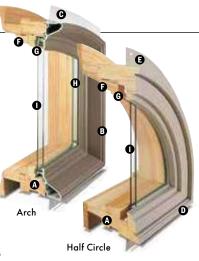


SPECIALTY WINDOWS

FEATURES

FRAME

- ♠ Wood frame members are treated with a water-repellent preservative for long-lasting protection and performance. Radii are made of laminated pine, offering improved strength and appearance.
- The lineal sections of the jamb and sill on eyebrow, extended gothic, octagon, monumental, Flexiframe, oustom arch and arch windows are covered with a low-maintenance, fiberglass-reinforced composite. The arched head members and Springline that in the arched head members are covered with stretch-formed aluminum.
- The vinyl installation flange on eyebrow, extended gothic, octagon, monumental, Flexiframe, custom arch, arch and Springline units extends 1 1/4" (32) around the entire perimeter of the unit. It helps seal the unit to the structure.
- ① Circle, half circle, quarter circle, elliptical and oval windows are covered with a rigid vinyl cladding. Low-maintenance exterior cladding provides long-lasting* beauty.
- Rigid vinyl cladding on circle, half circle, quarter circle, elliptical and oval window frames forms a full-perimeter installation flange for securing the unit to the structure. It also helps maintain an attractive appearance while minimizing maintenance.
- Inside trim stop is made of unfinished pine. Arched trim stops are made with quality, full-length laminated pine. Units are shipped with the trim stops tacked on, so removal is easy expediting finishing and joining procedures.
- **(b)** Unfinished interior wood glazing stops help secure the glass in place. Arched glazing stops are made with full-length laminated pine.



GLASS

- ① In addition to stainless steel glass spacers, black or white glass spacers are now available to allow the spacer to blend in with the unit color.
- High-Performance options include:
- Low-E4® glass
- · Low-E4 HeatLock® glass
- Low-E4 SmartSun[™] glass
- Low-E4 SmartSun HeatLock glass
- · Low-E4 Sun glass

Tempered and other glass options are available. Contact your Andersen supplier.

A removable translucent film helps shield the glass from damage during delivery and construction, and simplifies finishing at the job site.

Patterned Glass

Patterned glass options are available. See page 12 for more details.

Stormwatch

Specialty windows are available with Stormwatch® Protection. Visit andersenwindows.com/coastal for more details.

EXTERIOR & INTERIOR OPTIONS

EXTERIOR COLORS



INTERIOR OPTIONS









Springline[™]



Flexiframe®

*Visit andersenwindows.com/warranty for details.

**Products with dark bronze and black interiors have matching exteriors.



ACCESSORIES Sold Separately

FRAME

Extension Jambs

Specify extension jambs when ordering. Standard unit jamb depth is $2^{7/6}$ " (73), except for elliptical and double-hung half circle units, which are $4^{1/2}$ " (114).

Pine extension jambs are available for most products in ½/6" (1.5) increments between 4%/6" (116) and 7½" (181). Elliptical and double-hung half circle extension jambs are available between 5½/6" (129) and 7½" (181). Some sizes may be pine veneer.

Springline[™] window extension jambs and transition blocks are applied when ordered with the unit (key component block is also applied to units with a 48" (1219) radius).

Extension Jamb Alignment for Joined Combinations

When joining 400 Series arch, Springline or Flexiframe® over casement windows or when joining arch, Springline or Flexiframe alongside awning windows, use Method A or Method B for extension jamb alignment. See page 135 for details.

Method A: Individually Framed

Specify Andersen® auxiliary extension jambs. Available for the following wall thicknesses: 4%,6" (116), 51/4" (133), 6%,6" (167) and 71/8" (181).

Method B: Perimeter Framed

Specify 1/4" (6) filler in pine or white. Requires modification of extension jambs.

CASING

Interior Arch Casing

Available in Colonial or Ranch styles. Arch casings come with transition blocks or plinth blocks, depending on the product. For easy integration and consistency, casing dimensions are consistent with Wood Moulding and Millwork Producers Association specifications. Available in pine, maple and oak.



2 1/4" (57) Colonial style WM366



2 1/2" (64) Colonial style WM351



3 ½" (89) Colonial style WM444



2 ½" (57) Ranch style WM324 2 ½" (64) Ranch style WM315

Plinth Blocks

For enhancing casing transitions. Decorated with a radial sunburst, or use the reverse side flush face.



For arch windows, use $2\frac{7}{8}$ " (73) x 4" (102) size plinth block with $2\frac{1}{4}$ " (57) and $2\frac{1}{2}$ " (64) casing. With $3\frac{1}{2}$ " (89) casing, use $3\frac{7}{8}$ " (98) x $5\frac{1}{4}$ " (133).



For half circle, circle and oval windows, use 2% (73) size plinth block with 2% (57) and 2% (64) casing. With 3% (89) casing, use 3% (98).

Key Block



Excellent for creating unique trim designs or accents at arch casing transitions. A key block is an option for circle and oval windows.

Transition Blocks



Two transition blocks come with the interior arch casing extension jambs, providing a beautiful accent for circle and oval windows.

GLASS

Andersen Art Glass

Andersen art glass panels come in a variety of original patterns. See art glass section starting on page 173 for more information or visit andersenwindows.com/artglass.

GRILLES

Grilles are available in a variety of configurations and widths. For specialty window grille patterns, see pages 122 and 132.

EXTERIOR TRIM

Available with Andersen exterior trim. See exterior trim section starting on page 175.

CAUTION

- Painting and staining may cause damage to rigid vinyl.
- 400 Series windows in Terratone color may be painted any color lighter than Terratone color using quality oil-based or latex paint.
- Do not paint 400 Series windows in white, canvas, Sandtone, dark bronze, forest green or black exterior colors
- Andersen does not warrant the adhesion or performance of homeowner-applied paint over vinyl or other factory-coated surfaces.
- For vinyl painting instructions and preparation, contact your Andersen supplier.
- Do not paint weatherstrip
- Creosote-based stains should not come in contact with Andersen products.
- Abrasive cleaners or solutions containing corrosive solvents should not be used on Andersen products.

SPECIALTY WINDOWS

Table of Double-Hung Half Circle and Eyebrow Window Sizes

Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96

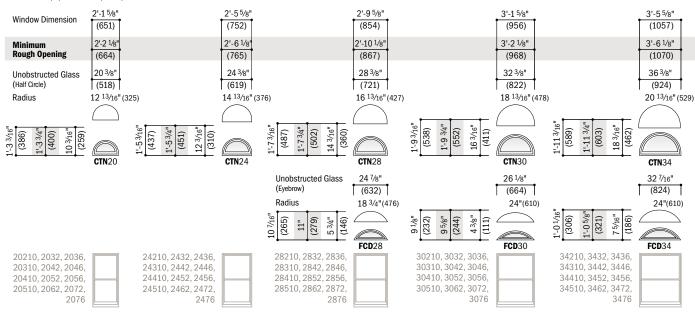
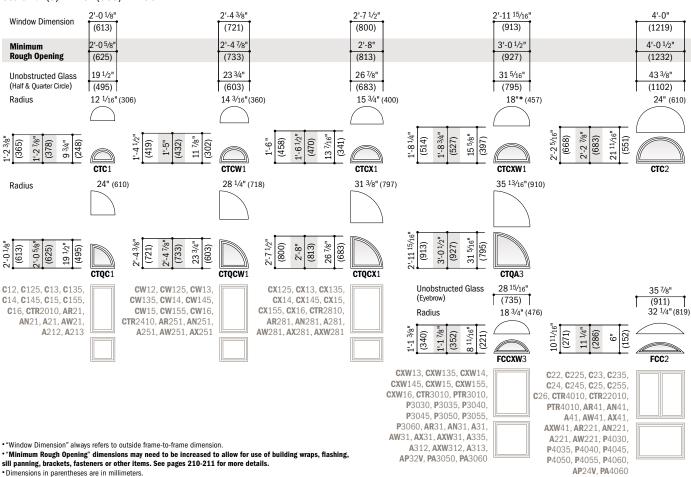


Table of Casement/Awning Half Circle, Quarter Circle and Eyebrow Window Sizes

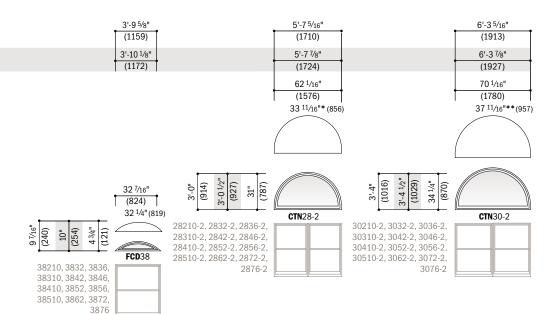
Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96



¹²⁰

*Actual radius of 17 31/32" (456).





Compatible double-hung, casement, awning and picture windows are shown below specialty windows. Grille patterns shown on page 122.

Double-Hung Half Circle Window Area Specifications

Window Number	Glass Area Sq. Ft./(m²)
CTN20	1.1 (0.10)
CTN24	1.6 (0.15)
CTN28	2.2 (0.20)
CTN30	2.8 (0.26)
CTN34	3.6 (0.34)
CTN28-2	10.5 (0.98)
CTN30-2	13.4 (1.25)

Casement/Awning Half Circle Window Area Specifications

Window Number	Glass Area Sq. Ft./(m²)	
CTC1	1.0	(0.09)
CTCW1	1.5	(0.14)
CTCXW1	2.7	(0.25)
CTC2	5.1	(0.47)
CTCW2	7.3	(0.68)
CTC3	12.3	(1.14)
CTCX1	2.0	(0.19)
CTCX2	9.3	(0.86)

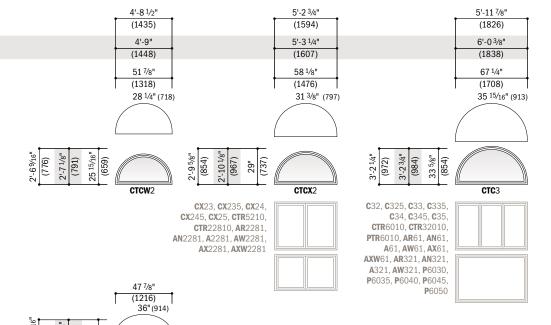
Quarter Circle Window Area Specifications

Window Number	Glass Area Sq. Ft./(m²)		
CTQC1	1.9 (0.18)		
CTQCW1	3.0 (0.28)		
CTQA3	5.2 (0.48)		
CTQCX1	3.8 (0.35)		

Eyebrow Window Area Specifications

•		
Window Number	Glass Area Sq. Ft./(m²)	
FCD28	0.69 (0.06)	
FCD30	0.54 (0.05)	
FCD34	1.15 (0.11)	
FCD38	0.84 (0.08)	
FCCXW3	1.24 (0.12)	
FCC2	1.02 (0.09)	
FCCW2	2.78 (0.26)	

• Dimensions in parentheses are in square meters.



Compatible double-hung, casement, awning

windows. Grille patterns shown on page 122.

Dimensions in parentheses are in millimeters.
 *Actual radius of 33²¹/₃₂" (855).
 **Actual radius of 37²¹/₃₂" (956).

and picture windows are shown below specialty

"Window Dimension" always refers to outside frame-to-frame dimension.

"Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 210-211 for more details.

(362)

CW22, CW225, CW23,

CTR4810, CTR22410, AR2251, AN2251, A2251, AW2251.

CW235, CW24, CW245, CW25, CW255, CW26,

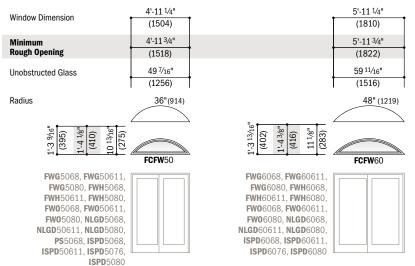
<u>"</u>б

AX2251

FCCW2

Table of Eyebrow Window Sizes - Patio Doors

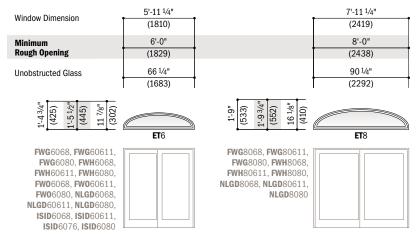
Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96



Compatible patio doors are shown below specialty windows. Grille patterns shown below.

Table of Elliptical Window Sizes - Patio Doors

Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96



- "Window Dimension" always refers to outside frame-to-frame dimension.
- "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 210-211 for more details.
- Dimensions in parentheses are in millimeters.

Eyebrow Window Area Specifications

Window Number		s Area :./(m²)
FCFW50	2.57	(0.24)
FCFW60	3.15	(0.29)

Elliptical Window Area Specifications

Window Number	Glass Area Sq. Ft./(m²)
ET6	4.3 (0.40)
ET8	8.0 (0.74)

Circle and Oval Window Area Specifications

Window Number	Glass Area Sq. Ft./(m²)	
CIR20	2.1	(0.20)
CIR24	3.0	(0.28)
CIR30	5.2	(0.48)
OVL 1824	1.9	(0.18)
0VL 2030	3.2	(0.30)
OVL 3048	8.7	(0.81)

Extended Gothic and Octagon Window Area Specifications

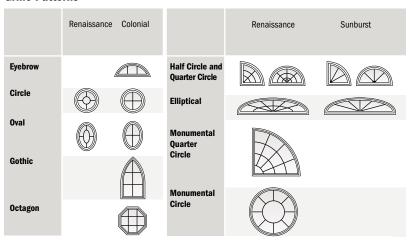
Window Number	Glass Area Sq. Ft./(m²)	
GT 2036	4.01	(0.37)
GT 2440	5.84	(0.54)
GT 3046	8.78	(0.82)
GT 4056	14.88	(1.38)
0C 20	2.14	(0.20)
0C 24	3.12	(0.29)
0C 30	5.63	(0.52)

Monumental Quarter Circle and Circle Area Specifications

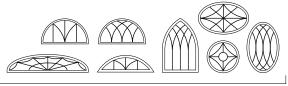
Window Number	Glass Area Sq. Ft./(m²)	
QR40	9.91	(0.92)
FR 40	10.22	(0.95)
FR60	24.69	(2.29)

[•] Dimensions in parentheses are in square meters.

Grille Patterns



Patterns for specialty windows may not align with patterns for picture windows when horizontally joined. Number of lights and overall pattern varies with window size. Patterns not available in all configurations. Specified equal light and custom patterns are also available. For more grille options, see page 14 or visit andersenwindows.com/grilles.



Custom Pattern Examples



Table of Circle Window Sizes

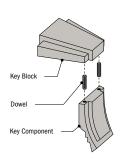
Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96

Window Dimension	2'-0 ¹ /8" (613)	2'-4 3/8" (721)	2'-11 ¹⁵ / ₁₆ " (913)
Minimum	2'-0 5/8"	2'-4 7/8"	3'-0 1/2"
Rough Opening	(625)	(733)	(927)
Unobstructed Glass	19 3/4"	24"	31 9/16"
	(502)	(610)	(802)
	CIR20	CIR24	CIR30

Table of Oval Window Sizes

Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96

Window Dimension	1'-7 3/4"		2'-0"			3'-0"
Willdow Diffielision	(502)		(610)			(914)
Minimum	1'-8 1/4"		2'-0 1/2"			3'-0 1/2"
Rough Opening	(514)		(622)			(927)
Unobstructed Glass	15 3/8"		19 3/8"			31 3/8"
	(391)		(492)			(797)
2'-43/8" (721) 2'-47/8" (733) 24" (610)	OVI 1824	2-1115/16" (913) 3-01/2" (927) 319/16"		4'-81/2" (1435) 4'-9"	(1448) 52 1/8" (1324)	OVI 3048
	OVL 1824		0VL 2030	_	-	OVL3048





Each Andersen® key block kit includes two

key blocks and two key components.





Oval windows can be installed in a vertical or horizontal orientation.





Circle, oval, extended gothic, octagon and monumental quarter circle and circle specifications shown on page 122.

Grille patterns shown on page 122.

Table of Extended Gothic Window Sizes

Scale $\frac{1}{8}$ " = 1'-0" (1:96)

Window Dimension Minimum Rough Opening	2'-0 ½" (613) 2'-0 ½" (625)	2'-4 ³ /8" (721) 2'-4 ⁷ /8" (733)	2'-11 ¹⁵ / ₁₆ " (913) 3'-0 ¹ / ₂ " (927)	4'-0" (1219) 4'-0 ½" (1232)
Unobstructed Glass	19 ⁷ /16" (495)	23 ¹¹ / ₁₆ " (602)	31 ¹ / ₄ " (794)	43 5/16" (110)
Radius	32 1/4" (819)	32 1/4" (819)	36" (914)	48" (1219)
3'-6" (1067) 3'-6 1/2" (1080) 36 9/46" (929)	Side Height 16 27322 (428)	4'-0" (1219) 4'-0 12" (1032) 42 34" (1086) (1086) (541)	4.6" (1372) 4"6 1/2" (1384) 48 7/8" (1241) 22 27/32" (580) (580)	56" (1676) 56.1/2" (1689) 60.7%" (1548) 24.7/6" (621)

Table of Octagon Window Sizes

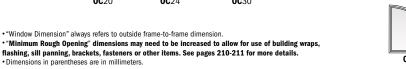
Scale $\frac{1}{8}$ " (3) = $\frac{1}{-0}$ " (305) -1:96

Window Dimension	2'-0"	2'-4"	3'-0"
Willdow Difficusion	(610)	(711)	(914)
Minimum	2'-0 1/2"	2'-4 1/2"	3'-0 1/2"
Rough Opening	(622)	(724)	(927)
Unobstructed Glass	19 5/16"	23 5/16"	31 5/16"
	[(491) [[(592)]	(795)
	0C 20	0C 24	0C 30

Table of Monumental Quarter Circle and Circle Window Sizes

Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96

Window Dimension	4'-0"	4'-0"	6'-0"
	(1219)	(1219)	(1829)
Minimum	4'-0 ¹ / ₂ "	4'-0 ¹ /2"	6'-0 ¹ / ₂ "
Rough Opening	(1232)	(1232)	(1842)
Unobstructed Glass	43 ½"	43 ⁵ / ₁₆ "	67 ⁵ /16"
	(1099)	(1100)	(1710)
Radius	48"(1219)	24"(610)	36" (914)



OR40



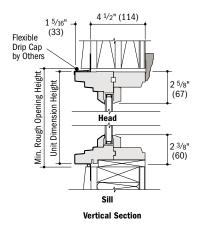


¹²³

SPECIALTY WINDOWS

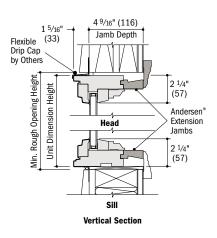
Double-Hung Half Circle Window Detail

Scale $1^{1}/2^{"}$ (38) = 1'-0" (305) - 1:8



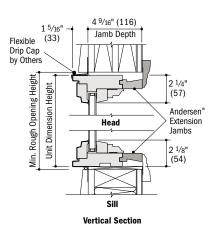
Casement/Awning Half Circle Window Detail

Scale $1^{1}/2$ " (38) = 1'-0" (305) -1:8



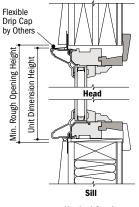
Casement/Awning Quarter Circle Window Detail

Scale $1^{1}/2$ " (38) = 1'-0" (305) - 1:8

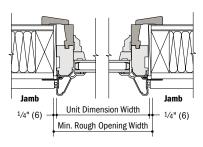


Eyebrow Window Details

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8



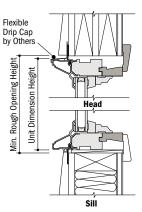
Vertical Section



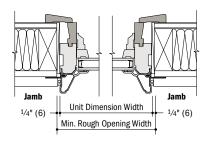
Horizontal Section

Extended Gothic Window Details

Scale $1^{1}/_{2}$ " (38) = 1'-0" (305) - 1:8



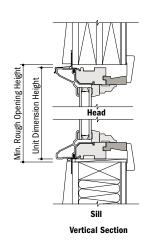
Vertical Section

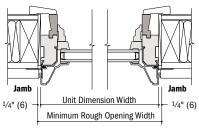


Horizontal Section

Octagon Window Details

Scale $1^{1}/_{2}$ " (38) = 1'-0" (305) - 1:8





Horizontal Section

^{• 4 9/16&}quot; (116) overall jamb depth measurement is from back side of installation flange

[·] Light-colored areas are parts included with window. Dark-colored areas are additional Andersen* parts required to complete window assembly as shown.

[•] Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 210-211.

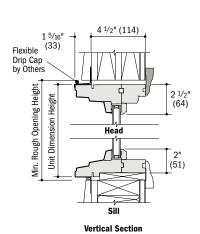
Datails are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com.

[•] Dimensions in parentheses are in millimeters.



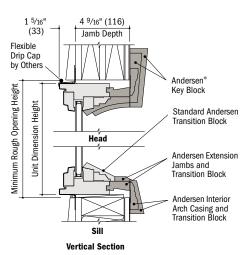
Elliptical Window Detail

Scale $1^{1}/2$ " (38) = 1'-0" (305) - 1:8



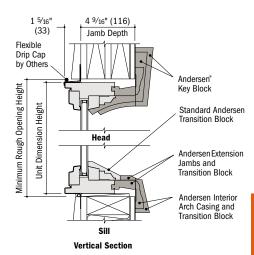
Circle Window Detail

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8



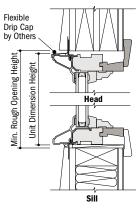
Oval Window Detail

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8

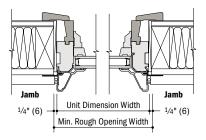


Monumental Quarter Circle Window Details

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8



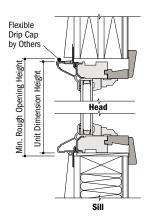
Vertical Section



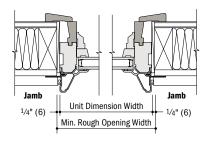
Horizontal Section

Monumental Circle Window Details

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8



Vertical Section



Horizontal Section

- 4 9/16" (116) overall jamb depth measurement is from back side of installation flange.
- · Light-colored areas are parts included with window. Dark-colored areas are additional Andersen* parts required to complete window assembly as shown.
- Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 210-211.
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com
- Dimensions in parentheses are in millimeters.

Horizontal (stack) Joining Details

Scale $1^{1}/2^{1}$ (38) = 1'-0'' (305) - 1:8

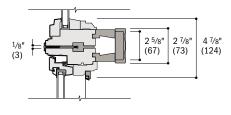
Casement Half Circle over Casement Window

Overall Window Dimension Height

Sum of individual window heights plus 1/8" (3) for each join.

Overall Rough Opening Height

Overall window dimension height plus 5/8" (16).



Elliptical Window over Frenchwood® Gliding Patio Door

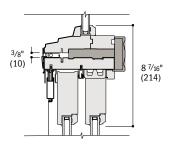
Vertical Section

Overall Unit Dimension Height

Sum of individual unit heights plus 3/8" (10).

Overall Rough Opening Height

Overall unit dimension height plus 5/8" (16).



Vertical Section

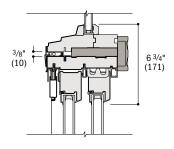
Elliptical Window over Perma-Shield® Gliding Patio Door

Overall Unit Dimension Height

Sum of individual unit heights plus 3/8" (10).

Overall Rough Opening Height

Overall unit dimension height plus 5/8" (16).



Vertical Section

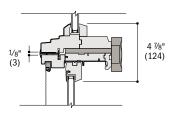
Double-Hung Half Circle over Tilt-Wash Double-Hung Window

Overall Window Dimension Height

Sum of individual window heights plus 0" for each join.

Overall Rough Opening Height

Overall window dimension height plus 3/8" (10).



Vertical Section

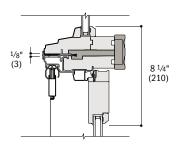
Elliptical Window over Frenchwood® Hinged Inswing Patio Door

Overall Unit Dimension Height

Sum of individual unit heights plus 1/8" (3).

Overall Rough Opening Height

Overall unit dimension height plus 1" (25).



Vertical Section

For more joining information, see the combination designs section starting on page 181.

Light-colored areas are parts included with window, Dark-colored areas are additional Andersen® parts required to complete window assembly as shown

[·] Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 210-211.

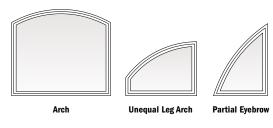
Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com.

[•] Consult with an architect or structural engineer regarding minimum requirements for structural support members between adjacent rough openings.

[·] Dimensions in parentheses are in millimeters.



Custom Arch Windows



Andersen offers even greater design flexibility with customdimensioned arch, unequal leg arch and partial eyebrow windows. Custom arch windows can be designed using one of 10 standard radii, further expanding the existing line of 90 standard sizes of Andersen® arch windows.

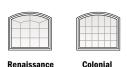




16' (4877) Radius for Joined Combinations

Custom arch shapes and sizes are specially constructed to be used in combination with other Andersen windows, including casement, awning, double-hung, gliding and Flexiframe* windows, and hinged or gliding patio doors.

Andersen grilles are available for most styles and sizes. Contact your supplier for availability.

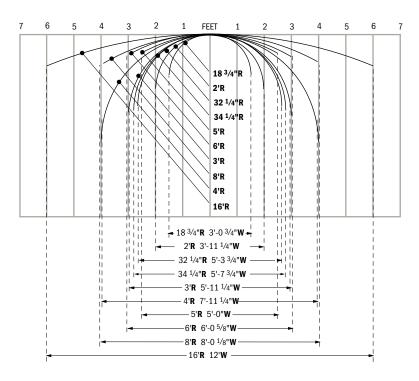


Design Criteria

Listed below are some factors that must be considered when deciding on a custom arch size and shape. For specific design criteria, joining instructions and order information, contact your Andersen supplier.



- Do all calculations in inches to 3 decimal places
- · Order extension jambs along with window for correct sizing
- · All units are fixed
- Maximum standard glass area of 60 sq. ft. or 5.57 m²
- Ten standard radii: 18 ³/₄" (476), 2' (610), 32 ¹/₄" (819), 34 ¹/₄" (870), 3' (914), 4' (1219), 5' (1524), 6' (1829), 8' (2438), 16' (4877)
- Maximum radii: based on available radius piece length; contact supplier for specific information
- Maximum equal leg arch unit width: 36 ³/₄" (399) for 18 ³/₄" (476) radius to 12' (3658) for 16' (4877) radius
- Maximum unequal leg arch unit width: 18 ³/₄" (476) for 18 ³/₄" radius to 11'-2" (3404) for 16' (4877) radius
- Maximum partial eyebrow unit width: 18 ³/₄" (476) for 18 ³/₄" radius to 11'-5 ¹/₂" (3493) for 16' (4877) radius
- Only one dimension, height or width, can exceed 7'-0" (2134)
- No height dimension greater than 12'-0" (3658)
- No leg dimension less than 6" (152)

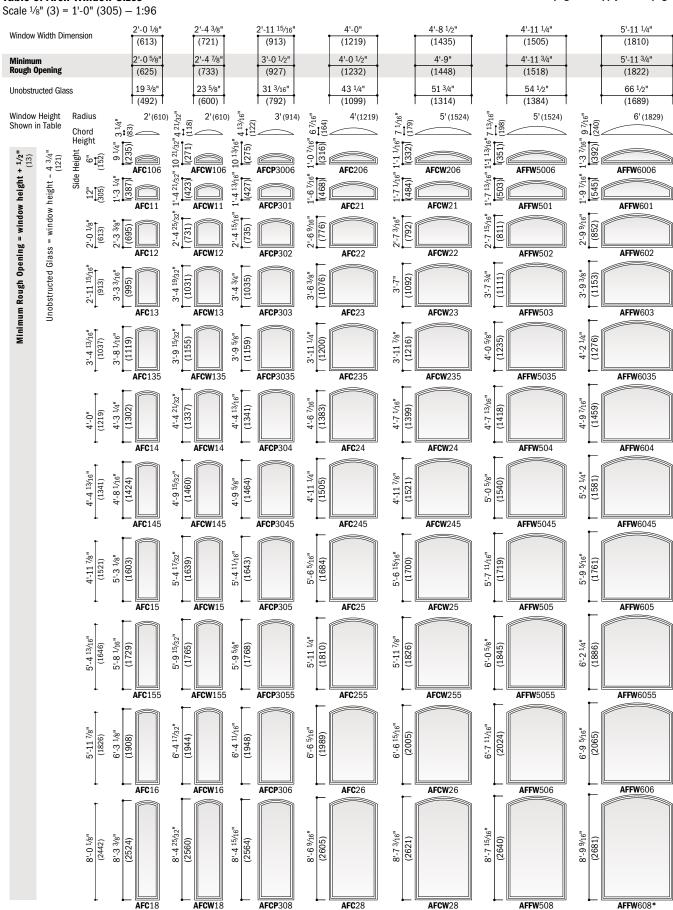


Standard Radii and Maximum Unit Width for Custom Arch Windows

Dimensions in parentheses are in millimeters.

Table of Arch Window Sizes

Notes on the next page also apply to this page.





11'-9" 7'-11 1/8" (2416) (3581) 7'-11 5/8" 11'-9 1/2" (2429) (3594) 90 3/8" 136 1/4" (2296) (3461) $\begin{array}{c|c} 1'-7 & 13/32'' & 13 & 13/32'' \\ \hline{(493)} & (341) & (341) \end{array}$ 8' (2438) 16' (4877) **AFFW**8006 **AFFW**12006 2'-1 ^{13/32}" (645) **AFFW**801 **AFFW**1201 3'-1 17/32" 3'-0 3/4" (933) (263) **AFFW**802 **AFFW**1202 4'-0 9/16" (1233)**AFFW**803 4'-5 7/16" (1357) Grille patterns shown on page 132. **AFFW**8035 5'-0 5/8" (1540) **AFFW**804 5'-5 7/16" (1662) **AFFW**8045 6'-0 1/2" (1842) **AFFW**805 6'-5 7/16" (1967)**AFFW**8055* 7'-0 1/2" (2146) **AFFW**806*

 [&]quot;Wininow Dimension" always reters to outside trame-to-trame dimension.
 "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items.

See pages 210-211 for more details.

Dimensions in parentheses are in millimeters.

Arch Window Area Specifications

Arch Window Area	Specificat	lions
Window Number	Glass / Sq. Ft./	
AFC106	0.7	(0.07)
AFC11	1.6	(0.15)
AFC12	3.4	(0.32)
AFC13	5.1	(0.47)
AFC135	5.8	(0.54)
AFC14	6.8	(0.63)
AFC145	7.5	(0.70)
AFC15	8.5	(0.79)
AFC155	9.2	(0.86)
AFC16	10.3	(0.96)
AFC18	13.8	(1.28)
AFCW106	1.1	(0.10)
AFCW11	2.1	(0.20)
AFCW12	4.2	(0.39)
AFCW13	6.3	(0.59)
AFCW135	7.1	(0.66)
AFCW14	8.4	(0.78)
AFCW145	9.2	(0.86)
AFCW15	10.4	(0.97)
AFCW155	11.3	(1.05)
AFCW16	12.5	(1.16)
AFCW18	16.8	(1.56)
AFCP3006	1.4	(0.13)
AFCP301	2.8	(0.26)
AFCP302	5.5	(0.51)
AFCP303	8.2	(0.76)
AFCP3035	9.3	(0.86)
AFCP304	10.9	(1.01)
AFCP3045	12.0	(1.12)
AFCP305	13.6	(1.26)
AFCP3055	14.7	(1.37)
AFCP306	16.3	(1.51)
AFCP308	21.8	(2.03)
AFC206	2.2	(0.20)
AFC21	4.1	(0.38)
AFC22	7.8	(0.73)
AFC23	11.5	(1.07)
AFC235	13.0	(1.21)
AFC24	15.2	(1.41)
AFC 245	16.7	(1.55)
AFC25	18.9	(1.76)
AFC255	20.4	(1.90)
AFC26	22.6	(2.10)
AFC28	30.2	(2.81)
AFCW206	2.8	(0.26)
AFCW21	5.1	(0.47)
AFCW22	9.5	(0.88)
AFCW23	13.9	(1.29)
AFCW235	15.7	(1.46)
AFCW24	18.3	(1.70)
AFCW245	20.1	(1.87)
AFCW25	22.7	(2.11)
AFCW255	24.6	(2.29)
AFCW26	27.2	(2.53)
AFCW28	36.1	(3.35)
AFFW5006	3.2	(0.30)
AFFW501	5.5	(0.51)
AFFW502	10.3	(0.96)
AFFW503	14.8	(1.38)
AFFW5035	16.7	(1.55)
AFFW504	19.5	(1.81)
	13.3	(1.01)

Window Number	Glass Area	
WIIIdow Nullibei	Sq. Ft./(m²)	
AFFW 5045	21.4	(1.99)
AFFW 505	24.1	(2.24)
AFFW 5055	26.1	(2.43)
AFFW506	28.8	(2.68)
AFFW 508	38.2	(3.55)
AFFW 6006	4.4	(0.41)
AFFW601	7.2	(0.67)
AFFW 602	12.9	(1.20)
AFFW603	18.5	(1.72)
AFFW 6035	20.8	(1.93)
AFFW604	24.2	(2.25)
AFFW 6045	26.5	(2.46)
AFFW605	29.8	(2.77)
AFFW6055	32.1	(2.98)
AFFW606	35.5	(3.30)
AFFW608	46.9	(4.36)
AFFW8006	7.3	(0.68)
AFFW 801	11.1	(1.03)
AFFW 802	18.8	(1.75)
AFFW803	26.4	(2.45)
AFFW8035	29.5	(2.74)
AFFW 804	34.1	(3.17)
AFFW 8045	37.1	(3.45)
AFFW 805	41.6	(3.87)
AFFW 8055	44.8	(4.16)
AFFW 806	49.3	(4.58)
AFFW 12006	9.9	(0.92)
AFFW 1201	15.6	(1.45)
AFFW1202	27.1	(2.52)

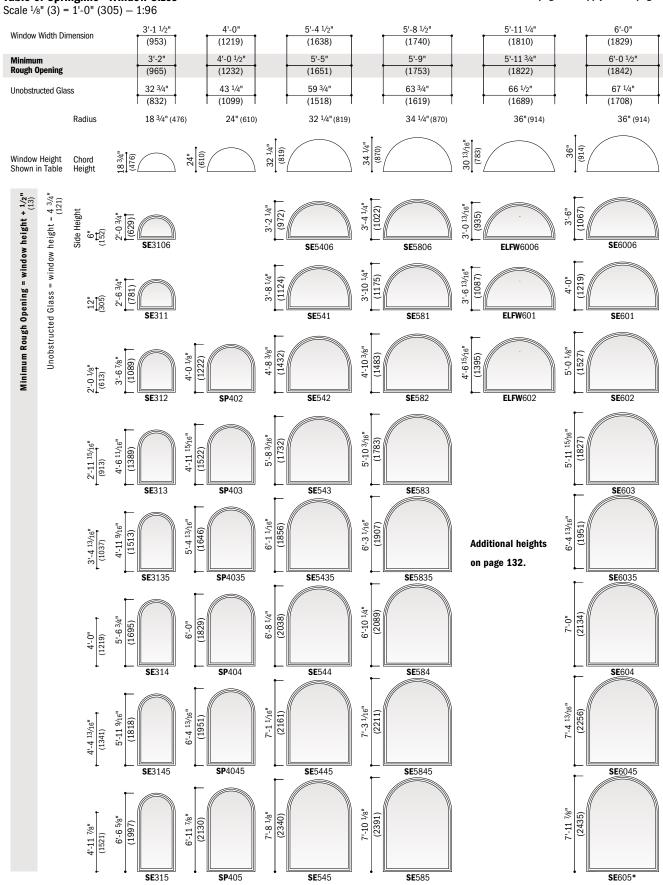
[.] Dimensions in parentheses are in square meters.

^{*}Tempered glass standard.

SPECIALTY WINDOWS

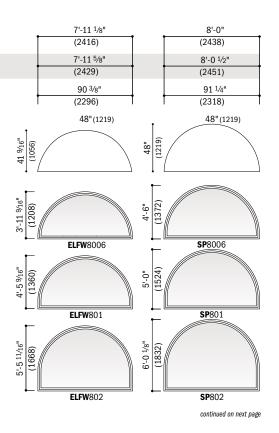
Table of Springline™ Window Sizes

Notes on the next page also apply to this page.



continued on next two pages





Extension jambs are available factory applied when ordered at the same time as $Springline^{\scriptscriptstyle\mathsf{IM}}$ windows.

Grille patterns shown on page 132.

Springline™ Window Area Specifications

Window Number	Glass	Aroo
Willdow Number	Sq. Ft.,	
SE 3106	3.74	(0.35)
SE 311	5.10	(0.47)
SE 312	7.86	(0.73)
SE 313	10.54	(0.98)
SE 3135	11.65	(1.08)
SE 314	13.28	(1.23)
SE 3145	14.38	(1.34)
SE 315	15.98	(1.49)
SE 3155	17.10	(1.59)
SE 316	18.71	(1.74)
SE 5406	11.22	(1.04)
SE 541	13.71	(1.27)
SE 542	18.74	(1.74)
SE 543	23.64	(2.20)
SE 5435	25.66	(2.38)
SE 544	28.64	(2.66)
SE 5445	30.64	(2.85)
SE 545	33.57	(3.12)
SE 5455	35.61	(3.31)
SE 546	38.54	(3.58)
SE 5806	12.67	(1.18)
SE 581	15.33	(1.42)
SE 582	20.69	(1.92)
SE 583	25.92	(2.41)
SE 5835	28.08	(2.61)
SE 584	31.26	(2.90)
SE 5845	33.39	(3.10)
SE 585	36.51	(3.39)
SE 5855	38.70	(3.60)
SE 586	41.82	(3.89)
SE 6006	14.01	(1.30)
SE 601	16.81	(1.56)
SE 602	22.47	(2.09)
SE 603	27.98	(2.60)
SE 6035	30.26	(2.81)
SE 604	33.61	(3.12)
SE 6045	35.86	(3.33)
SE 605	39.16	(3.64)
SE 6055	41.46	(3.85)
SE 606	44.76	(4.16)
SP 402	11.62	(1.08)
SP 403	15.16	(1.41)
SP 4035	16.63	(1.55)
SP 404	18.78	(1.75)
SP 4045	20.23	(1.88)
SP 405	22.35	(2.08)
SP 4055	23.83	(2.21)
SP 406	25.95	(2.41)
SP8006	24.98	(2.32)
SP 801	24.98	(2.32)
SP 802	36.46	(3.39)
ELFW 6006	11.58	(1.08)
ELFW 601	14.35	(1.33)
ELFW 602	19.95	(1.85)
ELFW 8006	20.88	(1.94)
	24.64	(2.29)
ELFW801	24.04	(2.20)

[.] Dimensions in parentheses are in square meters.

^{• &}quot;Window Dimension" always refers to outside frame-to-frame dimension.
• "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other

items. See pages 210-211 for more details.

• Dimensions in parentheses are in millimeters.

^{*}Tempered glass standard.

SPECIALTY WINDOWS

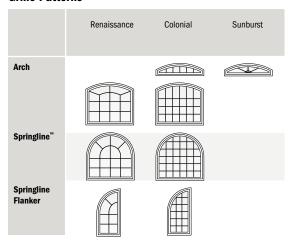
Table of Springline™ Window Sizes (continued)

Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96

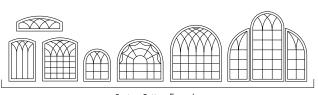
Window Width Dim Minimum Rough Opening Unobstructed Glass		3'-1 ¹ / ₂ " (953) 3'-2" (965) 32 ³ / ₄ "	4'-0" (1219) 4'-0 1/2" (1232) 43 1/4"	5'-4 ¹ / ₂ " (1638) 5'-5" (1651) 59 ³ / ₄ "	5'-8 1/2" (1740) 5'-9" (1753) 63 3/4"		6'-0" (1829) 6'-0 1/2" (1842) 67 1/4"
	Radius	[(832)] 18 ³ / ₄ " (476)	[(1099) [24" (610)	J (1518) J 32 ½"(819)	(1619) 34 ½ (870)		(1708) T
Window Height	Chord & ST	, ,		32 44"	(870)		(914)
. !!	Side Height 5-4 13/16" (1646) 6-11 9/16"	7-413/16"	(2256)	(2465)	8'.3 1/16" (2515)	Table is continued from page 130.	8-4 ¹³ / _{16"} (2561)
Minimum Rough Opening Unobstructed Glass	5-11 7\epsilon" (1826) 7-6 5\epsilon" (2302)	\$E3155	\$P4055	\$ E 5455	\$E5855* (2690) SE586*	Extension jambs are available factory applied when ordered at the same time as Springline™ windows. Grille patterns shown below.	8-117/8" (2740) (2740) SE60055*

^{• &}quot;Window Dimension" always refers to outside frame-to-frame dimension.

Grille Patterns



Number of lights and overall pattern varies with window size. Patterns not available in all configurations. Specified equal light and custom patterns are also available. For more grille options, see page 14 or visit andersenwindows.com/grilles.



Custom Pattern Examples

 [&]quot;Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 210-211 for more details.
 Dimensions in parentheses are in millimeters.

^{*}Tempered glass standard.



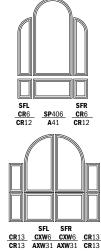
Table of Springline™ Flanker Window Sizes

Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96

Mini	ow Dimer mum (h Openin		1'-5" 1'-5 (432) (432) 1'-5 \(\frac{1}{2}\) (1'-5 \(\frac{1}{2}\) (445)	(521) (521) (2" 1'-9" 1'-9"	2'-0 ½" 2'-0 ½ (613) (613) (613) 2'-0 ½" 2'-0 ½ (625) (625)	(721) (721)	2'-11 ¹⁵ / ₁₆ " 2'-11 ¹⁵ / ₁₆ " (913) (913) (913) 3'-0 ¹ / ₂ " (927) (927)
Unob	structed (Glass	12 ³ / ₄ " 12 ³ / ₄ (324) (324)	(400) (400)	19 3/8" 19 3/8" (492)	(600) (600)	31 ³ / ₁₆ " 31 ³ / ₁₆ " (792) (792)
Radii	JS		CR 18 ³ /4"(47	CN 24"(610)	C 32 ½" (819	CW) 32 ½" (819)	CXW 36" (914)
Chor Heigh			18 5/8" (473)	23 11/16" (584)	31 3/16" (792)	32"	(914)
2'-11 ¹⁵ / ₁₆ " (913)	3'-0 1/2" (927)	31 ³ / ₁₆ " (792) c3	Side Height 17 5/16" (440)	(311)			
3'-4 ¹³ / ₁₆ " (1037)	3'-53%" (1051)	38 ^{13/} 16" (986) C35	\$ 22 3/16" (564)	17 1/8" (435)	9 5/8"	8 13/16" (234)	
4'-0" (1219)	4'-0 1/2" (1232)	43 1/4" (1099) C4	29 3/8" (721)	24 5/16" (618)	16 13/16" (427)	16" (406)	12" (305)
4'-11 7/8" (1521)	5'-0 3/8" (1534)	55 1/8" (1400) C5	41 1/4" (1048)	36.3/16" (919)	28 11/16" (729)	27 78" (708)	23.7%" (606)
5'-11 7/8" (1826)	6'-0 3/8" (1838)	67 1/4" (1708) CG	53 1/4" (1353)	48 3/16" (1353)	40 11/16" (1033)	39 7%" (1013)	35 Vg" (911)

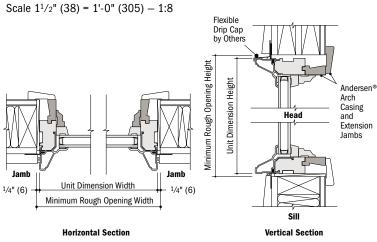
Window dimensions shown in table are compatible with standard casement window widths (CR, CN, C, CW, CXW) and heights (C3, C35, C4, C5, C6). Grille patterns shown on page 132.





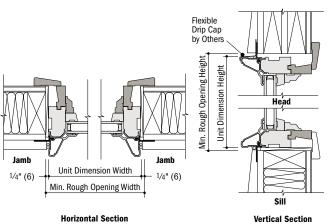
- . "Window Dimension" always refers to outside frame-to-frame dimension.
- "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps,
- flashing, sill panning, brackets, fasteners or other items. See pages 210-211 for more details.
- · Dimensions in parentheses are in millimeters.

Arch Window Details



Springline™ Window Details

Scale $1^{1}/2$ " (38) = 1'-0" (305) - 1:8



- · Light-colored areas are parts included with window. Dark-colored areas are additional Andersen® parts required to complete window assembly as shown.
- Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 210-211.
 Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com.
- · Dimensions in parentheses are in millimeters.

Flexiframe® Window Shapes and Design Criteria

Minimum and Maximum Limits

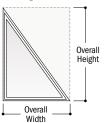
Flexiframe windows are available in many shapes and sizes with these

- Maximum standard glass area of 60 sq. ft. or 5.57 m²
- * Square footage is based on a square or rectangular shape
- No angle may be less than 14°
- No leg may be less than 6" (152) or greater than 144" (3658)
- * No short side may be greater than 84" (2134)
- See product information below for additional limitations based on specific shapes

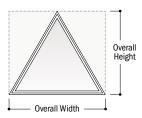


Triangle

limitations:

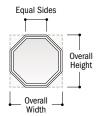


Right triangles contain one 90° corner. Specify overall width and overall height extending from the 90° corner.



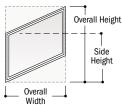
Isosceles triangles contain two sides of equal length and equal angle. Specify overall width and overall height (sill to peak).

Octagon

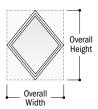


Octagons contain eight equal angles and sides. Specify length of equal side. Standard-size octagons are available in 2' (610), 2'-4" (711) and 3' (914) dimensions. See page 123.

Parallelogram

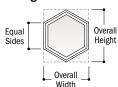


Parallelograms contain two pairs of parallel sides. Specify overall width along with side height and overall window height.

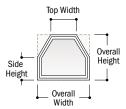


Diamonds contain two pairs of parallel and equal length sides. Specify overall width and overall height.

Hexagon

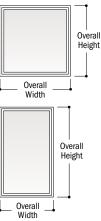


Hexagons contain six equal angles and sides. Specify length of equal sides.



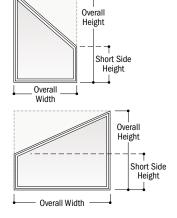
Unequal hexagons contain three pairs of angles and two sets of equal-length sides. Top side is parallel to and centered over the sill. Specify overall width, top width, short side height and overall height.

Rectangle



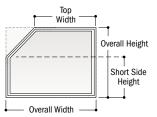
Rectangles contain four equal angles and two equal sides for rectangles, or four equal sides for squares. Specify overall width and overall height.

Trapezoid

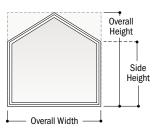


Trapezoids contain an angle face cut to left or right. Specify overall width along with short side height and overall height. Window's pitch is often designed to match a roof's pitch.

Pentagon



Angled pentagons contain an angle cut, or a "cut-off corner" sloping to left or right. Specify overall width and top width along with short side height and overall height.



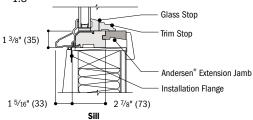
Peak pentagons contain sides of equal length extending at right angles from the sill and two angled sides of equal length that peak above center of sill. Specify overall width, side height and overall height.

Dimensions in parentheses are in millimeters.



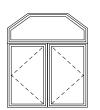
Flexiframe® Window Detail

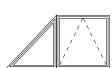
Scale $1^{1}/2$ " (38) = 1'-0" (305) - 1:8

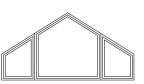


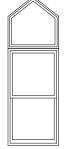
Vertical Section

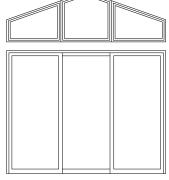
Combination Designs







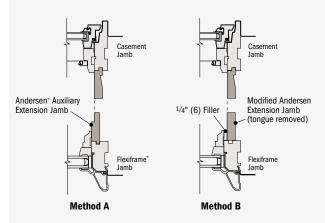




Extension Jamb Alignment

For these joined 400 Series window combinations only:

- Arch, Springline™ or Flexiframe over Casement
- Arch, Springline or Flexiframe alongside Awning



Method A: Individually Framed – Use optional Andersen auxiliary extension jambs for individual picture frame trimming.

Method B: Perimeter Framed – For continuous perimeter trimming, remove extension jamb tongue and use ½4" (6)-thick filler between Arch, Springline or Flexiframe trim stop and extension jamb.

Vertical (ribbon) Joining Detail

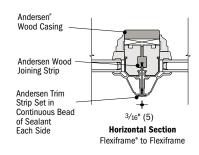
Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8

Overall Window Dimension Width

Sum of individual window widths plus $\ensuremath{^{3\!/}16}\ensuremath{^{\text{II}}}$ (5) for each join.

Overall Rough Opening Width

Overall window dimension width plus $\frac{1}{2}$ " (13).



Horizontal joining on next page.

For more joining information, see the combination designs section starting on page 181.

[•] Light-colored areas are parts included with window. Dark-colored areas are additional Andersen® parts required to complete window assembly as shown.

[•] Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 210-211.

Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com

Dimensions in parentheses are in millimeters.

SPECIALTY WINDOWS

Horizontal (stack) Joining Details

Scale $1^{1}/2^{1}$ (38) = 1'-0'' (305) - 1:8

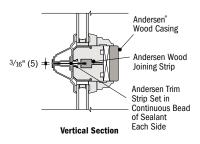
Flexiframe® over Flexiframe Window

Overall Window Dimension Height

Sum of individual window heights plus 3/16" (5) for each join.

Overall Rough Opening Height

Overall window dimension height plus 1/2" (13).



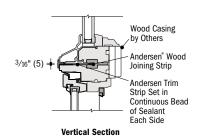
Flexiframe over Casement Window

Overall Window Dimension Height

Sum of individual window heights plus 3/16" (5) for each join.

Overall Rough Opening Height

Overall window dimension height plus 1/2" (13).



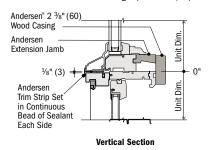
Flexiframe over Tilt-Wash Double-Hung Window

Overall Window Dimension Height

Sum of individual window heights plus 1/8" (3) for each join.

Overall Rough Opening Height

Overall window dimension height plus 1/2" (13).



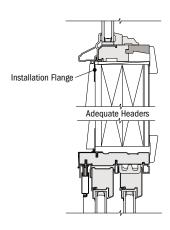
Vertical joining on previous page.

For more joining information, see the combination designs section starting on page 181.

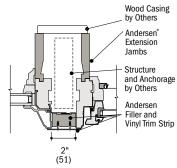
Separate Rough Openings Details

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8

To meet structural requirements or to achieve a wider joined appearance, windows may be installed into separate rough openings having vertical support (by others) in combination with Andersen® exterior filler and exterior vinyl trim.



Vertical Section Flexiframe® and Perma-Shield® Gliding Patio Door



Horizontal Section Flexiframe® Window and Awning Window

[·] Light-colored areas are parts included with window. Dark-colored areas are additional Andersen® parts required to complete window assembly as shown

Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 210-211.

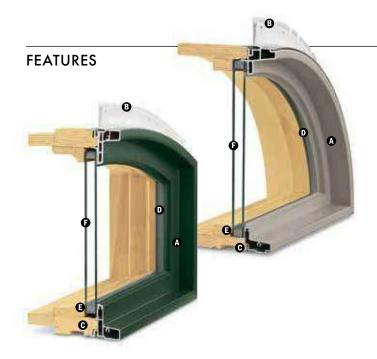
Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com.

[·] Consult with an architect or structural engineer regarding minimum requirements for structural support members between adjacent rough openings.





COMPLEMENTARY SPECIALTY WINDOWS



FRAME

- ♠ Heavy-duty aluminum cladding protects the frame exterior, providing low-maintenance durability. Standard cladding finish meets AAMA 2604 specification. An optional finish that meets the AAMA 2605 specification is also available.
- (38) a vinyl installation flange extends 1½" (38) around the perimeter of the unit to help properly position the unit in the opening. Installation clips are standard for increased structural anchoring to building members. Mounted around the perimeter, the clips rotate into position and can be bent into place against the framing members to suit all jamb conditions.
- € Wood frame members are treated with a water-repellent wood preservative for long-lasting* protection and performance. Radii are made of laminated pine veneers. Lineal components are solid or engineered wood with a pine core.

lambs

A variety of basic unit jamb designs and depths are available to match 400 Series units. Specify desired jamb depth when ordering.

CAUTION

- Do not paint weatherstrip
- Creosote-based stains should not come in contact with Andersen products.
- Abrasive cleaners or solutions containing corrosive solvents should not be used on Andersen products.

GLASS

- In addition to stainless steel glass spacers, black or white glass spacers are now available to allow the spacer to blend in with the unit color.
- Silicone glazing bead combined with two-sided silicone tape provide superior weathertightness.
- High-Performance options include:
- Low-E4® glass
- Low-E4 HeatLock® glass
- Low-E4 SmartSun™ glass
- Low-E4 SmartSun HeatLock glass
- · Low-E4 Sun glass

Tempered and other glass options are available. Contact your Andersen supplier.

A removable translucent film helps shield the glass from damage during delivery and construction, and simplifies finishing at the job site.

Patterned Glass

Patterned glass options are available. See page 12 for more details.

Stormwatch

Complementary specialty windows are available with Stormwatch® Protection. For more details, visit andersenwindows.com/coastal.

*Visit andersenwindows.com/warranty for details.

Dimensions in parentheses are in millimeters.

Printing limitations prevent exact replication of colors.

See your Andersen supplier for actual color samples.

Naturally occurring variations in grain, color and texture of wood make each window one of a kind. All wood interiors are unfinished unless a finish is specified.

EXTERIOR & INTERIOR OPTIONS

EXTERIOR COLORS



INTERIOR OPTIONS



ACCESSORIES

FRAME

Extension Jambs

Standard jamb depths are 4%6" (116) or 2%1" (73). Extension jambs are available in 1/6" (1.5) increments between 4%6" (116) and 71%1" (181). Additional dimensions are available. Contact your supplier for more information. Extension jambs are available in unfinished pine or prefinished white, dark bronze and black. Available for job site application or can be factory applied.

Plinth Blocks

For enhancing casing transitions. Decorated with a radial sunburst or use the reverse side flush face.



For arch windows, use $2\%" (73) \times 4" (102)$ size plinth block with 2%" (57) and 2%" (64) casing. With 3%" (89) casing, use $3\%" (98) \times 5\%" (133)$.



For half circle, circle and oval windows, use 2% " (73) size plinth block with $2\frac{1}{4}$ " (57) and $2\frac{1}{2}$ " (64) casing. With $3\frac{1}{2}$ " (89) casing, use 3% " (98).

CASING

Interior Arch Casing

Available in Colonial or Ranch styles. Arch casings come with transition blocks or plinth blocks, depending on the product. For easy integration and consistency, casing dimensions are consistent with Wood Moulding and Millwork Producers Association specifications. Available in pine, maple and oak.



2 1/4" (57) Colonial style WM366



2 1/2" (64) Colonial style WM351



3 1/2" (89) Colonial style WM444

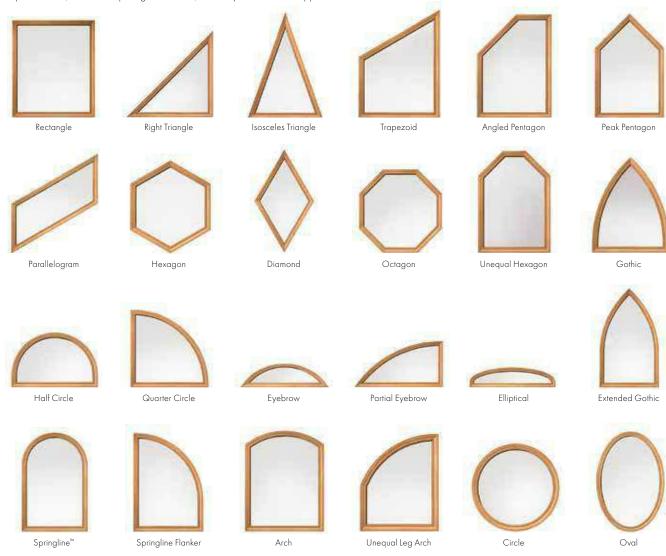


2 ½" (57) Ranch style WM324 2 ½" (64) Ranch style WM315

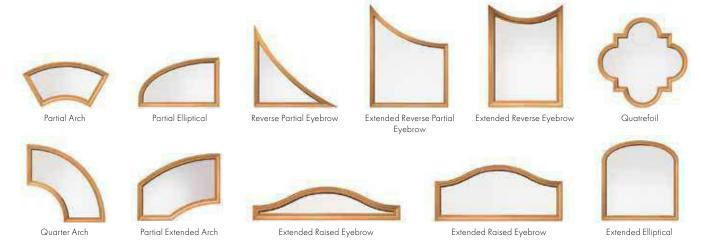


SHAPES

Andersen® complementary specialty windows are available in a variety of sizes. Fixed unit profiles may vary dependent upon shape. For specific sizes, details and joining information, contact your Andersen supplier.



The additional specialty window shapes below are available by special order.

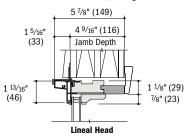


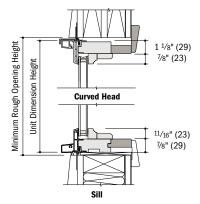
COMPLEMENTARY SPECIALTY WINDOWS

Complementary Specialty Window Details

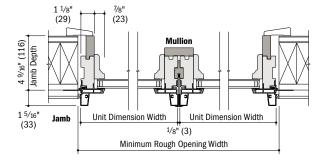
Scale $1^{1}/2^{1}$ (38) = 1'-0'' (305) - 1:8

Complements 400 Series Casement, Awning and Picture Windows





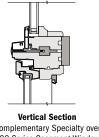
Vertical Section



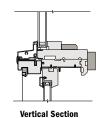
Horizontal Section

Horizontal (stack) Joining Detail

Scale $1^{1/2}$ " (38) = 1'-0" (305) -1:8

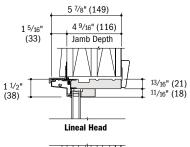


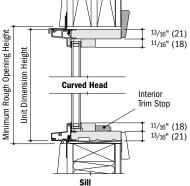
Complementary Specialty over 400 Series Casement Window



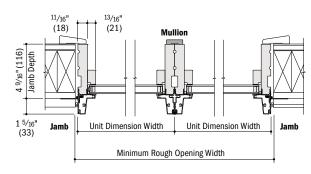
Complementary Specialty over 400 Series Tilt-Wash Double-Hung Window

Complements 400 Series Double-Hung Windows and Patio Doors





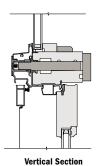
Vertical Section



Horizontal Section

Horizontal (stack) Joining Detail - LVL

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8



Complementary Specialty over 400 Series Frenchwood® Hinged Inswing Patio Door

For more joining information, see the combination designs section starting on page 181.

- 4 9/16" (116) overall jamb depth measurement is from back side of installation flange.
- · Light-colored areas are parts included with window. Dark-colored areas are additional Andersen* parts required to complete window assembly as shown
- Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 210-211.
 Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com.
- · Dimensions in parentheses are in millimeters.





FEATURES

FRAME

- ♠ The sill has an extruded aluminum track, with a stainless steel cap that resists stains, rust and denting*.
 A thermal barrier reduces conductive heat loss and limits condensation on the inside. The sill has an attractive, wear-resistant, heat-baked finish in neutral gray.
- All basic exterior frame members are covered with a rigid vinyl sheath that maintains an attractive appearance while minimizing maintenance.
- **(€)** Wood frame members are treated with a water-repellent preservative for long-lasting protection and performance. Interior frame trim pieces are unfinished pine. Maple and oak veneers, or prefinished white interior options are available.

Factory-assembled two-panel doors are available and arrive at the job site ready to install. Unassembled doors are also available and require job site assembly.

• A flexible vinyl weatherstrip at the head and side jambs provides a positive seal between the frame and panels.

PANEL

- **3** The exterior of the wood door panel is protected with a low-maintenance urethane base finish in white, Sandtone, Terratone or forest green.
- Panel interior surfaces are unfinished pine veneer. Unfinished maple or oak veneers are available as options. Low-maintenance prefinished white interiors are also available on units with white exteriors.
- **6** Dual ball-bearing rollers on door panels provide smooth gliding operation with self-contained leveling adjusters.
- *Visit andersenwindows.com/warranty for details.

Mix-and-match interior and exterior style and finish options are available.

Bright brass and satin nickel finishes feature a 10-year limited warranty.

Tribeca and Albany hardware are zinc die cast with powder-coated durable finish. Other hardware is solid forged brass. Dimensions in parentheses are in millimeters.

Naturally occurring variations in grain, color and texture of wood make each window one of a kind. All wood interiors are unfinished unless a finish is specified.

Printing limitations prevent exact replication

of colors and finishes. See your Andersen supplier for actual color and finish samples. Distressed bronze and oil rubbed bronze are "living" finishes that will change with time and use.



Mortise-and-Tenon Joints



Panel joints are mortise and tenon with patented dowel construction for maximum strength.

Flexible Seal



A full-length combination weatherstrip/ interlock system provides a flexible seal at the meeting stile.

GLASS

- ① In addition to stainless steel glass spacers, black or white glass spacers are now available to allow the spacer to blend in with the unit color.
- Panels are silicone bed glazed and finished with an interior wood stop.
- High-Performance options include:
- Low-E4® tempered glass
- Low-E4 HeatLock® tempered glass
- Low-E4 SmartSun™ tempered glass
- Low-E4 SmartSun HeatLock tempered glass
- Low-E4 Sun tempered glass

Additional glass options are available. Contact your Andersen supplier.

A removable translucent film helps shield the glass from damage during delivery and construction, and simplifies finishing at the job site.

Patterned Glass

Patterned glass options are available. See page 12 for more details.

EXTERIOR & INTERIOR OPTIONS

EXTERIOR COLORS



Forest Green

INTERIOR OPTIONS



HARDWARE OPTIONS Sold Separately



Terratone

ANVERS®

Bright Brass
Oil Rubbed Bronze
Satin Nickel



YUMA®
Distressed Bronze
Distressed Nickel



Antique Brass Bright Brass Brushed Chrome Oil Rubbed Bronze Polished Chrome Satin Nickel

NEWBURY®



Black
Gold Dust
Stone
White



Antique Brass **Bright Brass**Oil Rubbed Bronze



Distressed Bronze
Distressed Nickel



Antique Brass
Bright Brass
Oil Rubbed Bronze
Satin Nickel



Black Stone White

Bold name denotes finish shown

HARDWARE FINISHES

Bronze





Blinds-Between-the-Glass



Blinds-between-the-glass are available for select gliding patio door sizes when ordered with Low-E4® tempered glass, and a pine or prefinished white door interior and any of our four exterior colors. White 1/2" (13) aluminum slat blinds come mounted between two panes of insulated glass in a dust-free environment, Blinds are magnetically controlled and can be tilted, raised and lowered using low-profile controls. Smooth, simple operation allows for customized light and privacy control. Available in 3368, 33611, 6068, 60611, 12068-4 and 120611-4 door sizes.

HARDWARE

Reachout Locking Hardware



The unique Andersen® reachout locking hardware pulls the door panel snugly into the jamb for a weathertight seal and enhanced security.

ACCESSORIES Sold Separately

FRAME

Standard jamb depth is 4%6" (116). Pine, maple and oak veneers or prefinished white interior extension jambs are available in $\frac{1}{16}$ 8" (1.5) increments between $5\frac{1}{16}$ 1" (116) and $7\frac{1}{6}$ 1" (181).

Threshold



A maple or oak threshold is available for finishing the interior of the sill.

Ramped Sill Insert



Ramped sills in maple or oak provide smooth transition from interior to exterior, and can be used with a retractable insect screen but not a gliding insect screen. Check with local and federal officials to determine if product meets accessibility codes.

Sill Support



An aluminum sill support is designed to lock into a channel under the sill and tie back into the wall. This offers support to the outermost sill section when needed. Available in a neutral gray finish.

HARDWARE

Exterior Keyed Lock



A six-pin key cylinder lock is available in finishes that coordinate with the hardware. This lock allows the gliding door to be locked and unlocked from the exterior.

Auxiliary Foot Lock



Provides an extra measure of security when the door is in a locked position. Lock can be set so the door is fully closed or partially open to provide a secure venting position. Available in all hardware finishes.

GLASS

Andersen Art Glass

Andersen art glass panels come in a variety of original patterns. Available for stationary panels, sidelights and transoms. See art glass section starting on page 173 for more information or visit andersenwindows.com/artglass.

INSECT SCREENS

All insect screens have a long-lasting fiberglass screen mesh with a charcoal finish, and frames are color matched to the exterior of the door unless otherwise specified.

Gliding Insect Screen



Patented square-corner joint construction adds considerable strength to the frame members. The insect screen is available for both two-panel doors and fourpanel doors. Gliding insect screens have Delrin® injection-molded bottom rollers with self-contained leveling adjusters, providing smooth operation. Interior and exterior pulls and latch are provided.

Retractable Insect Screen



The retractable insect screen is installed on the exterior of the door and opens side to side across the width of the opening. When the insect screen is not in use, it neatly retracts into a small canister mounted on the exterior of the door. The retractable insect screen canister is available for two-panel patio doors in our four standard exterior colors. Please note that the retractable insect screen track reduces clear opening height by 1" (25).

GRILLES

Grilles are available in a variety of configurations and widths. For patio door grille patterns, see page 155.

EXTERIOR TRIM

Available with Andersen exterior trim. See exterior trim section starting on page 175.

SIDELIGHTS & TRANSOMS

Andersen Frenchwood® patio door sidelights and transoms feature elegant lines that match our Frenchwood gliding patio doors. They feature pine, maple, oak and prefinished white interior options, plus our four standard exterior colors. Stationary units can also be selected for use as sidelights. For details, see pages 159-162.

CAUTION

- Painting and staining may cause damage to rigid vinyl.
- 400 Series patio door in Terratone color may be painted any color lighter than Terratone color using quality oil-based or latex paint.
- Do not paint 400 Series patio doors in white, canvas, Sandtone, dark bronze, forest green or black exterior colors.
- Andersen does not warrant the adhesion or performance of homeowner-applied paint over vinyl or other factory-coated surfaces.
- For vinyl painting instructions and preparation, contact your Andersen supplier.
- Do not paint weatherstrip.
- Creosote-based stains should not come in contact with Andersen products.
- Abrasive cleaners or solutions containing corrosive solvents should not be used on Andersen products.

^{*}Visit andersenwindows.com/warranty for details.

^{*}Delrin" is a registered trademark of E.I. du Pont de Nemours and Company. Andersen patio doors are not intended for use as entrance doors. Dimensions in parentheses are in millimeters.

FRENCHWOOD® GLIDING PATIO DOORS

Three Patio Door Heights

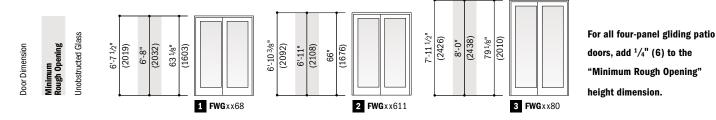
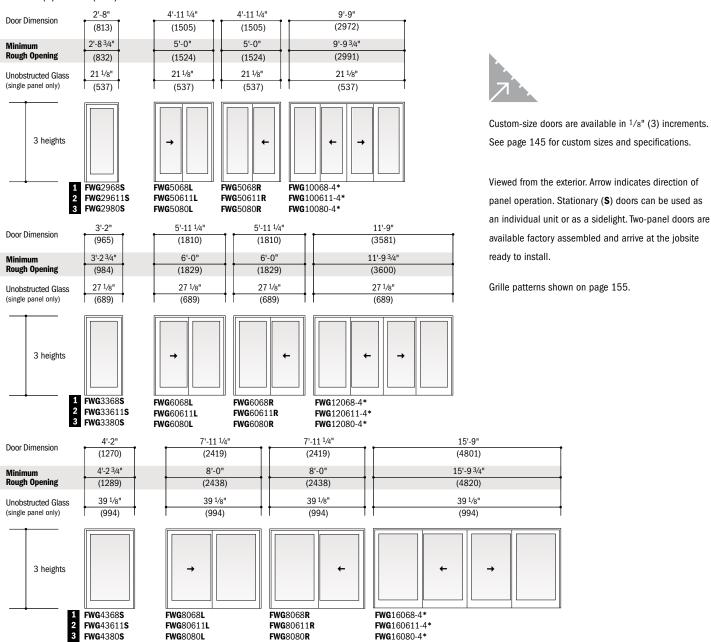


Table of Frenchwood® Gliding Patio Door Sizes

Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96



^{• &}quot;Door Dimension" always refers to outside frame-to-frame dimension.

^{*&}quot;Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 210-211 for more details.

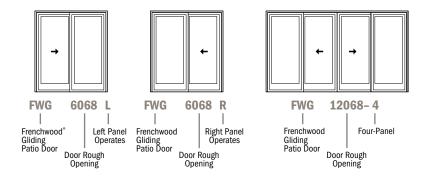
[•] Dimensions in parentheses are in millimeters.

^{*}Add ½" (6) to the "Minimum Rough Opening" height dimension for four-panel doors.

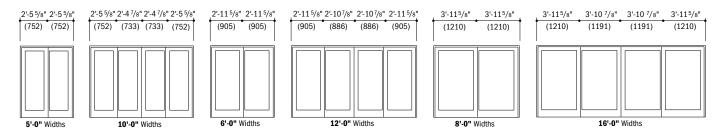


Order Designation Description

Viewed from the exterior.



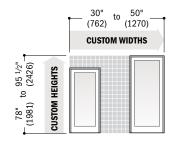
Frenchwood® Gliding Patio Door Centerline Astragal Dimensions

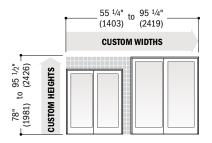


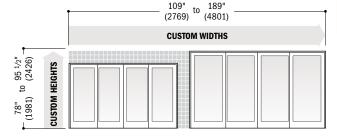
Custom Sizes and Specification Formulas

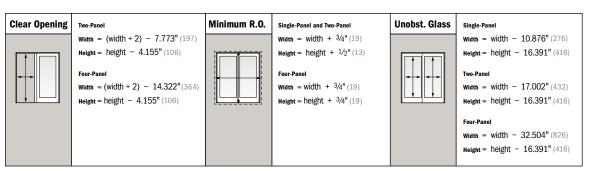


Available in ¹/8" (3) increments between minimum and maximum widths and heights shown. Some restrictions apply. Measurement guide for custom-size patio doors can be found at **andersenwindows.com/measure**.









Dimensions in parentheses are in millimeters.

[•] Clear Opening formulas provide dimensions for determining area available for egress. Vent opening, or area available for passage of air, is equal to clear opening. Minimum R.O. (minimum rough opening) formulas provide minimum rough opening width and height dimensions. Unobst. Glass (unobstructed glass) formulas provide dimensions for determining area available for passage of light.

FRENCHWOOD® GLIDING PATIO DOORS

Two-Panel and Four-Panel Frenchwood® Gliding Patio Door Opening and Area Specifications

			Clear 0	pening in	Full Open F	Position					Overall Door		
Door Number	Ar		Wie			ght	Gla Ar	ea	Ar		Ar	ea	
	Sq. Ft	./(m²)	Inches	/(mm)	Inches	/(mm)	Sq. Ft	./(m²)	Sq. F	./(m²)	Sq. F	t./(m²)	
FWG5068	11.43	(1.06)	21 13/16"	(555)	75 ⁵ / ₁₆ "	(1914)	18.52	(1.72)	11.43	(1.06)	32.71	(3.04)	
FWG6068	14.57	(1.35)	27 13/16"	(707)	75 5/16"	(1914)	23.77	(2.21)	14.57	(1.35)	39.34	(3.65)	
FWG8068	20.85	20.85 (1.94) 39		(1012)	75 5/16"	(1914)	34.29	(3.19)	20.85	(1.94)	52.59	(4.89)	
FWG10068	23.12	(2.15)	44 1/8"	(1122)	75 5/16"	(1914)	37.03	(3.44)	23.12	(2.15)	64.59	(6.00)	
FWG12068	29.39	(2.73)	56 1/8"	(1427)	75 5/16"	(1914)	47.55	(4.42)	29.39	(2.73)	77.84	(7.23)	
FWG16068	41.95	(3.90)	80 1/8"	(2037)	75 5/16"	(1914)	68.59	(6.37)	41.95	(3.90)	104.34	(9.69)	
FWG50611	11.87	(1.10)	21 13/16"	(555)	78 ³ / ₁₆ "	(1987)	19.36	(1.80)	11.87	(1.10)	33.89	(3.15)	
FWG60611	15.13	(1.41)	27 13/16"	(707)	78 ³ / ₁₆ "	(1987)	24.86	(2.31)	15.13	(1.41)	40.76	(3.79)	
FWG80611	21.65	(2.01)	39 13/16"	(1012)	78 ³ / ₁₆ "	(1987)	35.85	(3.33)	21.65	(2.01)	54.49	(5.06)	
FWG100611	24.00	(2.23)	44 1/8"	(1122)	78 ³ / ₁₆ "	(1987)	38.72	(3.60)	24.00	(2.23)	66.93	(6.22)	
FWG120611	30.52	(2.83)	56 1/8"	(1427)	78 ³ / ₁₆ "	(1987)	49.72	(4.62)	30.52	(2.83)	80.66	(7.49)	
FWG160611	43.55	(4.05)	80 1/8"	(2037)	78 ³ / ₁₆ "	(1987)	71.71	(6.66)	43.55	(4.05)	108.12	(10.04)	
FWG5080	13.86	(1.29)	21 13/16"	(555)	91 5/16"	(2320)	23.21	(2.16)	13.86	(1.29)	39.29	(3.65)	
FWG6080	17.67	(1.64)	27 13/16"	(707)	91 5/16"	(2320)	29.80	(2.77)	17.67	(1.64)	47.25	(4.39)	
FWG8080	25.28	(2.35)	39 13/16"	(1012)	91 5/16"	(2320)	42.99	(3.99)	25.28	(2.35)	63.17	(5.87)	
FWG10080	28.02	(2.60)	44 1/8"	(1122)	91 5/16"	(2320)	46.42	(4.31)	28.02	(2.60)	77.59	(7.21)	
FWG12080	35.64	(3.31)	56 1/8"	(1427)	91 5/16"	(2320)	59.60	(5.54)	35.64	(3.31)	93.51	(8.69)	
FWG16080	50.86	(4.73)	80 1/8"	(2037)	91 5/16"	(2320)	85.97	(7.99)	50.86	(4.73)	125.34	(11.64)	

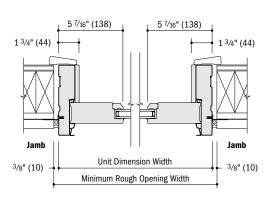
Stationary Frenchwood Gliding Patio Door Area Specifications

Door Number	Gla Are Sq. Ft.	ea	Overal Are Sq. Ft	ea			
FWG2968	9.26	(0.86)	17.67	(1.64)			
FWG3368	11.89	(1.11)	20.98	(1.95)			
FWG4368	17.15	(1.59)	27.60	(2.56)			
FWG29611	9.68	(0.90)	18.31	(1.70)			
FWG33611	12.43	(1.16)	21.74	(2.02)			
FWG43611	17.93	(1.67)	28.60	(2.66)			
FWG2980	11.60	(1.08)	21.22	(1.97)			
FWG3380	14.90	(1.38)	25.20	(2.34)			
FWG4380	21.49	(2.00)	.00) 33.16 (3.08				

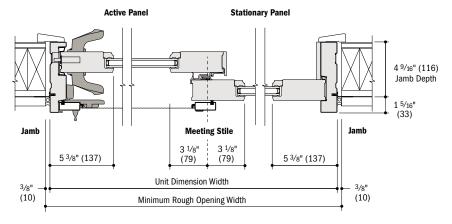
[·] Dimensions in parentheses are in square meters

Frenchwood Gliding Patio Door Details

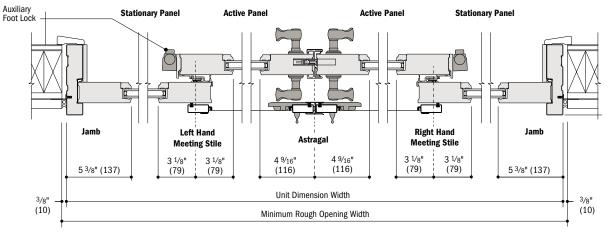
Scale $1^{1}/2$ " (38) = 1'-0" (305) -1:8



Horizontal Section Stationary



Horizontal Section Two-Panel



Horizontal Section Four-Panel

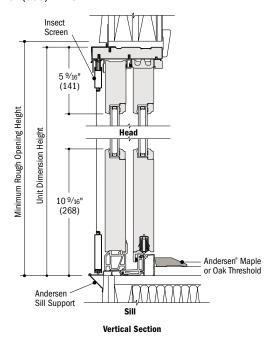
- 4 9/16" (116) overall jamb depth measurement is from back side of installation flange.
- Light-colored areas are parts included with door. Dark-colored areas are additional Andersen* parts required to complete door assembly as shown.
- Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 210-211. • Details are for illustration
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at and greanwindows com.
- andersenwindows.com.

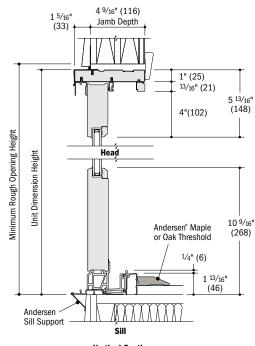
 Dimensions in parentheses are in millimeters.

[•] Dimensions in parentheses are in millimeters or square meters



Frenchwood* Gliding Patio Door Details Scale $1^1/2$ " (38) = 1'-0" (305) -1:8

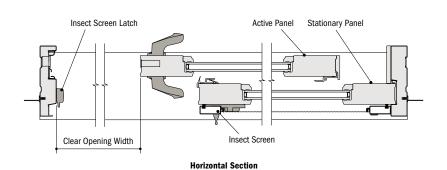




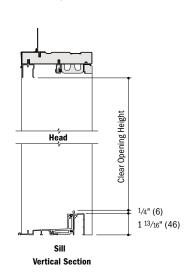
Vertical Section Stationary

Clear Opening Details

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8



Two-Panel



Active Panel Active Panel Astragal Stationary Panel Stationary Panel Auxiliary Foot Lock Clear Opening Width Insect Screen

Horizontal Section

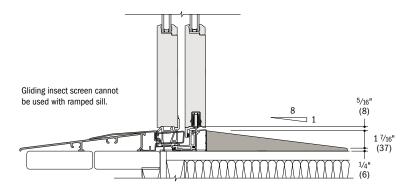
Four-Panel

- 4 9/16" (116) overall jamb depth measurement is from back side of installation flange.
- · Light-colored areas are parts included with door. Dark-colored areas are additional Andersen® parts required to complete door assembly as shown.
- Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 210-211.
 Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com.
- · Dimensions in parentheses are in millimeters.

FRENCHWOOD® GLIDING PATIO DOORS

Ramped Sill Detail

Scale $1^{1}/2^{1}$ (38) = 1'-0" (305) - 1:8



Vertical Joining Detail

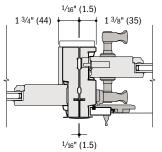
Scale $1^{1}/2$ " (38) = 1'-0" (305) - 1:8

Overall Door Dimension Width

Sum of individual door widths plus $^{1}/_{16}$ " (1.5) for each join.

Overall Rough Opening Width

Overall door width plus 3/4" (19).



Horizontal Section Frenchwood* Gliding to Frenchwood Gliding

Vertical Joining Detail — Fiberglass

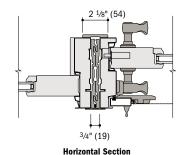
Scale $1^{1}/2$ " (38) = 1'-0" (305) - 1:8

Overall Door Dimension Width

Sum of individual door widths plus $\,^{3}/_{4}$ " (19) for each join.

Overall Rough Opening Width

Overall door width plus 3/4" (19).



Frenchwood® Gliding to Frenchwood Gliding

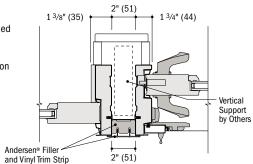
Andersen does not recommend joining of receiver jamb to receiver jamb.

For more joining information, see the combination designs section starting on page 181.

Separate Rough Openings Detail

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8

To meet structural requirements or to achieve a wider joined appearance, doors may be installed into separate rough openings having vertical support (by others) in combination with Andersen* exterior filler and exterior vinyl trim.



Horizontal SectionFrenchwood* Gliding and Frenchwood Gliding

- · Light-colored areas are parts included with door. Dark-colored areas are additional Andersen* parts required to complete door assembly as shown.
- Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 210-211.
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com.
- Andersen recommends installation of doors into separate rough openings. Consult with an architect or structural engineer regarding minimum requirements for structural support members between adjacent rough openings.
- Dimensions in parentheses are in millimeters.





FRENCHWOOD® HINGED INSWING PATIO DOORS

FEATURES

FRAME

⚠ The sill is made with three-piece construction. The subsill is made of Fibrex® material, and the sill step is solid oak. The exterior sill member is made of extruded aluminum with an attractive wear-resistant, heatbaked finish in neutral gray. This combination of materials combines durability and low maintenance with excellent insulating characteristics.

B All basic exterior frame members are fiberglass reinforced composite, which maintains an attractive appearance while minimizing maintenance.

• The exterior frame members are attached to a water-repellent preservativetreated wood subframe for long-lasting* protection and performance. The subframe is grooved to accept extension jambs.

• Panel interior surfaces are unfinished pine veneer. Unfinished maple or oak veneers are available as options. Lowmaintenance prefinished white interiors are also available.

Hinged inswing operating panels are left-hand active, right-hand active or two-panel active-passive jamb hinged.



● The exterior of the wood door panel is protected with a long-lasting* urethane base finish available in white, Sandtone, Terratone and forest green.

6 A factory-applied, one-piece compression-type rubber weatherstrip continues in one plane around the panel to provide maximum effectiveness against water and air infiltration. Corners of the weatherstrip are welded to eliminate gaps between the panel and the frame/sill shoulder.

Mortise-and-Tenon Joints



Mortise and tenon joints prevent panel sag and maintain smooth operation.

GLASS

6 In addition to stainless steel glass spacers, black or white glass spacers are now available to allow the spacer to blend in with the unit color.

 $oldsymbol{\Theta}$ Panels are silicone bed glazed and finished with an interior wood stop.

High-Performance options include:

- Low-E4® tempered glass
- Low-E4 HeatLock® tempered glass
- Low-E4 SmartSun[™] tempered glass
- · Low-E4 SmartSun HeatLock tempered glass
- · Low-E4 Sun tempered glass

Additional glass options are available. Contact your Andersen supplier.

A removable translucent film helps shield the glass from damage during delivery and construction, and simplifies finishing at the job site.

Patterned glass options are available. See page 12 for more details.

EXTERIOR & INTERIOR OPTIONS

EXTERIOR COLORS







Green

INTERIOR OPTIONS



White Oak

Naturally occurring variations in grain, color and texture of wood make each window one of a kind. All wood interiors are unfinished unless a finish is specified. Printing limitations prevent exact replication of colors and finishes. See your Andersen supplier for actual color and finish samples.

HARDWARE OPTIONS Sold Separately



Bright Brass Oil Rubbed Bronze Satin Nickel



YUMA® Distressed Bronze Distressed Nickel



NEWBURY® Antique Brass Bright Brass Brushed Chrome Oil Rubbed Bronze Polished Chrome

Satin Nickel



Black Gold Dust Stone White



COVINGTON™ Antique Brass **Bright Brass** Oil Rubbed Bronze



ENCINO® Distressed Bronze Distressed Nickel



Antique Brass Bright Brass Oil Rubbed Bronze Satin Nickel



TRIBECA® Black Stone White

Bold name denotes finish shown.

HARDWARE FINISHES



^{*}Visit andersenwindows.com/warranty for details.

"FSB" is a registered trademark of Franz Schneider Brakel GmbH & Co. Matching hinges are available for inswing patio doors.





Mix-and-match interior and exterior style and finish options are available; excludes FSB hardware. Bright brass and satin nickel finishes feature a 10-year limited warranty.

Tribeca and Albany hardware are zinc die cast with powder-coated durable finish. Other hardware is solid forged brass. Distressed bronze and oil rubbed bronze are "living" finishes that will change with time and use.

^{**}FSB style 1102 is not available in black anodized aluminum.



Blinds-Between-the-Glass



Blinds-between-the-glass are available for select hinged patio door sizes when ordered with Low-E4® tempered glass, and a pine or prefinished white door interior and any of our four exterior colors. White ½" (13) aluminum slat blinds come mounted between two panes of insulated glass in a dust-free environment. Blinds are magnetically controlled and can be tilted, raised and lowered using low-profile controls. Smooth, simple operation allows for customized light and privacy control. Available in 2768, 27611, 3168, 31611, 5068, 50611, 6068, 60611, 9068 and 90611 door sizes.

HARDWARE

Hinges

Adjustable hinges are standard on inswing patio doors and have ball-

smooth, frictionless movement. Feature easy horizontal and vertical adjustment, plus quick-release



Gold dust finish

for easy panel removal.
The release feature is ideal for transporting large units up stairs or to other hard-to-reach areas.

Gold dust finish is standard on wood interior doors. For units with prefinished white interior, white is standard. Also available in finishes that coordinate with the hardware.

Multi-Point Locking System



The multi-point locking system, with a hook bolt above and below the center dead bolt, provides a weathertight seal and enhanced security.

ACCESSORIES Sold Separately

FRAME

Interior Extension Jambs

Standard jamb depth is 4%/6" (116). Pine, maple and oak veneers, or prefinished white extension jambs are available in 1/16" (1.5) increments between 5 1/16" (129) and 7 1/8" (181). Interior extension jambs on inswing units will restrict the full opening of the door.

Exterior Extension Jambs'

Exterior extension iamb system is available for the following wall thicknesses: 5 1/4" (133), 6 9/16" (167) and 7%6" (192). In walls over $4\frac{1}{2}$ " (114). the exterior sill extender and exterior extension jamb system allows the unit to be installed flush to the interior, so the hinged doors will open flat against the interior wall. Color matched to the exterior of the finished unit, this system provides a low-maintenance, finished exterior appearance. An extended double-insect screen track is available for jamb-hinged doors that require gliding insect screens. Exterior extension jamb kits are available with or without the double-insect screen track.

Threshold



A maple or oak threshold is available for finishing the interior of the sill.

Ramped Sill Insert



Ramped sills in maple or oak provide smooth transition from interior to exterior. Ramped sill cannot be used with insect screens. Check with local and federal officials to determine if product meets accessibility codes. Shown with a Frenchwood® gliding patio door.

Sill Support



An aluminum sill support is designed to lock into a channel under the sill and tie back into the wall. This offers support to the outermost sill section when needed. Available in a neutral gray finish.

HARDWARE

Exterior Keyed Lock



A six-pin key cylinder lock is available in styles and finishes that coordinate with the hardware. This lock allows the hinged patio door to be locked and unlocked from the exterior.

Handle Extension



Extends interior door handle an additional 1" (25) from the door interior panel to accommodate blinds or shades. Kit includes

one handle extender and spindle. A second extender may be added to increase the length an additional 1" (25) to a 2" (51) total extension. Extenders are available in finishes that coordinate with hardware.

Strike Plate Extensions

Bright brass, antique brass, polished chrome, oil rubbed bronze, brushed chrome and satin nickel strike plate extensions are available for the following wall thicknesses: 5 ½ (133), 6 % (167), 7 ½ (181) and 7 % (192).

Construction Lock



This hardware can be used on all Andersen® hinged doors to help secure the structure during the construction phase of the project. It features an undersized escutcheon plate, which makes on-site finishing easier.

Panel Stop



This hinged door panel stop helps prevent wall damage when opening the inswing door. Available in finishes

that coordinate with the hardware.

GLASS

Andersen® Art Glass

Andersen art glass panels come in a variety of original patterns. Available for stationary panels, sidelights and transoms. See art glass section starting on page 173 for more information or visit andersenwindows.com/artglass.

INSECT SCREENS

All insect screens have a long-lasting "fiberglass screen mesh with a charcoal finish, and frames are color matched to the exterior of the door unless otherwise specified.

Gliding Insect Screen

Available for all twoand three-panel doors. Features Delrin® material injection-molded bottom rollers with self-contained leveling adjusters.



A double insect screen track is required for two-panel active-passive or passive-active doors. Gliding insect screens are not available for 4' (1219)-wide doors.

Double-Insect Screen Track



An extended insect screen track is required for two-panel active-passive or passive-active hinged doors that use gliding insect screens.

Hinged Insect Screens

Available for single-panel hinged doors, and two-panel active-passive or passiveactive doors.



GRILLES

Available in a variety of configurations and widths. See page 155.

EXTERIOR TRIM

Available with Andersen exterior trim. See exterior trim section starting on page 175.

SIDELIGHTS & TRANSOMS

Andersen Frenchwood patio door sidelights and transoms feature elegant lines that match our Frenchwood hinged patio doors. See pages 159-162 for details.

CAUTION:

- Painting and staining may cause damage to rigid vinyl.
- Do not paint 400 Series patio doors in white, canvas, Sandtone, dark bronze, forest green or black exterior colors.

See page 143 for a complete list of painting, staining and cleaning cautions.

 $^{^{\}star}$ Exterior extension jambs for hinged inswing patio doors must be applied before installing into opening.

^{**}Visit andersenwindows.com/warranty for details.

[&]quot;Delrin" is a registered trademark of E.I. du Pont de Nemours and Company.

Andersen patio doors are not intended for use as entrance doors.

Dimensions in parentheses are in millimeters.

FRENCHWOOD® HINGED INSWING PATIO DOORS

Table of Frenchwood® Hinged Inswing Patio Door Sizes Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96 2'-0 1/2" 4'-0" 4'-0" Door Dimension (620) (1219) (1219) 2'-1" 4'-1" 4'-1" Minimum **Rough Opening** (634)(1242)(1242)13 ¹/4' 13 1/4" 13 1/4" Unobstructed Glass (336) (single panel only) (336) (336) Custom-size doors are available in 1/8" (3) 3 heights increments. See page 155 for custom sizes FWH2168S FWH4168ΔPI R FWH4168PALR and specifications. FWH21611S FWH41611APLR FWH41611PALR FWH2180S FWH4180APLR FWH4180PALR 2'-6 1/8' 2'-61/8" 2'-6 1/8" 4'-11 1/4" 4'-11 1/4" 4'-11 ¹/4" 4'-11 ¹/4" 4'-11 1/4" Door Dimension Stationary (S) doors (765)(765) (765)(1504)(1504)(1504)(1504)(1504)can be used as an 5'-0" 5'-0" 5'-0" 2'-7" 2'-7" 2'-7" 5'-0" 5'-0" Minimum **Rough Opening** (787) (787) (787) (1524)(1524)(1524) (1524)(1524) individual unit or as a 18 7/8" 18 7/8" 18 7/8" 18 7/8" 18 7/8" 18 7/8' 18 7/8" 18 7/8" Unobstructed Glass sidelight. In addition (single panel only) (479) (479) (479) (479) (479) (479) (479) (479) to venting door panels shown in table, other standard configurations 3 heights are available for twoand three-panel doors. FWH2768AR FWH2768AL FWH5068ASR FWH5068SAL FWH5068APLR FWH5068PALR FWH5068SS FWH27611S FWH27611AR FWH27611AL FWH50611SS FWH50611ASR FWH50611SAL FWH50611APLR FWH50611PALR Grille patterns shown FWH2780S FWH2780AR FWH2780AL FWH5080SS FWH5080ASR FWH5080SAL FWH5080APLR FWH5080PALR on page 155. 2'-8 1/8' 2'-8 1/8' 2'-81/8' 5'-3 1/4 5'-3 1/4" 5'-3 1/4" 5'-3 1/4' 5'-3 1/4" Door Dimension (816) (816) (816) (1607)(1607) (1607)(1607)(1607) 2'-9" 2'-9" 2'-9" 5'-4" 5'-4" 5'-4" 5'-4" 5'-4" Minimum Rough Opening (1626)(838)(838)(838)(1626)(1626)(1626)(1626)20 7/8" 20 7/8 20 7/8" 20 7/8 20 7/8" 20 7/8" 20 7/8 20 7/8" Unobstructed Glass (single panel only) (530) (530) (530) (530) (530) (530) (530) (530) 3 heights FWH2968S FWH2968AR FWH2968AL FWH5468SS FWH5468ASR FWH5468SAL FWH5468APLR FWH5468PALR FWH29611S FWH29611AR FWH29611AL FWH54611SS FWH54611ASR FWH54611SAL FWH54611APLR FWH54611PALR FWH2980S FWH5480SAL FWH2980AR FWH2980AL FWH5480SS FWH5480PALR FWH5480ASR FWH5480APLR 3'-0 1/8' 3'-0 1/8" 3'-0 1/8' 5'-11 ¹/4" 5'-11 1/4" 5'-11 1/4" 5'-11 ¹/4" 5'-11 1/4' Door Dimension (918) (918) (918) (1810)(1810)(1810)(1810) (1810)3'-1" 3'-1" 3'-1" 6'-0" 6'-0" 6'-0" 6'-0" 6'-0" Minimum **Rough Opening** (1829)(1829) (1829) (1829) (940) (940) (940) (1829)24 7/81 24 7/8" 24 7/8" 24 7/8" 24 7/8' 24 7/81 24 7/8" 24 7/8" Unobstructed Glass (single panel only) (632) (632) (632) (632) (632) (632) (632) (632) 3 heights FWH3168S FWH3168AR FWH3168AL FWH6068SS FWH6068ASR FWH6068SAL FWH6068APLR FWH6068PALR FWH31611S FWH31611AR FWH31611AL FWH60611SS FWH60611ASR FWH60611SAL FWH60611APLR FWH60611PALR

FWH3180AR FWH3180AL

FWH6080ASR

FWH6080SAL

FWH6080APLR

FWH6080PALR

FWH6080SS

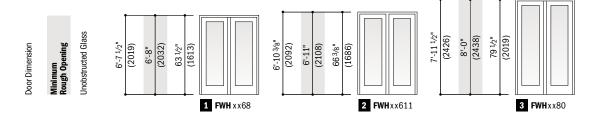
FWH3180S "Door Dimension" always refers to outside frame-to-frame dimension.

^{* &}quot;Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 210-211 for more details.

[.] Dimensions in parentheses are in millimeters

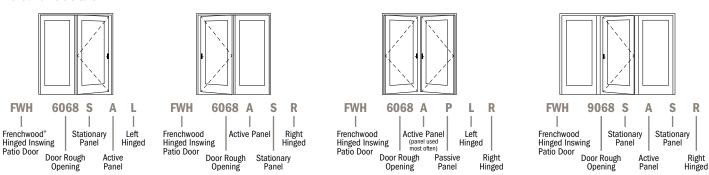


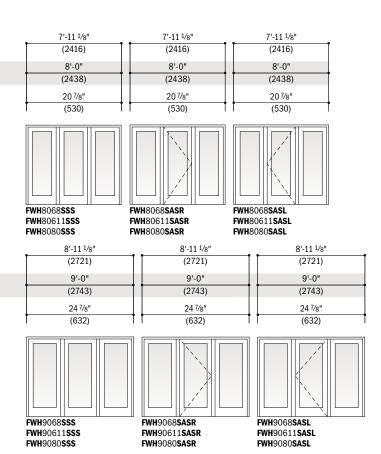
Three Patio Door Heights



Order Designation Description

Viewed from the exterior.







^{*} Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 210-211 for more details.

Dimensions in parentheses are in millimeters.

FRENCHWOOD® HINGED INSWING PATIO DOORS

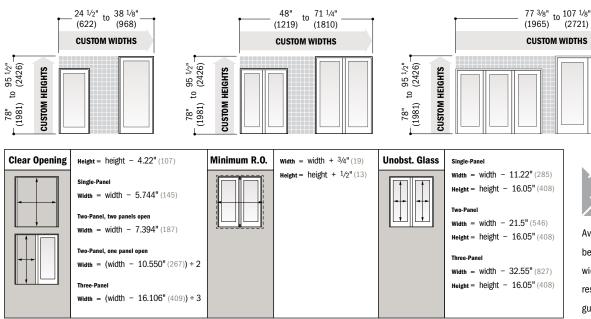
Frenchwood® Hinged Inswing Patio Door Opening and Area Specifications

Position* Sq. Ft./ FWH2168S	(1.21) (1.30) (1.50) (1.99) (1.02) (1.21) (2.54) (1.23)	24 ¹³ / ₁₆ " 26 ¹³ / ₁₆ " 30 ¹³ / ₁₆ " 41"	(630)	Inches	, ,	ms Height Inches/(mm)		OU. FL	/(m ²)	Sq. Ft	ea /(m²)	Overall Door Area Sq. Ft./(m²)	
FWH2968 1 14.02 FWH3168 1 16.11 FWH4168 2 21.43 FWH4168 1 11.01 FWH5068 1 - AS/SA 12.98 FWH5068 2 - AP/PA 27.30 FWH5068 1 - AP/PA 13.32 FWH5468 1 - AP/PA 14.37 FWH5468 1 - AP/PA 14.37 FWH6068 1 - AP/PA 14.37 FWH6068 1 - AP/PA 16.46 FWH8068 1 16.11 FWH27611 1 13.48 FWH27611 1 14.55 FWH31611 1 16.72 FWH41611 2 22.24 FWH41611 1 14.3 FWH50611 1 - AS/SA 13.48 FWH50611 1 - AS/SA 13.48 FWH50611 1 - AS/SA 14.55 FWH54611 1 - AS/SA 14.55 FWH56011 1 - AS/SA 14.55 FWH50611	(1.30) (1.50) (1.99) (1.02) (1.21) (2.54)	26 ¹³ / ₁₆ " 30 ¹³ / ₁₆ "					-	5.74	(0.53)			13.39	(1.24)
FWH3168 1 16.11 FWH4168 2 21.43 FWH4168 1 11.01 FWH5068 1 - AS/SA 12.98 FWH5068 2 - AP/PA 27.30 FWH5068 1 - AS/SA 14.02 FWH5468 1 - AS/SA 14.02 FWH5468 1 - AP/PA 29.39 FWH5468 1 - AP/PA 14.37 FWH6068 1 - AP/PA 14.37 FWH6068 1 - AP/PA 16.46 FWH8068 1 14.02 16.46 FWH20611 1 13.48 16.11 FWH21611S - - FWH22611 1 14.55 14.55 FWH31611 1 1.45 14.55 FWH41611 2 22.24 15.44 FWH50611 1 - AS/SA 13.48 FWH50611 1 - AS/SA 13.83 FWH54611 1 - AP/PA 30.51 FWH56611 1 - AP/PA 34.86 FWH56611 1 - AP/PA 14.91	(1.50) (1.99) (1.02) (1.21) (2.54)	30 13/16"	(004)	26"	(660)	75 1/4"	(1911)	8.32	(0.77)	12.98	(1.21)	16.63	(1.55)
FWH4168 2 21.43 FWH4168 1 11.01 FWH5068 1 - AS/SA 12.98 FWH5068 2 - AP/PA 27.30 FWH5068 1 - AS/SA 14.02 FWH5468 1 - AS/SA 14.02 FWH5468 1 - AP/PA 29.39 FWH5468 1 - AP/PA 14.37 FWH6068 1 - AS/SA 16.11 FWH6068 2 - AP/PA 33.58 FWH6068 1 - AP/PA 16.46 FWH8068 1 14.02 16.46 FWH8068 1 14.02 16.46 FWH21611S - - FWH22611 1 13.48 16.72 FWH31611 1 16.72 17.02 FWH41611 2 22.24 17.02 FWH50611 1 - AS/SA 13.48 FWH50611 1 - AS/SA 14.55 FWH54611 1 - AS/SA 14.55 FWH56611 1 - AS/SA 14.57 FWH60611 1 - AS/SA 16.72	(1.99) (1.02) (1.21) (2.54)		(681)	28"	(711)	75 1/4"	(1911)	9.20	(0.86)	14.02	(1.30)	17.74	(1.65)
FWH4168 1 11.01 FWH5068 1 - AS/SA 12.98 FWH5068 2 - AP/PA 27.30 FWH5068 1 - AP/PA 13.32 FWH5068 1 - AS/SA 14.02 FWH5468 2 - AP/PA 29.39 FWH5468 1 - AP/PA 14.37 FWH6068 1 - AP/PA 14.37 FWH6068 2 - AP/PA 33.58 FWH6068 1 - AP/PA 16.46 FWH8068 1 14.02 16.46 FWH20611 1 13.48 16.11 FWH27611 1 13.48 16.72 FWH27611 1 14.55 16.72 FWH41611 2 22.24 16.72 FWH41611 1 - AS/SA 13.48 FWH50611 1 - AS/SA 13.48 FWH50611 1 - AS/SA 14.55 FWH54611 1 - AS/SA 14.55 FWH56611 1 - AS/SA 14.72 FWH56611 1 - AS/SA 16.72 FWH56611 1 - AP/PA 14.9	(1.02) (1.21) (2.54)	41"	(783)	32"	(813)	75 1/4"	(1911)	10.96	(1.02)	16.11	(1.50)	19.95	(1.85)
FWH5068 1 - AS/SA 12.98 FWH5068 2 - AP/PA 27.30 FWH5068 1 - AP/PA 13.32 FWH5468 1 - AS/SA 14.02 FWH5468 2 - AP/PA 29.39 FWH5468 1 - AP/PA 14.37 FWH6068 1 - AS/SA 16.11 FWH6068 2 - AP/PA 33.58 FWH6068 1 - 16.46 14.02 FWH8068 1 - 16.11 14.02 FWH2611S - - FWH27611 1 - 13.48 16.72 FWH27611 1 - 14.55 14.02 FWH26611 1 - 14.55 14.02 FWH36611 1 - 14.55 14.48 FWH50611 1 - AS/SA 13.48 FWH50611 1 - AS/SA 14.55 FWH54611 1 - AS/SA 14.55 FWH54611 1 - AS/SA 14.91 FWH60611 1 - AS/SA 16.72 FWH60611 1 - AP/PA 14.91 FWH60611 1 - AP/PA <	(1.21)		(1039)	43 7/8"	(1112)	75 1/4"	(1911)	11.68	(1.09)	21.43	(1.99)	26.50	(2.46)
FWH5068 2 - AP/PA 27.30 FWH5068 1 - AP/PA 13.32 FWH5468 1 - AS/SA 14.02 FWH5468 2 - AP/PA 29.39 FWH5468 1 - AP/PA 14.37 FWH6068 1 - AS/SA 16.11 FWH6068 2 - AP/PA 33.58 FWH6068 1 - AP/PA 16.46 FWH3068 1 16.11 FWH29618 1 16.11 FWH27611 1 13.48 FWH29611 1 14.55 FWH31611 1 16.72 FWH41611 2 22.24 FWH50611 1 - AS/SA 13.48 FWH50611 1 - AS/SA 13.48 FWH50611 1 - AP/PA 28.34 FWH50611 1 - AP/PA 13.83 FWH54611 1 - AS/SA 14.55 FWH56611 1 - AP/PA 14.91 FWH60611 1 - AP/PA 14.91 FWH60611 1 - AP/PA 14.91	(2.54)	19 7/8"	(505)	21 1/16"	(535)	75 1/4"	(1911)	11.68	(1.09)	11.01	(1.02)	26.50	(2.46)
FWH5068 1 - AP/PA 13.32 FWH5468 1 - AS/SA 14.02 FWH5468 2 - AP/PA 29.39 FWH5468 1 - AP/PA 14.37 FWH6068 1 - AS/SA 16.11 FWH6068 2 - AP/PA 33.58 FWH6068 1 - AP/PA 16.46 FWH8068 1 - 14.02 14.02 FWH29611 1 - 13.48 15.71 FWH27611 1 - 13.48 14.02 FWH27611 1 - 14.55 14.05 FWH3611 1 - 14.55 14.33 FWH41611 2 - 22.24 14.41 FWH50611 1 - AS/SA 13.48 FWH50611 1 - AS/SA 13.83 FWH56611 1 - AP/PA 13.83 FWH56611 1 - AS/SA 14.55 FWH56611 1 - AS/SA 14.72 FWH56611 1 - AP/PA 14.91 FWH60611 1 - AP/PA 14.91 FWH60611 1 - AP/PA 14.91 FWH60611 1 - AP/PA </td <td></td> <th>24 13/16"</th> <td>(630)</td> <td>26"</td> <td>(660)</td> <td>75 1/4"</td> <td>(1911)</td> <td>16.64</td> <td>(1.55)</td> <td>12.98</td> <td>(1.21)</td> <td>32.71</td> <td>(3.04)</td>		24 13/16"	(630)	26"	(660)	75 1/4"	(1911)	16.64	(1.55)	12.98	(1.21)	32.71	(3.04)
FWH5468 1 - AS/SA 14.02 FWH5468 2 - AP/PA 29.39 FWH5468 1 - AP/PA 14.37 FWH6068 1 - AS/SA 16.11 FWH6068 2 - AP/PA 33.58 FWH6068 1 - AP/PA 16.46 FWH8068 1 16.11 FWH21611S - - FWH22611 1 13.48 FWH29611 1 14.55 FWH31611 2 22.24 FWH41611 1 14.33 FWH50611 1 - AS/SA 13.48 FWH50611 1 - AS/SA 13.48 FWH50611 1 - AP/PA 28.34 FWH50611 1 - AP/PA 13.83 FWH54611 1 - AS/SA 14.55 FWH56011 1 - AS/SA 16.72 FWH60611 1 - AP/PA 14.91 FWH60611 1 - AP/PA 17.08 FWH80611 1 - AP/PA 17.08 FWH2180S - - FWH	(1,23)	52 1/4"	(1327)	55 ¹/ ₈ "	(1400)	75 1/4"	(1911)	16.64	(1.55)	27.30	(2.54)	32.71	(3.04)
FWH5468 2 - AP/PA 29.39 FWH5468 1 - AP/PA 14.37 FWH6068 1 - AS/SA 16.11 FWH6068 2 - AP/PA 33.58 FWH6068 1 - AP/PA 16.46 FWH8068 1 16.11 FWH21611S - - FWH22611 1 13.48 FWH29611 1 14.55 FWH31611 2 22.24 FWH41611 1 11.43 FWH50611 1 - AS/SA 13.48 FWH50611 1 - AS/SA 13.48 FWH50611 1 - AS/SA 14.55 FWH54611 1 - AP/PA 28.34 FWH54611 1 - AP/PA 30.51 FWH56011 1 - AS/SA 16.72 FWH60611 1 - AP/PA 14.91 FWH60611 1 - AP/PA 17.08 FWH60611 1 - AP/PA 17.08 FWH2780 1 15.73 FWH2780 1 15.73 FWH2980<	\/	25 1/2"	(647)	26 11/16"	(678)	75 1/4"	(1911)	16.64	(1.55)	13.32	(1.23)	32.71	(3.04)
FWH5468 1 - AP/PA 14.37 FWH6068 1 - AS/SA 16.11 FWH6068 2 - AP/PA 33.58 FWH6068 1 - AP/PA 16.46 FWH8068 1 14.02 16.46 FWH9068 1 16.11 1.45 FWH21611S	(1.30)	26 13/16"	(681)	28"	(711)	75 1/4"	(1911)	18.39	(1.71)	14.02	(1.30)	34.92	(3.24)
FWH6068 1 · AS/SA 16.11 FWH6068 2 · AP/PA 33.58 FWH6068 1 · AP/PA 16.46 FWH3068 1 16.11 FWH21611S - - FWH27611 1 13.48 FWH29611 1 14.55 FWH31611 1 16.72 FWH41611 2 22.24 FWH50611 1 · AS/SA 13.48 FWH50611 1 · AS/SA 13.48 FWH50611 1 · AS/SA 14.55 FWH50611 1 · AP/PA 28.34 FWH50611 1 · AS/SA 14.55 FWH54611 1 · AS/SA 14.55 FWH54611 1 · AS/SA 16.72 FWH60611 1 · AS/SA 16.72 FWH60611 1 · AP/PA 17.08 FWH80611 1 · AP/PA 17.08 FWH2180S - - FWH2180S - - FWH2780 1 15.73 FWH2980	(2.73)	56 ¹ / ₄ "	(1429)	59 ¹/ ₈ "	(1502)	75 1/4"	(1911)	18.39	(1.71)	29.39	(2.73)	34.92	(3.24)
FWH6068 2 - AP/PA 33.58 FWH6068 1 - AP/PA 16.46 FWH3068 1 16.11 FWH21611S - - FWH27611 1 13.48 FWH29611 1 14.55 FWH31611 1 16.72 FWH41611 2 22.24 FWH41611 1 11.43 FWH50611 1 - AS/SA 13.48 FWH50611 2 - AP/PA 28.34 FWH50611 1 - AF/PA 13.83 FWH54611 1 - AS/SA 14.55 FWH54611 1 - AF/PA 30.51 FWH56611 1 - AF/PA 14.91 FWH60611 1 - AF/PA 14.91 FWH60611 1 - AP/PA 17.08 FWH80611 1 - AP/PA 17.08 FWH2180S - - FWH2780 1 15.73 FWH2980 1 17.00 FWH3180 1 19.54 FWH4180 2	(1.33)	27 1/2"	(698)	28 11/16"	(729)	75 1/4"	(1911)	18.39	(1.71)	14.37	(1.33)	34.92	(3.24)
FWH6068 1 - AP/PA 16.46 FWH8068 1 14.02 FWH9068 1 16.11 FWH21611S - - FWH27611 1 13.48 FWH29611 1 14.55 FWH31611 1 16.72 FWH41611 1 11.43 FWH50611 1 - AS/SA 13.48 FWH50611 2 - AP/PA 28.34 FWH50611 1 - AP/PA 13.83 FWH54611 1 - AP/PA 14.55 FWH54611 1 - AP/PA 14.91 FWH56611 1 - AP/PA 14.91 FWH60611 1 - AP/PA 14.91 FWH60611 1 - AP/PA 17.08 FWH80611 1 - AP/PA 17.08 FWH2180S - - FWH2780 1 15.73 FWH2980 1 17.00 FWH3180 1 19.54 FWH4180 2 25.98 FWH4180 1 <th< td=""><td>(1.50)</td><th>30 13/16"</th><td>(783)</td><td>32"</td><td>(813)</td><td>75 1/4"</td><td>(1911)</td><td>21.92</td><td>(2.04)</td><td>16.11</td><td>(1.50)</td><td>39.34</td><td>(3.66)</td></th<>	(1.50)	30 13/16"	(783)	32"	(813)	75 1/4"	(1911)	21.92	(2.04)	16.11	(1.50)	39.34	(3.66)
FWH8068 1 14.02 FWH9068 1 16.11 FWH21611S - - FWH27611 1 13.48 FWH29611 1 14.55 FWH31611 1 16.72 FWH41611 1 11.43 FWH50611 1 - AS/SA 13.48 FWH50611 1 - AP/PA 28.34 FWH50611 1 - AP/PA 14.85 FWH54611 1 - AP/PA 14.55 FWH54611 1 - AP/PA 30.51 FWH56611 1 - AP/PA 14.91 FWH60611 1 - AP/PA 14.91 FWH60611 1 - AP/PA 34.86 FWH80611 1 - AP/PA 17.08 FWH2180S - - FWH22180S - - FWH2780 1 15.73 FWH2980 1 17.00 FWH3180 1 19.54 FWH4180 2 25.98 FWH4180 1 1.3.35 <td>(3.12)</td> <th>64 1/2"</th> <td>(1632)</td> <td>67 1/8"</td> <td>(1705)</td> <td>75 1/4"</td> <td>(1911)</td> <td>21.92</td> <td>(2.04)</td> <td>33.58</td> <td>(3.12)</td> <td>39.34</td> <td>(3.66)</td>	(3.12)	64 1/2"	(1632)	67 1/8"	(1705)	75 1/4"	(1911)	21.92	(2.04)	33.58	(3.12)	39.34	(3.66)
FWH8068 1 14.02 FWH9068 1 16.11 FWH21611S - - FWH27611 1 13.48 FWH29611 1 14.55 FWH31611 1 16.72 FWH41611 1 11.43 FWH50611 1 - AS/SA 13.48 FWH50611 1 - AP/PA 28.34 FWH50611 1 - AP/PA 14.85 FWH54611 1 - AP/PA 14.55 FWH54611 1 - AP/PA 30.51 FWH56611 1 - AP/PA 14.91 FWH60611 1 - AP/PA 14.91 FWH60611 1 - AP/PA 34.86 FWH80611 1 - AP/PA 17.08 FWH2180S - - FWH22180S - - FWH2780 1 15.73 FWH2980 1 17.00 FWH3180 1 19.54 FWH4180 2 25.98 FWH4180 1 1.3.35 <td>(1.52)</td> <th>31 1/2"</th> <td>(800)</td> <td>32 11/16"</td> <td>(830)</td> <td>75 1/4"</td> <td>(1911)</td> <td>21.92</td> <td>(2.04)</td> <td>16.46</td> <td>(1.52)</td> <td>39.34</td> <td>(3.66)</td>	(1.52)	31 1/2"	(800)	32 11/16"	(830)	75 1/4"	(1911)	21.92	(2.04)	16.46	(1.52)	39.34	(3.66)
FWH21611S - - FWH27611 1 13.48 FWH29611 1 14.55 FWH31611 1 16.72 FWH41611 1 11.43 FWH50611 1 - AS/SA 13.48 FWH50611 2 - AP/PA 28.34 FWH50611 1 - AP/PA 13.83 FWH54611 1 - AS/SA 14.55 FWH54611 2 - AP/PA 30.51 FWH56611 1 - AP/PA 14.91 FWH60611 1 - AP/PA 14.91 FWH60611 1 - AP/PA 34.86 FWH60611 1 - AP/PA 17.08 FWH2180S - - FWH2180S - - FWH2780 1 15.73 FWH2980 1 17.00 FWH3180 1 19.54 FWH4180 2 25.98 FWH4180 1 1.3.35 FWH5080 1 - AP/PA 33.11 FWH5080 1 - AP/PA	(1.30)	26 13/16"	(681)	28"	(711)	75 1/4"	(1911)	27.60	(2.56)	14.02	(1.30)	52.52	(4.88)
FWH27611 1 13.48 FWH29611 1 14.55 FWH31611 1 16.72 FWH41611 2 22.24 FWH41611 1 11.43 FWH50611 1 - AS/SA 13.48 FWH50611 2 - AP/PA 28.34 FWH50611 1 - AP/PA 13.83 FWH54611 1 - AS/SA 14.55 FWH54611 1 - AP/PA 30.51 FWH54611 1 - AP/PA 14.91 FWH60611 1 - AP/PA 14.91 FWH60611 1 - AP/PA 34.86 FWH80611 1 1 14.55 FWH2180S - - FWH2780 1 15.73 FWH2980 1 17.00 FWH3180 1 19.54 FWH4180 2 25.98 FWH4180 1 13.35 FWH5080 1 - AS/SA 15.73 FWH5080 1 - AP/PA 33.11 FWH5080 1 - AP/PA 16.15 FWH5480 1 - AS/SA	(1.50)	30 13/16"	(783)	32"	(813)	75 1/4"	(1911)	32.88	(3.06)	16.11	(1.50)	59.14	(5.49)
FWH29611 1 14.55 FWH31611 1 16.72 FWH41611 2 22.24 FWH41611 1 11.43 FWH50611 1 - AS/SA 13.48 FWH50611 2 - AP/PA 28.34 FWH50611 1 - AP/PA 13.83 FWH54611 1 - AS/SA 14.55 FWH54611 2 - AP/PA 30.51 FWH56611 1 - AP/PA 14.91 FWH60611 1 - AP/PA 14.91 FWH60611 1 - AP/PA 17.08 FWH80611 1 14.55 FWH2180S - - FWH2780 1 15.73 FWH2980 1 17.00 FWH3180 1 19.54 FWH4180 2 25.98 FWH4180 1 13.35 FWH5080 1 - AS/SA 15.73 FWH5080 1 - AP/PA 33.11 FWH5080 1 - AP/PA 16.15 FWH5480 1 - AS/S	. ,	-	. ,			-	. ,	6.01	(0.56)	-	, ,	13.89	(1.29)
FWH29611 1 14.55 FWH31611 1 16.72 FWH41611 2 22.24 FWH41611 1 11.43 FWH50611 1 - AS/SA 13.48 FWH50611 2 - AP/PA 28.34 FWH50611 1 - AP/PA 13.83 FWH54611 1 - AS/SA 14.55 FWH54611 1 - AP/PA 30.51 FWH56611 1 - AP/PA 14.91 FWH60611 1 - AP/PA 14.91 FWH60611 1 - AP/PA 34.86 FWH80611 1 1 1.08 10.82 FWH2180S - - FWH2780 1 15.73 15.73 FWH2980 1 17.00 15.73 FWH4180 2 25.98 15.73 FWH5080 1 - AS/SA 15.73 FWH5080 1 - AP/PA 33.11 FWH5080 1 - AP/PA 16.15 FWH5480 1 - AS/SA 17.00	(1.25)	24 13/16"	(630)	26"	(660)	78 ¹/ ₈ "	(1984)	8.69	(0.81)	13.48	(1.25)	17.21	(1.60)
FWH31611 1 16.72 FWH41611 2 22.24 FWH41611 1 11.43 FWH50611 1 - AS/SA 13.48 FWH50611 2 - AP/PA 28.34 FWH50611 1 - AP/PA 13.83 FWH54611 1 - AS/SA 14.55 FWH54611 1 - AP/PA 30.51 FWH56611 1 - AP/PA 14.91 FWH60611 1 - AP/PA 14.91 FWH60611 1 - AP/PA 17.08 FWH80611 1 16.72 FWH2180S - - FWH22180S - - FWH2780 1 15.73 FWH2980 1 17.00 FWH3180 1 19.54 FWH4180 2 25.98 FWH4180 1 13.35 FWH5080 1 - AS/SA 15.73 FWH5080 1 - AP/PA 33.11 FWH5080 1 - AP/PA 16.15 FWH5480 1 - AS/SA </td <td>(1.35)</td> <th>26 13/16"</th> <td>(681)</td> <td>28"</td> <td>(711)</td> <td>78 1/8"</td> <td>(1984)</td> <td>9.61</td> <td>(0.89)</td> <td>14.55</td> <td>(1.35)</td> <td>18.36</td> <td>(1.71)</td>	(1.35)	26 13/16"	(681)	28"	(711)	78 1/8"	(1984)	9.61	(0.89)	14.55	(1.35)	18.36	(1.71)
FWH41611 2 22.24 FWH41611 1 11.43 FWH50611 1 - AS/SA 13.48 FWH50611 2 - AP/PA 28.34 FWH50611 1 - AS/SA 14.55 FWH54611 2 - AP/PA 30.51 FWH54611 1 - AP/PA 14.91 FWH60611 1 - AS/SA 16.72 FWH60611 2 - AP/PA 34.86 FWH60611 1 - AP/PA 17.08 FWH80611 1 16.72 FWH2180S - - FWH2280 1 15.73 FWH2980 1 17.00 FWH3180 1 19.54 FWH4180 2 25.98 FWH4180 1 13.35 FWH5080 1 - AS/SA 15.73 FWH5080 1 - AP/PA 33.11 FWH5080 1 - AP/PA 16.15 FWH5480 1 - AS/SA 17.00	(1.55)	30 13/16"	(783)	32"	(813)	78 ¹/ ₈ "	(1984)	11.45	(1.06)	16.72	(1.55)	20.64	(1.92)
FWH41611 1 11.43 FWH50611 1 - AS/SA 13.48 FWH50611 2 - AP/PA 28.34 FWH50611 1 - AP/PA 13.83 FWH54611 1 - AS/SA 14.55 FWH54611 1 - AP/PA 30.51 FWH56611 1 - AP/PA 14.91 FWH60611 1 - AS/SA 16.72 FWH60611 2 - AP/PA 34.86 FWH80611 1 1 14.55 FWH80611 FWH2180S - - FWH2780 1 15.73 FWH2980 1 17.00 FWH3180 1 19.54 FWH4180 2 25.98 FWH4180 2 25.98 FWH4180 1 13.35 FWH5080 1 - AS/SA 15.73 FWH5080 1 - AP/PA 33.11 FWH5080 1 - AP/PA 16.15 FWH5480 1 - AS/SA 17.00	(2.07)	41"	(1039)	43 7/8"	(1112)	78 ¹/ ₈ "	(1984)	12.20	(1.13)	22.24	(2.07)	27.46	(2.55)
FWH50611 1 - AS/SA 13.48 FWH50611 2 - AP/PA 28.34 FWH50611 1 - AP/PA 13.83 FWH54611 1 - AS/SA 14.55 FWH54611 1 - AP/PA 30.51 FWH54611 1 - AP/PA 14.91 FWH60611 1 - AS/SA 16.72 FWH60611 2 - AP/PA 34.86 FWH60611 1 - AP/PA 17.08 FWH80611 1 1 14.55 FWH2780 FWH2180S FWH2780 1 15.73 FWH2980 1 17.00 FWH3180 1 19.54 FWH4180 2 25.98 FWH4180 1 13.35 FWH5080 1 - AS/SA 15.73 FWH5080 2 - AP/PA 33.11 FWH5080 1 - AP/PA 16.15 FWH5480 1 - AS/SA 17.00	(1.06)	19 7/8"	(505)	21 1/16"	(535)	78 1/8"	(1984)	12.20	(1.13)	11.43	(1.06)	27.46	(2.55)
FWH50611 2 - AP/PA 28.34 FWH50611 1 - AP/PA 13.83 FWH54611 1 - AS/SA 14.55 FWH54611 2 - AP/PA 30.51 FWH54611 1 - AP/PA 14.91 FWH60611 1 - AS/SA 16.72 FWH60611 1 - AP/PA 34.86 FWH60611 1 - AP/PA 17.08 FWH80611 1 1 16.72 16.72 FWH2180S - - FWH2780 1 15.73 15.73 FWH2980 1 17.00 19.54 FWH4180 2 25.98 14.45 FWH4180 1 13.35 15.73 FWH5080 1 - AS/SA 15.73 FWH5080 1 - AP/PA 33.11 FWH5080 1 - AP/PA 16.15 FWH5480 1 - AS/SA 17.00	(1.25)	24 13/16"	(630)	26"	(660)	78 ¹/ ₈ "	(1984)	17.38	(1.62)	13.48	(1.25)	33.89	(3.15)
FWH50611 1 - AP/PA 13.83 FWH54611 1 - AS/SA 14.55 FWH54611 2 - AP/PA 30.51 FWH54611 1 - AP/PA 14.91 FWH60611 1 - AS/SA 16.72 FWH60611 1 - AP/PA 34.86 FWH60611 1 - AP/PA 17.08 FWH90611 1 1 16.72 16.72 FWH2180S - - FWH2780 1 15.73 15.73 FWH2980 1 17.00 19.54 FWH4180 2 25.98 14.45 FWH4180 1 13.35 15.73 FWH5080 1 - AS/SA 15.73 FWH5080 1 - AP/PA 33.11 FWH5080 1 - AP/PA 16.15 FWH5480 1 - AS/SA 17.00	(2.63)	52 1/4"	(1327)	55 ¹/ ₈ "	(1400)	78 ¹/ ₈ "	(1984)	17.38	(1.62)	28.34	(2.63)	33.89	(3.15)
FWH54611 1 - AS/SA 14.55 FWH54611 2 - AP/PA 30.51 FWH54611 1 - AP/PA 14.91 FWH60611 1 - AS/SA 16.72 FWH60611 2 - AP/PA 34.86 FWH60611 1 - AP/PA 17.08 FWH80611 1 1 14.55 FWH2180S - - FWH2780 1 15.73 FWH2980 1 17.00 FWH3180 1 19.54 FWH4180 2 25.98 FWH4180 1 13.35 FWH5080 1 - AS/SA 15.73 FWH5080 2 - AP/PA 33.11 FWH5080 1 - AS/SA 17.00	(1.28)	25 1/2"	(647)	26 11/16"	(678)	78 1/8"	(1984)	17.38	(1.62)	13.83	(1.28)	33.89	(3.15)
FWH54611 2 - AP/PA 30.51 FWH54611 1 - AP/PA 14.91 FWH60611 1 - AS/SA 16.72 FWH60611 2 - AP/PA 34.86 FWH60611 1 - AP/PA 17.08 FWH80611 1 1 14.55 FWH90611 1 1 16.72 FWH2780 1 15.73 FWH2980 1 17.00 FWH3180 1 19.54 FWH4180 2 25.98 FWH4180 1 13.35 FWH5080 1 - AS/SA 15.73 FWH5080 2 - AP/PA 33.11 FWH5080 1 - AS/SA 17.00	(1.35)	26 13/16"	(681)	28"	(660)	78 1/8"	(1984)	19.22	(1.79)	14.55	(1.35)	36.18	(3.36)
FWH54611 1 - AP/PA 14.91 FWH60611 1 - AS/SA 16.72 FWH60611 2 - AP/PA 34.86 FWH60611 1 - AP/PA 17.08 FWH90611 1 14.55 1 16.72 FWH2180S - - FWH2780 1 15.73 5 FWH2980 1 17.00 7 FWH3180 1 19.54 7 FWH4180 2 25.98 7 FWH4180 1 13.35 7 FWH5080 1 - AS/SA 15.73 FWH5080 2 - AP/PA 33.11 FWH5080 1 - AP/PA 16.15 FWH5480 1 - AS/SA 17.00	(2.83)	56 1/4"	(1429)	59 1/8"	(1502)	78 1/8"	(1984)	19.22	(1.79)	30.51	(2.83)	36.18	(3.36)
FWH60611 1 - AS/SA 16.72 FWH60611 2 - AP/PA 34.86 FWH60611 1 - AP/PA 17.08 FWH80611 1 14.55 1 16.72 FWH2180S - - FWH2780 1 15.73 1 17.00 FWH3180 1 19.54 1 19.54 FWH4180 2 25.98 FWH4180 1 13.35 FWH5080 1 - AS/SA 15.73 FWH5080 2 - AP/PA 33.11 FWH5080 1 - AP/PA 16.15 FWH5480 1 - AS/SA 17.00	(1.58)	27 1/2"	(698)	28 11/16"	(729)	78 ¹/ ₈ "	(1984)	19.22	(1.79)	14.91	(1.58)	36.18	(3.36)
FWH60611 2 - AP/PA 34.86 FWH60611 1 - AP/PA 17.08 FWH80611 1 14.55 FWH90611 1 16.72 FWH2180S - - FWH2780 1 15.73 FWH2980 1 17.00 FWH3180 1 19.54 FWH4180 2 25.98 FWH4180 1 13.35 FWH5080 1 - AS/SA 15.73 FWH5080 2 - AP/PA 33.11 FWH5080 1 - AP/PA 16.15 FWH5480 1 - AS/SA 17.00	(1.55)	30 13/16"	(783)	32"	(813)	78 ¹/ ₈ "	(1984)	22.91	(2.13)	16.72	(1.55)	40.76	(3.79)
FWH60611 1 - AP/PA 17.08 FWH80611 1 14.55 FWH90611 1 16.72 FWH2180S - - FWH2780 1 15.73 FWH2980 1 17.00 FWH3180 1 19.54 FWH4180 2 25.98 FWH4180 1 13.35 FWH5080 1 - AS/SA 15.73 FWH5080 2 - AP/PA 33.11 FWH5080 1 - AP/PA 16.15 FWH5480 1 - AS/SA 17.00	(3.24)	64 1/2"	(1632)	67 1/8"	(1705)	78 ¹/ ₈ "	(1984)	22.91	(2.13)	34.86	(3.24)	40.76	(3.79)
FWH80611 1 14.55 FWH90611 1 16.72 FWH2180S - - FWH2780 1 15.73 FWH2980 1 17.00 FWH3180 1 19.54 FWH4180 2 25.98 FWH4180 1 13.35 FWH5080 1 - AS/SA 15.73 FWH5080 2 - AP/PA 33.11 FWH5080 1 - AP/PA 16.15 FWH5480 1 - AS/SA 17.00	(1.68)	31 1/2"	(800)	32 11/16"	(830)	78 1/8"	(1984)	22.91	(2.13)	17.08	(1.68)	40.76	(3.79)
FWH2180S - - FWH2780 1 15.73 FWH2980 1 17.00 FWH3180 1 19.54 FWH4180 2 25.98 FWH4180 1 13.35 FWH5080 1 - AS/SA 15.73 FWH5080 2 - AP/PA 33.11 FWH5080 1 - AP/PA 16.15 FWH5480 1 - AS/SA 17.00	(1.35)	26 13/16"	(681)	28"	(660)	78 1/8"	(1984)	28.83	(2.68)	14.55	(1.35)	54.43	(5.06)
FWH2180S - - FWH2780 1 15.73 FWH2980 1 17.00 FWH3180 1 19.54 FWH4180 2 25.98 FWH4180 1 13.35 FWH5080 1 - AS/SA 15.73 FWH5080 2 - AP/PA 33.11 FWH5080 1 - AP/PA 16.15 FWH5480 1 - AS/SA 17.00	(1.55)	30 13/16"	(783)	32"	(813)	78 1/8"	(1984)	34.36	(3.19)	16.72	(1.55)	61.30	(5.70)
FWH2980 1 17.00 FWH3180 1 19.54 FWH4180 2 25.98 FWH4180 1 13.35 FWH5080 1 - AS/SA 15.73 FWH5080 2 - AP/PA 33.11 FWH5080 1 - AP/PA 16.15 FWH5480 1 - AS/SA 17.00	. ,		. ,		. , ,	-		7.19	(0.67)	-	, ,	16.08	(1.49)
FWH2980 1 17.00 FWH3180 1 19.54 FWH4180 2 25.98 FWH4180 1 13.35 FWH5080 1 - AS/SA 15.73 FWH5080 2 - AP/PA 33.11 FWH5080 1 - AP/PA 16.15 FWH5480 1 - AS/SA 17.00	(1.46)	24 13/16"	(630)	26"	(660)	91 1/4"	(2318)	10.41	(0.97)	15.73	(1.46)	19.98	(1.86)
FWH4180 2 25.98 FWH4180 1 13.35 FWH5080 1 - AS/SA 15.73 FWH5080 2 - AP/PA 33.11 FWH5080 1 - AP/PA 16.15 FWH5480 1 - AS/SA 17.00	(1.58)	26 13/16"	(681)	28"	(711)	91 1/4"	(2318)	11.52	(1.07)	17.00	(1.58)	21.31	(1.98)
FWH4180 2 25.98 FWH4180 1 13.35 FWH5080 1 - AS/SA 15.73 FWH5080 2 - AP/PA 33.11 FWH5080 1 - AP/PA 16.15 FWH5480 1 - AS/SA 17.00	(1.82)	30 13/16"	(783)	32"	(813)	91 1/4"	(2318)	13.72	(1.28)	19.54	(1.82)	23.96	(2.23)
FWH5080 1 - AS/SA 15.73 FWH5080 2 - AP/PA 33.11 FWH5080 1 - AP/PA 16.15 FWH5480 1 - AS/SA 17.00	(2.41)	41"	(1039)	43 7/8"	(1112)	91 1/4"	(2318)	14.62	(1.36)	25.98	(2.41)	31.83	(2.96)
FWH5080 2 - AP/PA 33.11 FWH5080 1 - AP/PA 16.15 FWH5480 1 - AS/SA 17.00	(1.24)	19 7/8"	(505)	21 1/16"	(535)	91 1/4"	(2318)	14.62	(1.36)	13.35	(1.24)	31.83	(2.96)
FWH5080 2 - AP/PA 33.11 FWH5080 1 - AP/PA 16.15 FWH5480 1 - AS/SA 17.00	(1.46)	24 13/16"	(630)	26"	(660)	91 1/4"	(2318)	20.82	(1.93)	15.73	(1.46)	39.30	(3.65)
FWH5080 1 - AP/PA 16.15 FWH5480 1 - AS/SA 17.00	(3.08)	52 1/4"	(1327)	55 ¹/ ₈ "	(1400)	91 1/4"	(2318)	20.82	(1.93)	33.11	(3.08)	39.30	(3.65)
FWH5480 1 - AS/SA 17.00	(1.50)	25 1/2"	(647)	26 11/16"	(678)	91 1/4"	(2318)	20.82	(1.93)	16.15	(1.50)	39.30	(3.65)
	(1.58)	26 13/16"	(681)	28"	(660)	91 1/4"	(2318)	23.03	(2.14)	17.00	(1.58)	41.95	(3.90)
	(3.31)	56 1/4"	(1429)	59 ¹/ ₈ "	(1502)	91 1/4"	(2318)	23.03	(2.14)	35.64	(3.31)	41.95	(3.90)
FWH5480 1 - AP/PA 17.42	(1.61)	27 1/2"	(698)	28 11/16"	(729)	91 1/4"	(2318)	23.03	(2.14)	17.42	(1.61)	41.95	(3.90)
FWH6080 1 - AS/SA 19.54	(1.82)	30 13/16"	(783)	32"	(813)	91 1/4"	(2318)	27.44	(2.55)	19.54	(1.82)	47.25	(4.39)
FWH6080 2 - AP/PA 40.71		64 1/2"	(1632)	67 1/8"	(1705)	91 1/4"	(2318)	27.44	(2.55)	40.71	(3.78)	47.25	(4.39)
FWH6080 1 - AP/PA 19.96		31 1/2"	(800)	32 11/16"	(830)	91 1/4"	(2318)	27.44	(2.55)	19.96	(1.85)	47.25	(4.39)
FWH8080 1 17.00	(3.78)		(681)	28"	(660)	91 1/4"	(2318)	34.55	(3.21)	17.00	(1.58)	63.09	(5.86)
FWH9080 1 19.54		26 13/16"	(783)	32"	(813)	91 1/4"	(2318)	41.16	(3.82)	19.54	(1.82)	71.05	(6.60)

[•] Dimensions in parentheses are in millimeters or square meters.
• For two-panel AP/PA doors with only one panel open, clear opening is based on the active panel open and the passive panel closed.

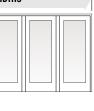


Custom Sizes and Specification Formulas





[·] Dimensions in parentheses are in millimeters

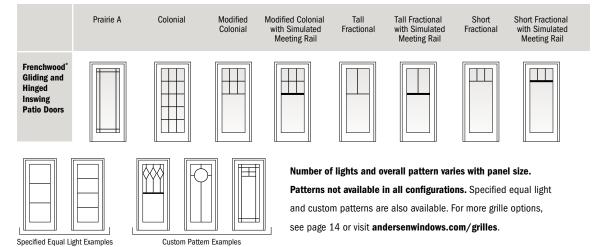




Available in 1/8" (3) increments between minimum and maximum widths and heights. Some restrictions apply. Measurement guide can be found at

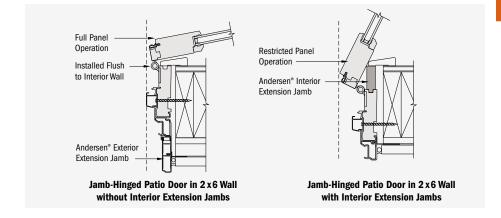
andersenwindows.com/measure.

Grille Patterns



Interior Extension Jambs

Use of interior extension jambs or drywall return will restrict panel operation on jamb-hinged patio doors. Jamb-hinged patio doors must be installed flush to the interior to achieve full panel operation.

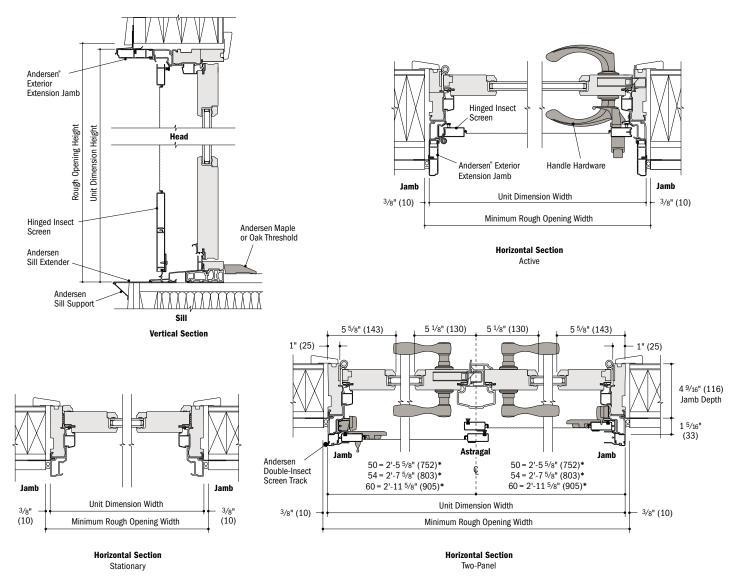


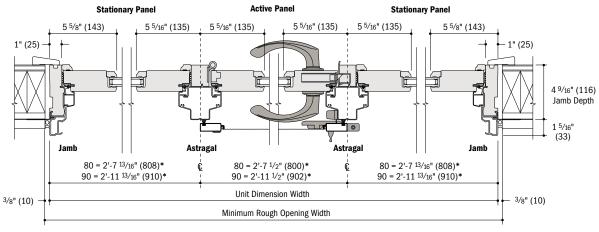
[•] Clear Opening formulas provide dimensions for determining area available for egress. Vent opening, or area available for passage of air, is equal to clear opening. Minimum R.O. (minimum rough opening) formulas provide minimum rough opening width and height dimensions. Unobst. Glass (unobstructed glass) formulas provide dimensions for determining area available for passage of light.

FRENCHWOOD® HINGED INSWING PATIO DOORS

Frenchwood® Hinged Inswing Patio Door Details

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8



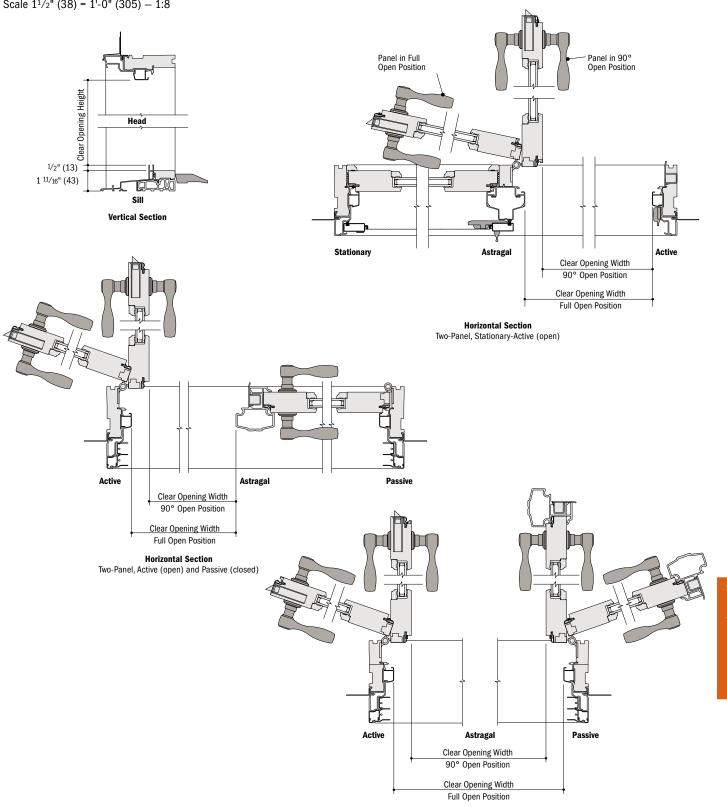


Horizontal Section Three-Panel

- 4 9/16" (116) overall jamb depth measurement is from back side of installation flange.
- Light-colored areas are parts included with door. Dark-colored areas are additional Andersen* parts required to complete door assembly as shown.
- Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 210-211.
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer product installation guides at andersenwindows.com.
- Dimensions in parentheses are in millimeters.
- *Dimension indicates location of astragal centerline.



Clear Opening Details Scale $1^{1}/2^{11}$ (38) = $1^{1}-0^{11}$ (305) -1:8



Horizontal Section

Two-Panel, Active (open) and Passive (open)

[·] Light-colored areas are parts included with door. Dark-colored areas are additional Andersen® parts required to complete door assembly as shown.

[•] Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 210-211.

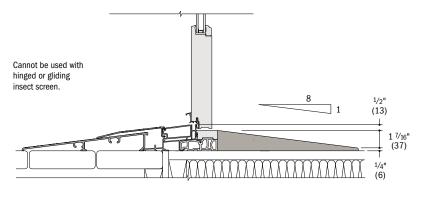
• Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com.

[·] Dimensions in parentheses are in millimeters.

FRENCHWOOD® HINGED INSWING PATIO DOORS

Ramped Sill Detail

Scale $1^{1}/2^{1}$ (38) = 1'-0" (305) - 1:8



Vertical Section

Vertical Joining Detail

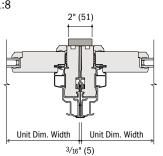
Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8

Overall Door Dimension Width

Sum of individual door widths plus 3/16" (5) for each join.

Overall Rough Opening Width

Overall door dimension width plus $^{3}/_{4}$ " (19).



Horizontal Section

Frenchwood* Hinged Inswing to Frenchwood Hinged Inswing

Vertical Joining Detail - Fiberglass

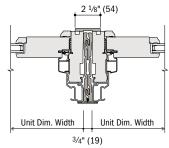
Scale $1^{1}/2^{1}$ (38) = 1'-0'' (305) -1:8

Overall Door Dimension Width

Sum of individual door widths plus $\frac{3}{4}$ " (19) for each join.

Overall Rough Opening Width

Overall door dimension width plus $\frac{3}{4}$ " (19).



Horizontal Section

Frenchwood* Hinged Inswing to Frenchwood Hinged Inswing

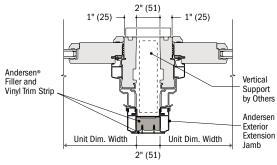
Andersen does not recommend joining of hinge jamb to hinge jamb.

For more joining information, see the combination designs section starting on page 181.

Separate Rough Openings Detail

Scale $1^{1}/2$ " (38) = 1'-0" (305) - 1:8

To meet structural requirements or to achieve a wider joined appearance, doors may be installed into separate rough openings having vertical support (by others) in combination with Andersen* exterior filler and exterior vinyl trim.

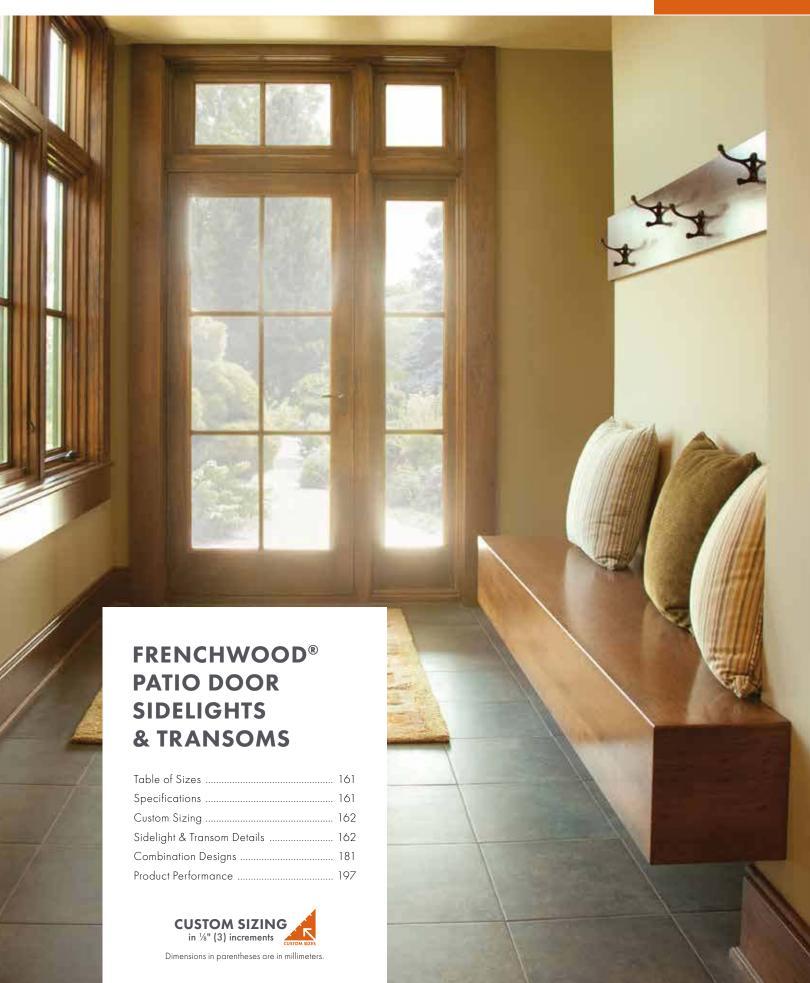


Horizontal Section

Frenchwood* Hinged Inswing and Frenchwood Hinged Inswing

- · Light-colored areas are parts included with door. Dark-colored areas are additional Andersen* parts required to complete door assembly as shown.
- Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on page 210-211.
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com.
- Andersen recommends installation of doors into separate rough openings. Consult with an architect or structural engineer regarding minimum requirements for structural support members between adjacent rough openings.
- Dimensions in parentheses are in millimeters.





FRENCHWOOD® PATIO DOOR SIDELIGHTS & TRANSOMS

FEATURES

FRAME

- All basic exterior frame members are fiberglass-reinforced composite, which maintains an attractive appearance while minimizing maintenance
- 1 The frame members are attached to a water-repellent preservativetreated wood subframe for longlasting* protection and performance. The subframe is grooved to accept extension jambs.
- The exterior of the wood door panel is protected with a long-lasting* urethane base finish in white, Sandtone, Terratone or forest green.
- Panel interior surfaces are unfinished pine veneer. Unfinished maple or oak veneers are available as options. Lowmaintenance prefinished white interiors are also available.
- **1** The sill of the Frenchwood patio door sidelight is made with three-piece construction. The subsill is made of Fibrex® material, and the sill step is solid oak. The exterior sill member is made of extruded aluminum with an attractive wear-resistant, heatbaked finish in neutral gray. This combination of materials combines durability and low maintenance with excellent insulating characteristics.

GLASS

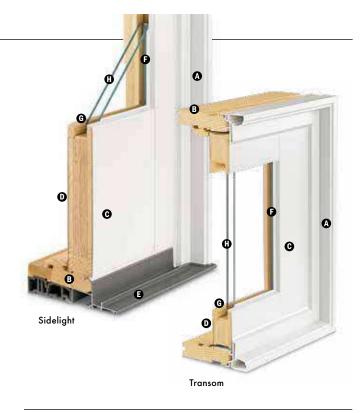
- In addition to stainless steel glass spacers, black or white glass spacers are now available to allow the spacer to blend in with the unit color.
- @ Panels are silicone bed glazed and finished with an interior wood stop.
- High-Performance options include:
- Low-E4[®] tempered glass
- Low-E4 HeatLock® tempered glass
- Low-E4 SmartSun[™] tempered glass
- · Low-E4 SmartSun HeatLock tempered glass
- Low-E4 Sun tempered glass

Additional glass options are available. Contact your Andersen supplier.

A removable translucent film helps shield the glass from damage during delivery and construction, and simplifies finishing at the job site.

Patterned Glass

Patterned glass options are available. See page 12 for more details.



EXTERIOR & INTERIOR OPTIONS

EXTERIOR COLORS







INTERIOR OPTIONS



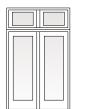


Fiberglass-reinforced joining materials are available in 4% (116) and 6% (167) depths. See joining information on pages 191-196.











ACCESSORIES Sold Separately

FRAME

Extension Jambs

Standard jamb depth is 4%16" (116). Pine, maple and oak veneers, or prefinished white interior extension jambs are available in 1/16" (1.5) increments between 5 1/16" (129) and 71/8" (181).

GLASS

Andersen® Art Glass

Andersen art glass panels come in a variety of original patterns. Available for stationary panels, sidelights and transoms. See art glass section starting on page 173 for more information or visit andersenwindows.com/artglass.

GRILLES

Grilles are available in a variety of configurations and widths.

EXTERIOR TRIM

Available with Andersen exterior trim. See exterior trim section starting on page 175.

- · Painting and staining may cause damage to
- 400 Series patio door sidelights and transoms in Terratone color may be painted any color lighter than Terratone color using quality oil-based or latex paint.
- · Do not paint 400 Series patio door sidelights or transoms in white, canvas, Sandtone, dark bronze, forest green or black exterior colors.
- · Andersen does not warrant the adhesion or performance of homeowner-applied paint over vinyl or other factory-coated surfaces.
- · For vinyl painting instructions and preparation, contact your Andersen supplier.
- · Do not paint weatherstrip.
- · Creosote-based stains should not come in contact with Andersen products.
- · Abrasive cleaners or solutions containing corrosive solvents should not be used on Andersen products

*Visit andersenwindows.com/warranty for details. Dimensions in parentheses are in millimeters.

Printing limitations prevent exact replication of colors and finishes. See your Andersen supplier for actual color and finish samples. Naturally occurring variations in grain, color and texture of wood make each window one of a kind. All wood interiors are unfinished unless a finish is specified.

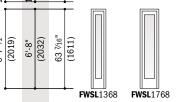


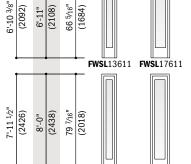
Table of Frenchwood® Patio Door Transom, Sidelight Transom and Sidelight Sizes

Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96

Transom/Sidelight Dimension	1'-2 ¹³ / ₁₆ " (376)	1'-6 ¹³ / ₁₆ " (478)	2'-0 ¹ / ₂ " (622)	2'-6 ¹ /8" (765)	2'-8 ¹ /8" (816)	3'-0 ¹ /8" (918)	4'-0" (1219)	4'-11 ¹ /4" (1505)	5'-3 ¹ / ₄ " (1607)	5'-11 ¹ / ₄ " (1810)
Minimum Rough Opening	1'-3 1/2" (394)	1'-7 ¹ /2" (495)	2'-1" (635)	2'-7" (787)	2'-9" (838)	3'-1" (940)	4'-1" (1245)	5'-0" (1524)	5'-4" (1626)	6'-0" (1829)
Unobstructed Glass (single sash only)	6 ³ /8" (162)	10 ³ /8" (264)	13 ⁵ /16" (338)	18 ¹⁵ / ₁₆ " (481)	20 ¹⁵ / ₁₆ " (532)	24 ¹⁵ / ₁₆ " (633)	36 ¹³ / ₁₆ " (935)	48 ¹ / ₁₆ " (1221)	52 ¹ / ₁₆ " (1322)	60 ¹ / ₁₆ " (1526)
							13 ⁵ /16" (338)	18 ¹⁵ / ₁₆ " (481)	20 ¹⁵ / ₁₆ " (532)	24 ¹⁵ / ₁₆ " (633)

=										
	FWSLT 1311	FWSLT1711	FWT 2111	FWT 2711	FWT 2911	FWT 3111	FWT 4111	FWT 5011	FWT 5411	FWT 6011
11-0 13/16" (325) 1-1 1/2" (343) 4 3/8" (111)							FWT -2-4111	FWT -2-5011	FWT -2-5411	FWT -2-6011
	FWSLT1316	FWSLT1716	FWT 2116	FWT 2716	FWT 2916	FWT 3116	FWT 4116	FWT 5016	FWT 5416	FWT 6016
1'-5 13/16" (452) 1'-6 1/2" (470) 9 3/8" (238)							FWT -2-4116	FWT -2-5016	FWT -2-5416	FWT -2-6016
1-9 13/16" (554) 1'-10 1/2' (572) 13 3/8" (340)	FWSLT13110	FWSLT17110	FWT 21110	FWT 27110	FWT 29110	FWT 31110	FWT 41110	FWT 50110	FWT 54110	FWT 60110
1-9 13/16" (554) 1'-10 1/2" (572) 13 3/8" (340)							FWT -2-41110	FWT -2-50110	FWT- 2-54110	FWT -2-60110





FWSL1380 • "Transom/Sidelight Dimension" always refers to outside frame-toframe dimension.

FWSL1780

• "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 210-211 for more details.

Frenchwood® Patio Door Sidelight Area Specifications

Sidelight Number	A	ass rea t./(m²)	Overall Window Area Sq. Ft./(m²)					
FWSL1368	2.82	(0.26)	8.18	(0.76)				
FWSL1768	4.58	(0.43)	10.39	(0.97)				
FWSL13611	2.95	(0.27)	8.47	(0.79)				
FWSL17611	4.79	(0.45)	10.76	(1.00)				
FWSL1380	3.53	(0.33)	9.82	(0.91)				
FWSL1780	5.74	(0.53)	12.48	(0.16)				



Custom-size doors are available in 1/8" (3) increments.

See page 162 for custom sizes and specifications.

Frenchwood® Patio Door Sidelight Transom **Area Specifications**

Sidelight Transom Number	Ar	ass ea t./(m²)	Overall Window Area Sq. Ft./(m²)					
FWSLT1311	0.20	(0.02)	1.32	(0.12)				
FWSLT1316	0.42	(0.04)	1.83	(0.17)				
FWSLT13110	0.60	(0.06)	2.24	(0.21)				
FWSLT1711	0.32	(0.03)	1.67	(0.16)				
FWSLT1716	0.68	(0.06)	2.33	(0.22)				
FWSLT17110	0.97	(0.09)	2.85	(0.27)				

Frenchwood® Patio Door Transom Area **Specifications**

Ar	ea	Overall Window Area Sq. Ft./(m ²)			
0.41	(0.04)	2.18	(0.20)		
0.87	(0.08)	3.03	(0.28)		
1.24	(0.12)	3.71	(0.35)		
0.58	(0.05)	2.68	(0.25)		
1.24	(0.12)	3.73	(0.35)		
1.77	(0.16)	4.56	(0.42)		
0.64	(0.06)	2.86	(0.27)		
1.37	(0.13)	3.97	(0.37)		
1.95	(0.18)	4.87	(0.45)		
0.76	(0.07)	3.21	(0.30)		
1.63	(0.15)	4.47	(0.42)		
2.33	(0.22)	5.47	(0.51)		
	0.41 0.87 1.24 0.58 1.24 1.77 0.64 1.37 1.95 0.76	0.87 (0.08) 1.24 (0.12) 0.58 (0.05) 1.24 (0.12) 1.77 (0.16) 0.64 (0.06) 1.37 (0.13) 1.95 (0.18) 0.76 (0.07) 1.63 (0.15)	Area Sq. Ft./(m²) Co.41 (0.04) 2.18 (0.87 (0.08) 3.03 (0.12) 3.71 (0.58 (0.05) 2.68 (0.12) 3.73 (0.16) 4.56 (0.64 (0.06) 2.86 (1.37 (0.13) 3.97 (0.13) 3.97 (0.16) (0.07) 3.21 (0.16) (0.07) 3.21 (0.16) (0.15) 4.47		

Frenchwood® Patio Door Transom Area **Specifications**

Transom Number	Ar	ass ea t./(m²)	Ar	Window ea t./(m²)
FWT4111	1.13	(0.11)	4.27	(0.40)
FWT4116	2.41	(0.22)	5.94	(0.55)
FWT41110	3.43	(0.32)	7.27	(0.68)
FWT5011	1.47	(0.14)	5.27	(0.49)
FWT5016	3.14	(0.29)	7.33	(0.68)
FWT50110	4.48	(0.42)	8.98	(0.83)
FWT5411	1.59	(0.15)	5.63	(0.52)
FWT5416	3.40	(0.32)	7.82	(0.73)
FWT 54110	4.85	(0.45)	9.58	(0.89)
FWT6011	1.84	(0.17)	6.34	(0.59)
FWT6016	3.93	(0.37)	8.81	(0.82)
FWT60110	5.60	(0.52)	10.79	(1.00)
FWT-2 4111	0.82	(0.08)	4.27	(0.40)
FWT-2 4116	1.74	(0.16)	5.94	(0.55)
FWT-2 41110	2.49	(0.23)	7.27	(0.68)
FWT-2 5011	1.16	(0.11)	5.27	(0.49)
FWT- 2 5016	2.48	(0.23)	7.33	(0.68)
FWT-2 50110	3.53	(0.33)	8.98	(0.83)
FWT-2 5411	1.28	(0.12)	5.63	(0.52)
FWT- 2 5416	2.74	(0.26)	7.82	(0.73)
FWT- 2 54110	3.91	(0.36)	9.58	(0.89)
FWT-2 6011	1.53	(0.14)	6.34	(0.59)
FWT- 2 6016	3.26	(0.30)	8.81	(0.82)
FWT- 2 60110	4.65	(0.43)	10.79	(1.00)

[·] Dimensions in parentheses are in square meters

Dimensions in parentheses are in millimeters.

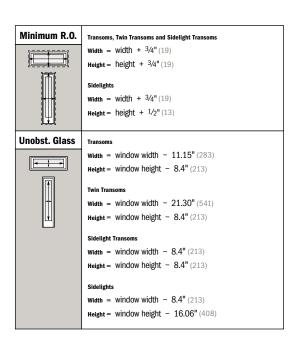
FRENCHWOOD® PATIO DOOR SIDELIGHTS & TRANSOMS

Custom Sizes and Specification Formulas

Available in 1/8" (3) increments between minimum and maximum widths and heights. Some restrictions apply. Measurement guide can be found at andersenwindows.com/measure.

Sidelight Transoms Transoms to 71 1/4" 14 ³/₄" to ^{18 13}/₁₆" 24 1/2" (478)(375)(622)(1810)**CUSTOM WIDTHS CUSTOM WIDTHS** " to 21 ^{13/16}" (554) to 21 ^{13/16}" (554) **CUSTOM HEIGHTS CUSTOM HEIGHTS** 12 ³/₄" t 12 3/4" (324)

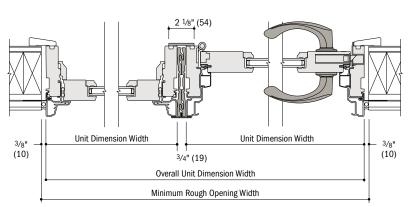
Sidelights Twin Transoms 14 ^{3/4}" to 18 ^{13/}16" 71 1/4" 48" (1219) to (1810) (375) (478)**CUSTOM WIDTHS CUSTOM WIDTHS** " to 21 ^{13/16}" to 95 ½" (2426) (554)**CUSTOM HEIGHTS** HEIGHTS 12 ¾" t (324) 78" (1981) CUSTOM



. Minimum R.O. (minimum rough opening) formulas provide minimum rough opening width and height dimensions. Unobst. Glass (unobstructed glass) formulas provide dimensions for determining area available for passage of light.

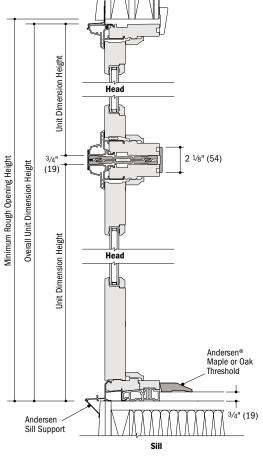
Frenchwood® Patio Door Transom and Sidelight Details

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8



Horizontal Section

Frenchwood® Patio Door Sidelight to Frenchwood Hinged Inswing Patio Door



Vertical Section

Frenchwood® Patio Door Transom over Frenchwood Patio Door Sidelight

For more joining information, see the combination designs section starting on page 181.

- · Light-colored areas are parts included with patio door sidelights/transoms or doors. Dark-colored areas are additional Andersen*
- parts required to complete patio door sidelights/transoms or door assembly as shown.

 Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 210-211.
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com.
- · Dimensions in parentheses are in millimeters





COMPLEMENTARY CURVED TOP PATIO DOORS

FEATURES

FRAME

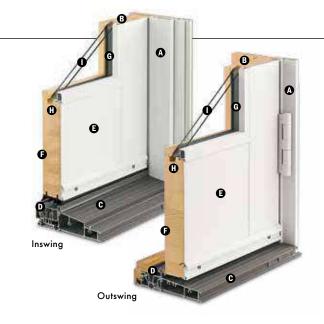
A Heavy-duty extruded aluminum cladding protects the frame exterior, providing low-maintenance durability. Standard cladding finish meets the AAMA 2604 specification. An optional finish that meets the AAMA 2605 specification is also available.

Installation flange extends 1 1/2" (38) around three sides of the unit to help properly position the unit in the opening. Installation clips are standard for increased structural anchoring to building members. Mounted around the frame perimeter, the clips rotate into position and can be bent into place against the framing members to suit all jamb conditions.

- **B** Wood frame members are treated with a water-repellent wood preservative for long-lasting* protection and performance. Radii are made of laminated continuous veneers. Lineal components are engineered wood with a pine core.
- Extruded aluminum sill is thermally broken and available in a painted bronze or grav finish. Innovative sill design provides superior water management. Standard outswing sills have an oak cap. Maple or mahogany** is optional. Inswing sills have an interior wood trim strip to match the interior finish.
- One-piece compression weatherstrip at the frame sides and head protects against air and water infiltration. Flexible thermoplastic sweep is featured at the bottom of the panel on inswing units. Outswing doors also feature a polypropylene rain skirt at the panel sides and top for added protection.

PANEL

- Heavy-duty extruded aluminum cladding protects the panel exterior, providing low-maintenance durability.
- Panel interior surfaces are unfinished wood veneers. Available species are pine, maple and oak.



GLASS

- **6** In addition to stainless steel glass spacers, black or white glass spacers are now available to allow the spacer to blend in with the unit color.
- Silicone glazing bead combined with two-sided silicone tape provide superior weathertightness.
- High-Performance options include:
- · Low-E4® tempered glass
- Low-E4 HeatLock® tempered glass Low-E4 SmartSun[™] tempered glass
- Low-E4 SmartSun HeatLock
- tempered glass
- · Low-E4 Sun tempered glass

A removable translucent film helps shield the glass from damage during delivery and construction, and simplifies finishing at the job site.

Additional glass options are available. Contact your Andersen supplier.

OPERATION

Inswing and outswing units are available. Choose left-hinged, righthinged or stationary as viewed from the exterior.

HARDWARE

Multi-Point Locking System

The complementary hinged patio door has a multi-point locking system with a hook bolt above and below the center dead bolt. This system provides a weathertight seal and enhanced security.

Hinges

Adjustable hinges are standard on inswing patio doors and have ballbearing pivots for smooth, frictionless movement. Feature easy horizontal and vertical adjustment, plus \dot{q} uick-release for easy panel removal. The release feature is ideal for transporting large units up stairs or to other hard-to-reach areas.

Ball-bearing hinges are standard on outswing patio doors and are available in finishes that coordinate with hardware trim sets. Gold dust finish is standard on wood interior doors. For units with a prefinished white interior, white finish hinges are standard. Also available in finishes that coordinate with hardware.

Hardware Options†

Mix-and-match style and finish options are available to get just the right look inside and out. See pages 10-11 for hardware styles and finishes, including FSB® hardware.

ACCESSORIES Sold Separately

FRAME

Extension Jambs

Inswing and outswing standard jamb depth is 4%16" (116). Inswing is also available in a 6% (167) jamb depth. Interior extension jambs are available in 1/16" (1.5) increments between 4% (116) and 71/8" (181). Additional dimensions are available. Contact your Andersen supplier for more information.

Interior extension jambs on inswing units will restrict the full opening of the door.

Casings



Curved interior casings are available in the same profiles as other Andersen® products. Curved exterior aluminum and wood casings are available in matching radii and a variety of profiles.

HARDWARE

Exterior Keyed Lock



A six-pin key cylinder lock is available for all patio doors in styles and finishes that coordinate with the hardware. This lock allows the door to be locked and unlocked from the exterior.

GRILLES

Grilles are available in a variety of configurations and widths.

ART GLASS

Decorative insulated art glass designs are available.

EXTERIOR & INTERIOR OPTIONS



INTERIOR OPTIONS^{††}



*Visit andersenwindows.com/warranty for details. **Actual wood species is either Sapele or Sipo, both non-endangered species grown in Africa, with color and

characteristics similar to Central American mahoganies.

†Sold separately. ††Painted options available on pine only. Additional

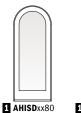
interior wood species and colors are available. "FSB" is a registered trademark of Franz Schneider Brakel GmbH & Co.

Dimensions in parentheses are in millimeters.

Naturally occurring variations in grain, color and texture of wood make each window one of a kind. All wood interiors are unfinished unless a finish is specified.

Printing limitations prevent exact replication of colors and finishes. See your Andersen supplier for actual color and finish samples.









Custom-size doors are available in 1/8" (3) increments.

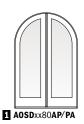
Traditional panels are standard. Custom-designed and ³/₄-light panels are also available. Stationary doors are also available (i.e., 3180\$ or 4080\$\$). Add AHISD to "Door Number" listed in table (i.e., AHISD3180).

Complementary Springline™ Hinged Inswing Patio Door Dimensions and Specifications

	-	, .,	_	_	8									
	Number		Door Di	mensions		Min. Roug	h Opening	Clear	Clear	Opening Maxim	iums			
Door Number	of Panels Open*	Radius Inches/(mm)	Side Height Inches/(mm)	Width Inches/(mm)	Height Inches/(mm)	Width Inches/(mm)	Height Inches/(mm)	Opening Area Sq. Ft./(m²)	90° Open Position Width Inches/(mm)	Full Open Position Width Inches/(mm)	Height Inches/(mm)	Glass Area Sq. Ft./(m²)	Vent Area Sq. Ft./(m²)	Overall Door Area Sq. Ft./(m ²)
3180	1	18" (457)	77 1/2" (1969)	35 15/16" (913)	95 1/2" (2426)	37" (940)	96" (2438)	17.26 (1.60)	30 7/8" (784)	32 13/16" (833)	75 3/4" (1924)	13.28 (1.23)	20.27 (1.88)	22.88 (2.13)
3380	1	19" (483)	76 1/2" (1943)	37 15/16" (964)	95 1/2" (2426)	39" (991)	96" (2438)	18.07 (1.68)	32 7/8" (835)	34 13/16" (884)	74 3/4" (1899)	14.31 (1.33)	21.45 (1.99)	24.09 (2.24)
4080	2	23 5/8" (600)	71 7/8" (1826)	47 1/4" (1200)	95 1/2" (2426)	48" (1219)	96" (2438)	21.34 (1.98)	39 15/16" (1014)	43 13/16" (1113)	70 1/8" (1781)	13.27 (1.23)	26.72 (2.48)	29.67 (2.76)
4080	1	23 5/8" (600)	71 7/8" (1826)	47 1/4" (1200)	95 1/2" (2426)	48" (1219)	96" (2438)	10.17 (0.94)	18 15/16" (481)	20 7/8" (530)	70 1/8" (1781)	13.27 (1.23)	11.72 (1.09)	29.67 (2.76)
5080	2	29 5/8" (752)	65 7/8" (1673)	59 1/4" (1505)	95 1/2" (2426)	60" (1524)	96" (2438)	24.85 (2.31)	51 15/16" (1319)	55 13/16" (1418)	64 1/8" (1629)	19.14 (1.78)	33.54 (3.12)	36.68 (3.41)
5080	1	29 5/8" (752)	65 7/8" (1673)	59 1/4" (1505)	95 1/2" (2426)	60" (1524)	96" (2438)	11.97 (1.11)	24 15/16" (633)	26 7/8" (683)	64 1/8" (1629)	19.14 (1.78)	14.53 (1.35)	36.68 (3.41)
5480	2	31 5/8" (803)	63 7/8" (1622)	63 1/4" (1607)	95 1/2" (2426)	64" (1626)	96" (2438)	25.80 (2.40)	55 15/16" (1421)	59 13/16" (1519)	62 1/8" (1578)	21.05 (1.96)	35.77 (3.32)	38.97 (3.62)
5480	1	31 5/8" (803)	63 7/8" (1622)	63 1/4" (1607)	95 1/2" (2426)	64" (1626)	96" (2438)	12.46 (1.16)	26 15/16" (684)	28 7/8" (733)	62 1/8" (1578)	21.05 (1.96)	15.45 (1.44)	38.97 (3.62)
6080	2	35 5/8" (905)	59 7/8" (1521)	71 1/4" (1810)	95 1/2" (2426)	72" (1829)	96" (2438)	27.37 (2.54)	63 15/16" (1624)	67 13/16" (1722)	58 ¹ / ₈ " (1476)	24.79 (2.30)	40.15 (3.73)	43.47 (4.04)
6080	1	35 5/8" (905)	59 7/8" (1521)	71 1/4" (1810)	95 1/2" (2426)	72" (1829)	96" (2438)	13.27 (1.23)	30 15/16" (786)	32 7/8" (835)	58 ¹ / ₈ " (1476)	24.79 (2.30)	17.24 (1.60)	43.47 (4.04)
6480	2	37 5/8" (956)	57 7/8" (1470)	75 1/4" (1911)	95 1/2" (2426)	76" (1930)	96" (2438)	27.99 (2.60)	67 15/16" (1726)	71 13/16" (1824)	56 1/8" (1426)	26.63 (2.47)	42.30 (3.93)	45.69 (4.24)
6480	1	37 5/8" (956)	57 7/8" (1470)	75 1/4" (1911)	95 1/2" (2426)	76" (1930)	96" (2438)	13.59 (1.26)	32 15/16" (837)	34 7/8" (886)	56 1/8" (1426)	26.63 (2.47)	19.84 (1.84)	45.69 (4.24)

^{• &}quot;Door Dimension" always refers to outside frame-to-frame dimension







Custom-size doors are available in 1/8" (3) increments.

Traditional panels are standard. Custom-designed and 3/4-light panels are also available. Stationary doors are also available (i.e., 3180\$ or 4080\$\$). Add AOSD to "Door Number" listed in table (i.e., AOSD3180).

Complementary Springline™ Hinged Outswing Patio Door Dimensions and Specifications

-			Door Di	mensions		Min. Rough Opening Clear			Close	Ononing Mayim	···mo			
Door Number	Number of Panels	Radius	Side Height	Width	Height	Width	Height	Clear Opening Area	90° Open Position Width	Full Open Position Width	Height	Glass Area	Vent Area	Overall Door Area
Number	Open*	Inches/(mm)	Inches/(mm)	Inches/(mm)			Inches/(mm)		Inches/(mm)	Inches/(mm)	Inches/(mm)	Sq. Ft./(m ²)	Sq. Ft./(m ²)	Sq. Ft./(m ²)
3180	1	18" (457)	77 1/2" (1969)	35 15/16" (913)	95 1/2" (2426)	37" (940)	96" (2438)	17.52 (1.63)	31 3/8" (797)	33 5/16" (846)	75 ³ / ₄ " (1924)	13.28 (1.23)	20.53 (1.91)	22.88 (2.13)
3380	1	19" (483)	76 1/2" (1943)	37 15/16" (964)	95 1/2" (2426)	39" (991)	96" (2438)	18.33 (1.70)	33 3/8" (848)	35 5/16" (897)	74 3/4" (1899)	14.31 (1.33)	21.71 (2.02)	24.09 (2.24)
4080	2	23 5/8" (600)	71 7/8" (1826)	47 1/4" (1200)	95 1/2" (2426)	48" (1219)	96" (2438)	21.73 (2.02)	40 11/16" (1033)	44 5/8" (1133)	70 1/8" (1781)	13.27 (1.23)	27.12 (2.52)	29.67 (2.76)
4080	1	23 5/8" (600)	71 7/8" (1826)	47 1/4" (1200)	95 1/2" (2426)	48" (1219)	96" (2438)	10.35 (0.96)	19 1/4" (489)	21 1/4" (540)	70 1/8" (1781)	13.27 (1.23)	11.72 (1.09)	29.67 (2.76)
5080	2	29 5/8" (752)	65 7/8" (1673)	59 ¹ / ₄ " (1505)	95 1/2" (2426)	60" (1524)	96" (2438)	25.22 (2.34)	52 11/16" (1338)	56 5/8" (1438)	64 1/8" (1629)	19.14 (1.78)	33.90 (3.15)	36.68 (3.41)
5080	1	29 5/8" (752)	65 7/8" (1673)	59 ¹ / ₄ " (1505)	95 1/2" (2426)	60" (1524)	96" (2438)	12.13 (1.13)	25 1/4" (641)	27 1/4" (692)	64 1/8" (1629)	19.14 (1.78)	14.53 (1.35)	36.68 (3.41)
5480	2	31 5/8" (803)	63 7/8" (1622)	63 1/4" (1607)	95 1/2" (2426)	64" (1626)	96" (2438)	26.16 (2.43)	56 11/16" (1440)	60 5/8" (1540)	62 1/8" (1578)	21.05 (1.96)	36.12 (3.36)	38.97 (3.62)
5480	1	31 5/8" (803)	63 7/8" (1622)	63 1/4" (1607)	95 1/2" (2426)	64" (1626)	96" (2438)	12.62 (1.17)	27 1/4" (692)	29 1/4" (743)	62 1/8" (1578)	21.05 (1.96)	15.45 (1.44)	38.97 (3.62)
6080	2	35 5/8" (905)	59 7/8" (1521)	71 1/4" (1810)	95 1/2" (2426)	72" (1829)	96" (2438)	27.70 (2.57)	64 11/16" (1643)	68 5/8" (1743)	58 ¹ / ₈ " (1476)	24.79 (2.30)	40.48 (3.76)	43.47 (4.04)
6080	1	35 5/8" (905)	59 7/8" (1521)	71 1/4" (1810)	95 1/2" (2426)	72" (1829)	96" (2438)	13.42 (1.25)	31 1/4" (794)	33 1/4" (845)	58 1/8" (1476)	24.79 (2.30)	17.24 (1.60)	43.47 (4.04)
6480	2	37 5/8" (956)	57 7/8" (1470)	75 1/4" (1911)	95 1/2" (2426)	76" (1930)	96" (2438)	28.31 (2.63)	68 11/16" (1745)	72 5/8" (1845)	56 1/8" (1426)	26.63 (2.47)	42.62 (3.96)	45.69 (4.24)
6480	1	37 5/8" (956)	57 7/8" (1470)	75 1/4" (1911)	95 1/2" (2426)	76" (1930)	96" (2438)	13.74 (1.28)	33 1/4" (845)	35 1/4" (895)	56 1/8" (1426)	26.63 (2.47)	19.84 (1.84)	45.69 (4.24)

^{· &}quot;Door Dimension" always refers to outside frame-to-frame dimension

^{· &}quot;Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 210-211 for more details.

[•] Dimensions in parentheses are in millimeters or square meters.

^{*}For two-panel patio doors with one panel open, clear opening is based on active panel being open and passive panel being closed.

^{*&}quot;Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 210-211 for more details.

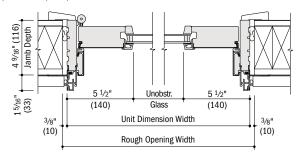
*Dimensions in parentheses are in millimeters or square meters.

^{*}For two-panel patio doors with one panel open, clear opening is based on active panel being open and passive panel being closed.

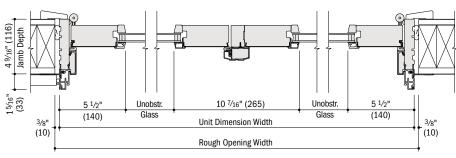
COMPLEMENTARY CURVED TOP PATIO DOORS

Complementary Springline™ Hinged Inswing Patio Door Details - 4 9/16" (116) Jamb Depth

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8



Horizontal Section



Horizontal Section Vertical Section Two-Panel

4 9/16" (116) 15/16"1 (33)Jamb Depth 5 1/2" (140) Unobstr. Rough Opening Height Unit Dimension Height Glass 世 Dimension from 10 7/16" (265) top of sill to subfloor will vary based on thickness of sill flashing. 1 7/8" (48) 1 11/16" (43)

Dimension from

1 11/16"

(43)

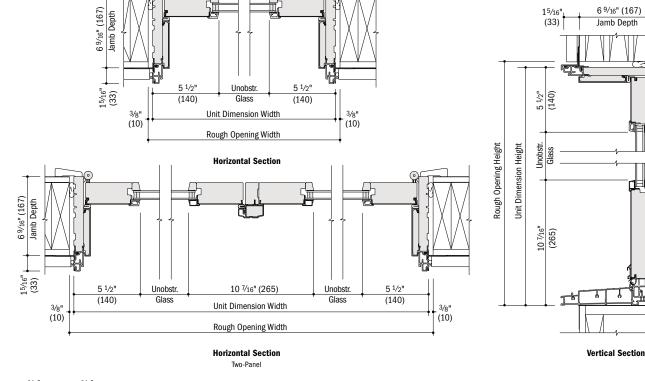
1 7/8"

(48)

top of sill to subfloor will vary based on thickness of sill flashing.

Complementary Springline™ Hinged Inswing Patio Door Details - 6 9/16" (167) Jamb Depth

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8

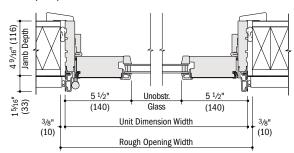


- 4 9/16" (116) and 6 9/16" (167) overall jamb depth measurements are from back side of installation flange
- · Light-colored areas are parts included with door. Dark-colored areas are additional Andersen* parts required to complete door assembly as shown.
- Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 210-211.
 Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com.
- · Dimensions in parentheses are in millimeters.

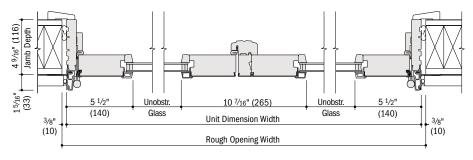


Complementary Springline™ Hinged Outswing Patio Door Details - 4 9/16" (116) Jamb Depth

Scale $1^{1}/2$ " (38) = 1'-0" (305) - 1:8

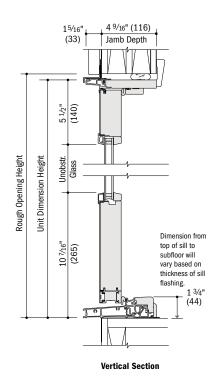


Horizontal Section



Horizontal Section

Two-Panel



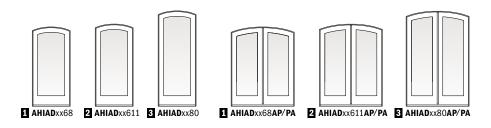
^{• 4 9/16&}quot; (116) overall jamb depth measurements are from back side of installation flange.

[·] Light-colored areas are parts included with door. Dark-colored areas are additional Andersen® parts required to complete door assembly as shown.

[•] Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 210-211.
• Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com.

[·] Dimensions in parentheses are in millimeters.

COMPLEMENTARY CURVED TOP PATIO DOORS





Custom-size doors are available in 1/8" (3) increments. Traditional panels are standard. Custom-designed and $^{3}\!/_{4}$ -light panels are also available. Stationary doors are also available (i.e., 2168\$ or 4068\$\$). Add AHIAD to "Door Number" listed in table (i.e., AHIAD2168).

Compl	Complementary Arch Hinged Inswing Pati					Door Dimensions and Specifications								"Door Number" listed in table (i.e., AHIAD 2168).						
-	Number	-		imensions		Min. Roug					Clear	r Opening M	aximums							
Door Number	of Panels Open*	Radius Inches/(mm)	Side Height Inches/(mm)	Width Inches/(mm)	Height Inches/(mm)	Width Inches/(mm)	Heigh Inches/(r	it Ai	Opening rea c./(m²)	90° 0 Position Inches/	Width	Full Oper Position Wid Inches/(mi	ith I	leight es/(mm)	Aı	ass rea :./(m²)	Ar	ent ea t./(m²)	Ar	II Door rea t./(m²)
2168	1	36" (914)	77 7/16" (1967)									20 13/16" (5					12.46			
2768	1	48" (1219)	77 1/8" (1959)	29 15/16" (760)	79 1/2" (2019)	31" (787)	80" (20	032) 13.84	(1.29)	24 7/8"	(632)	26 13/16" (6	31) 74 5/	(1888)	8.28	(0.77)	15.70	(1.46)	17.85	(1.66)
2968	1	48" (1219)	76 ³ / ₄ " (1949)	31 15/16" (811)	79 1/2" (2019)	33" (838)	80" (20	032) 14.81	(1.38)	26 7/8"	(683)	28 13/16" (7	32) 74'	(1880)	9.15	(0.85)	16.77	(1.56)	18.95	(1.76)
3168	1	48" (1219)	76" (1930)	35 15/16" (913)	79 1/2" (2019)	37" (940)	80" (20	032) 16.71	(1.55)	30 7/8"	(784)	32 13/16" (8	33) 73 5/	(1862)	10.87	(1.01)	18.88	(1.75)	21.13	(1.96)
3368	1	48" (1219)	75 ⁵ / ₈ " (1921)	37 15/16" (964)	79 1/2" (2019)	39" (991)	80" (20	032) 17.86	(1.66)	32 7/8"	(835)	34 13/16" (8	34) 73 7/	(1876)	11.72	(1.09)	22.01	(2.04)	24.36	(2.26)
21611	1	36" (914)	80 5/16" (2040)	23 15/16" (608)	82 3/8" (2092)	25" (635)	83" (21	108) 11.21	(1.04)	18 7/8"	(479)	20 13/16" (5	29) 77 º/	(1970)	5.93	(0.55)	14.39	(1.34)	16.65	(1.55)
27611	1	48" (1219)	80" (2032)	29 15/16" (760)	82 3/8" (2092)	31" (787)	83" (21	.08); 14.37	(1.33)	24 7/8"	(632)	26 13/16" (6	31) 77 ³ /	(1961)	8.68	(0.81)	18.17	(1.69)	20.55	(1.91)
29611	1	48" (1219)	79 5/8" (2022)	31 15/16" (811)	82 3/8" (2092)	33" (838)	83" (21	108) 15.38	(1.43)	26 7/8"	(683)	28 13/16" (7	32) 76 7/	₈ " (1953)	9.58	(0.89)	19.41	(1.80)	21.83	(2.03)
31611	1	48" (1219)	78 7/8" (2003)	35 15/16" (913)	82 3/8" (2092)	37" (940)	83" (21	108) 17.36	(1.61)	30 7/8"	(784)	32 13/16" (8	33) 76 ³ /	(1935)	11.39	(1.06)	21.89	(2.03)	24.37	(2.26)
33611	1	48" (1219)	78 ¹ / ₂ " (1994)	37 15/16" (964)	82 3/8" (2092)	39" (991)	83" (21	108) 18.55	(1.72)	32 7/8"	(835)	34 13/16" (8	34) 76 ³ /	(1949)	12.28	(1.14)	25.19	(2.34)	27.78	(2.58)
2180	1	36" (914)	93 7/16" (2373)	23 15/16" (608)	95 1/2" (2426)	25" (635)	96" (24	138) 13.11	(1.22)	18 7/8"	(479)	20 13/16" (5	29) 90 11/	16" (2303)	7.09	(0.66)	16.31	(1.52)	18.81	(1.75)
2780	1	48" (1219)	93 1/8" (2365)	29 15/16" (760)	95 1/2" (2426)	31" (787)	96" (24	138) 16.82	(1.56)	24 7/8"	(632)	26 13/16" (6	31) 90 ⁵ /	(2294)	10.38	(0.96)	20.63	(1.92)	23.25	(2.16)
2980	1	48" (1219)	92 3/4" (2356)	31 15/16" (811)	95 1/2" (2426)	33" (838)	96" (24	138) 18.01	(1.67)	26 7/8"	(683)	28 13/16" (7	32) 90'	(2286)	11.47	(1.07)	22.06	(2.05)	24.71	(2.30)
3180	1	48" (1219)	92" (2337)	35 15/16" (913)	95 1/2" (2426)	37" (940)	96" (24	138) 20.35	(1.89)	30 7/8"	(784)	32 13/16" (8	33) 89 5/	(2269)	13.63	(1.27)	24.89	(2.31)	27.62	(2.57)
3380	1	48" (1219)	91 5/8" (2327)	37 15/16" (964)	95 1/2" (2426)	39" (991)	96" (24	138) 21.73	(2.02)	32 7/8"	(835)	34 13/16" (8	84) 89 ⁷ /	8" (2283)	14.71	(1.37)	28.38	(2.64)	31.20	(2.90)
4068	2	48" (1219)	73 5/16" (1862)	47 1/4" (1200	79 1/2" (2019)	48" (1219)	80" (20	032) 21.56	(2.00)	39 15/16" ((1014)	43 13/16" (11	13) 70 ⁷ /	₈ " (1800)	10.93	(1.02)	25.61	(2.38)	28.07	(2.61)
4068	1	48" (1219)	73 5/16" (1862)	47 1/4" (1200	79 1/2" (2019)	48" (1219)	80" (20	032) 10.27	(0.95)	18 15/16"	(481)	20 7/8" (5	30) 70 ⁷ /	8" (1800)	10.93	(1.02)	12.22	(1.14)	28.07	(2.61)
5068	2	96" (2438)	74 13/16" (1900)	59 ¹ / ₄ " (1505	79 ¹ / ₂ " (2019)	60" (1524)	80" (20	032) 27.95	(2.60)	51 15/16"	(1319)	55 13/16" (14	18) 72 ¹ /	8" (1832)	16.30	(1.51)	32.24	(3.00)	34.97	(3.25)
5068	1	96" (2438)	74 13/16" (1900)	59 ¹ / ₄ " (1505	79 ¹ / ₂ " (2019)	60" (1524)	80" (20	032) 13.46	(1.25)	24 15/16"	(633)	26 7/8" (6	33) 72 ¹ /	8" (1832)	16.30	(1.51)	15.54	(1.44)	34.97	(3.25)
5468	2	96" (2438)	74 1/8" (1883)	63 1/4" (1607	') 79 ¹ / ₂ " (2019)	64" (1626)	80" (20	032) 29.70	(2.76)	55 15/16" ((1421)	59 13/16" (15	19) 71 1/	(1816)	17.97	(1.67)	34.29	(3.19)	37.09	(3.45)
5468	1	96" (2438)	74 1/8" (1883)	63 1/4" (1607	') 79 ¹ / ₂ " (2019)	64" (1626)	80" (20	032) 14.34	(1.33)	26 15/16"	(684)	28 7/8" (7	33) 71 1/	(1816)	17.97	(1.67)	16.56	(1.54)	37.09	(3.45)
6068	2	96" (2438)	72 5/8" (1845)	71 1/4" (1810	79 1/2" (2019)	72" (1829)	80" (20	32.99	(3.06)	63 15/16"	(1624)	67 13/16" (17	22) 70 1/	₁₆ " (1780)	21.25	(1.97)	38.33	(3.56)	41.27	(3.83)
6068	1	96" (2438)	72 5/8" (1845)	71 1/4" (1810	79 1/2" (2019)	72" (1829)	80" (20	032) 16.00	(1.49)	30 15/16"	(786)	32 7/8" (8	35) 70 ¹ /	₁₆ " (1780)	21.25	(1.97)	18.58	(1.73)	41.27	(3.83)
6468	2	96" (2438)	71 13/16" (1824)	75 1/4" (1911) 79 1/2" (2019)	76" (1930)	80" (20	032) 34.53	(3.21)	67 15/16"	(1726)	71 13/16" (18	24) 69 1/	(1759)	22.86	(2.12)	44.22	(4.11)	47.36	(4.40)
6468	1	96" (2438)	71 13/16" (1824)	75 1/4" (1911) 79 1/2" (2019)	76" (1930)	80" (20	032) 16.77	(1.56)	32 15/16"	(837)	34 7/8" (8	36) 69 ¹ /	(1759)	22.86	(2.12)	21.53	(2.00)	47.36	(4.40)
40611	2	48" (1219)	76 ³ / ₁₆ " (1935)	47 1/4" (1200) 82 3/8" (2092)	48" (1219)	83" (21	108) 22.44	(2.08)	39 15/16"	(1014)	43 13/16" (11	13) 73 ³ /	(1873)	11.46	(1.06)	29.64	(2.75)	32.34	(3.00)
40611	1	48" (1219)	76 ³ / ₁₆ " (1935)	47 1/4" (1200) 82 3/8" (2092)	48" (1219)	83" (21	108) 10.69	(0.99)	18 15/16"	(481)	20 7/8" (5	30) 73 ³ /	(1873)	11.46	(1.06)	14.29	(1.33)	32.34	(3.00)
50611	2	96" (2438)	77 11/16" (1973)	59 1/4" (1505	6) 82 ³ / ₈ " (2092)	60" (1524)	83" (21	108) 29.07	(2.70)	51 15/16"	(1319)	55 13/16" (14	18) 75'	(1905)	17.09	(1.59)	37.35	(3.47)	40.32	(3.75)
50611	1	96" (2438)	77 11/16" (1973)	59 ¹ / ₄ " (1505	6) 82 ³ / ₈ " (2092)	60" (1524)	83" (21	108) 14.00	(1.30)	24 15/16"	(633)	26 7/8" (6	33) 75'	(1905)	17.09	(1.59)	18.15	(1.69)	40.32	(3.75)
54611	2	96" (2438)	77" (1956)	63 1/4" (1607	(2092) 82 ³ / ₈ "	64" (1626)	83" (21	108) 30.89	(2.87)	55 15/16"	(1421)	59 13/16" (15	19) 74 ³ /	(1889)	18.84	(1.75)	39.77	(3.69)	42.80	(3.98)
54611	1	96" (2438)	77" (1956)	63 1/4" (1607	(2092) 82 ³ / ₈ "	64" (1626)	83" (21	108) 14.91	(1.39)	26 15/16"	(684)	28 7/8" (7	33) 74 ³ /	(1889)	18.84	(1.75)	19.35	(1.80)	42.80	(3.98)
60611	2	96" (2438)	75 1/2" (1918)	71 1/4" (1810) 82 3/8" (2092)	72" (1829)	83" (21	108) 34.35	(3.19)	63 15/16"	(1624)	67 13/16" (17	22) 72 15/	16" (1853)	22.28	(2.07)	44.53	(4.14)	47.71	(4.43)
60611	1	96" (2438)	75 1/2" (1918)	71 1/4" (1810) 82 3/8" (2092)	72" (1829)	83" (21	108) 16.65	(1.55)	30 15/16"	(786)	32 7/8" (8	35) 72 15/	16" (1853)	22.28	(2.07)	21.74	(2.02)	47.71	(4.43)
64611	2	96" (2438)	74 11/16" (1897)	75 1/4" (1911) 82 3/8" (2092)	76" (1930)	83" (21	108) 35.97	(3.34)	67 15/16"	(1726)	71 13/16" (18	24) 72 1/	(1832)	23.98	(2.23)	50.78	(4.72)	54.16	(5.03)
64611	1	96" (2438)	74 11/16" (1897)	75 1/4" (1911) 82 3/8" (2092)	76" (1930)	83" (21	108) 17.47	(1.62)	32 15/16"	(837)	34 7/8" (8	36) 72 ¹ /	(1832)	23.98	(2.23)	25.22	(2.34)	54.16	(5.03)
4080	2	48" (1219)	89 5/16" (2269)	47 1/4" (1200	95 1/2" (2426)	48" (1219)	96" (24	138) 26.43	(2.46)	39 15/16"	(1014)	43 13/16" (11	13) 86 7/	8" (2207)	13.76	(1.28)	33.66	(3.13)	36.60	(3.40)
4080	1	48" (1219)	89 5/16" (2269)	47 1/4" (1200	95 1/2" (2426)	48" (1219)	96" (24	138) 12.59	(1.17)	18 15/16"	(481)	20 7/8" (5	30) 86 7/	(2207)	13.76	(1.28)	14.29	(1.33)	36.60	(3.40)
5080	2		90 13/16" (2307)																	
5080	1	96" (2438)	90 13/16" (2307)	59 ¹ / ₄ " (1505	6) 95 ¹ / ₂ " (2426)	60" (1524)	96" (24	138) 16.45	(1.53)	24 15/16"	(633)	26 7/8" (6	33) 88 ¹ /	(2238)	20.50	(1.90)	18.15	(1.69)	45.67	(4.24)
5480	2		90 1/8" (2289)																	
5480	1	96" (2438)	90 1/8" (2289)	63 1/4" (1607	(2426) 95 ¹ / ₂ "	64" (1626)	96" (24	138) 17.55	(1.63)	26 15/16"	(684)	28 7/8" (7	33) 87 1/	(2223)	22.61	(2.10)	19.35	(1.80)	48.51	(4.51)
6080	2		88 5/8" (2251)																	
6080	1		88 5/8" (2251)							_										
6480	2		87 13/16" (2230)							_										
6480	1	96" (2438)	87 13/16" (2230)	75 ¹ / ₄ " (1911) 95 1/2" (2426)	76" (1930)	96" (24	138) 20.65	(1.92)	32 15/16"	(837)	34 7/8" (8	36) 85 ¹ /	(2165)	28.83	(2.68)	25.22	(2.34)	60.95	(5.66)

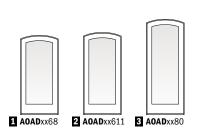
^{• &}quot;Door Dimension" always refers to outside frame-to-frame dimension.

• "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 210-211 for more details.

• Dimensions in parentheses are in millimeters or square meters.

^{*}For two-panel patio doors with one panel open, clear opening is based on active panel being open and passive panel being closed.













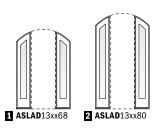
Custom-size doors are available in 1/8" (3) increments. Traditional panels are standard. Custom-designed and 3 /4-light panels are also available. Stationary doors are also available (i.e., 2168\$ or 4068\$\$). Add AOAD to "Door Number" listed in table (i.e., AOAD2168).

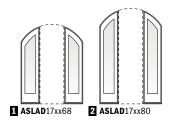
Comple	Complementary Arch Hinged Outswing Patio Door Dimensions and Specifications									"Door Number" listed in table (i.e., AOAD 2168).					
Number Door Dimensions Min. Rough Opening										r Opening Maxi	mums				
Door Number	of Panels	Radius Inches/(mm)	Side Height Inches/(mm)	Width Inches/(mm)	Height Inches/(mm)	Width Inches/(mm)	Height	Clear Opening Area Sq. Ft./(m ²)	90° Open Position Width Inches/(mm)	Full Open Position Width Inches/(mm)	Height Inches/(mm)	Glass Area Sq. Ft./(m²)	Vent Area Sq. Ft./(m ²)	Overall Door Area Sq. Ft./(m ²)	
2168	1		77 7/16" (1967)								74 3/4" (1899)		12.46 (1.16)		
2768	1			29 15/16" (760)				14.11 (1.31)			74 ³ / ₈ " (1889)	8.28 (0.77)	15.70 (1.46)	17.85 (1.66)	
2968	1	48" (1219)	76 ³ / ₄ " (1949)	31 15/16" (811)	79 1/2" (2019)	33" (838)	80" (2032)	15.08 (1.40)	27 3/8" (695)		74 1/16" (1881)	9.15 (0.85)	16.77 (1.56)	18.95 (1.76)	
3168	1	48" (1219)	76" (1930)	35 15/16" (913)	79 1/2" (2019)	37" (940)		16.97 (1.58)			73 3/8" (1864)	10.87 (1.01)	18.88 (1.75)	21.13 (1.96)	
3368	1	48" (1219)	75 ⁵ / ₈ " (1921)	37 15/16" (964)	79 1/2" (2019)	39" (991)	80" (2032)	17.90 (1.66)	33 3/8" (848)	35 5/16" (897)	73" (1854)	11.72 (1.09)	22.01 (2.04)	24.36 (2.26)	
21611	1	36" (914)	80 5/16" (2040)	23 15/16" (608)	82 3/8" (2092)	25" (635)	83" (2108)	11.49 (1.07)	19 ³ / ₈ " (492)	21 5/16" (541)	77 5/8" (1972)	5.93 (0.55)	14.39 (1.34)	16.65 (1.55)	
27611	1	48" (1219)	80" (2032)	29 15/16" (760)	82 3/8" (2092)	31" (787)	83" (2108)	14.65 (1.36)	25 ³ / ₈ " (645)	27 5/16" (694)	77 1/4" (1962)	8.68 (0.81)	18.17 (1.69)	20.55 (1.91)	
29611	1	48" (1219)	79 5/8" (2022)	31 15/16" (811)	82 3/8" (2092)	33" (838)	83" (2108)	15.66 (1.45)	27 3/8" (695)	29 5/16" (745)	76 ¹⁵ / ₁₆ " (1954)	9.58 (0.89)	19.41 (1.80)	21.83 (2.03)	
31611	1	48" (1219)	78 ⁷ / ₈ " (2003)	35 15/16" (913)	82 3/8" (2092)	37" (940)	83" (2108)	17.64 (1.64)	31 3/8" (797)	33 5/16" (846)	76 ¹ / ₄ " (1937)	11.39 (1.06)	21.89 (2.03)	24.37 (2.26)	
33611	1	48" (1219)	78 ½" (1994)	37 15/16" (964)	82 3/8" (2092)	39" (991)	83" (2108)	18.61 (1.73)	33 3/8" (848)	35 5/16" (897)	75 7/8" (1927)	12.28 (1.14)	25.19 (2.34)	27.78 (2.58)	
2180	1	36" (914)	93 7/16" (2373)	23 15/16" (608)	95 1/2" (2426)	25" (635)	96" (2438)	13.43 (1.25)	19 ³ / ₈ " (492)	21 5/16" (541)	90 3/4" (2305)	7.09 (0.66)	16.31 (1.52)	18.81 (1.75)	
2780	1	48" (1219)	93 1/8" (2365)	29 15/16" (760)	95 1/2" (2426)	31" (787)	96" (2438)	17.14 (1.59)	25 ³ / ₈ " (645)	27 5/16" (694)	90 3/8" (2296)	10.38 (0.96)	20.63 (1.92)	23.25 (2.16)	
2980	1	48" (1219)	92 3/4" (2356)	31 15/16" (811)	95 1/2" (2426)	33" (838)	96" (2438)	18.33 (1.70)	27 3/8" (695)	29 5/16" (745)	90 1/16" (2288)	11.47 (1.07)	22.06 (2.05)	24.71 (2.30)	
3180	1	48" (1219)	92" (2337)	35 15/16" (913)	95 1/2" (2426)	37" (940)	96" (2438)	20.68 (1.92)	31 3/8" (797)	33 5/16" (846)	89 3/8" (2270)	13.63 (1.27)	24.89 (2.31)	27.62 (2.57)	
3380	1	48" (1219)	91 5/8" (2327)	37 15/16" (964)	95 1/2" (2426)	39" (991)	96" (2438)	21.83 (2.03)	33 3/8" (848)	35 5/16" (897)	89" (2261)	14.71 (1.37)	28.38 (2.64)	31.20 (2.90)	
4068	2	48" (1219)	73 5/16" (1862)	47 1/4" (1200)	79 1/2" (2019)	48" (1219)	80" (2032)	21.93 (2.04)	40 11/16" (1033)	44 5/8" (1133)	70 3/4" (1797)	10.93 (1.02)	25.61 (2.38)	28.07 (2.61)	
4068	1	48" (1219)	73 5/16" (1862)	47 1/4" (1200)	79 1/2" (2019)	48" (1219)	80" (2032)	10.44 (0.97)	19 1/4" (489)	21 1/4" (540)	70 3/4" (1797)	10.93 (1.02)	12.22 (1.14)	28.07 (2.61)	
5068	2	96" (2438)	74 13/16" (1900)	59 ¹ / ₄ " (1505)	79 1/2" (2019)	60" (1524)	80" (2032)	28.36 (2.63)	52 11/16" (1338)	56 5/8" (1438)	72 1/8" (1832)	16.30 (1.51)	32.24 (3.00)	34.97 (3.25)	
5068	1	96" (2438)	74 13/16" (1900)	59 ¹ / ₄ " (1505)	79 1/2" (2019)	60" (1524)	80" (2032)	13.65 (1.27)	25 1/4" (641)	27 1/4" (692)	72 1/8" (1832)	16.30 (1.51)	15.54 (1.44)	34.97 (3.25)	
5468	2	96" (2438)	74 1/8" (1883)	63 1/4" (1607)	79 1/2" (2019)	64" (1626)	80" (2032)	30.08 (2.79)	56 11/16" (1440)	60 5/8" (1540)	71 7/16" (1815)	17.97 (1.67)	34.29 (3.19)	37.09 (3.45)	
5468	1	96" (2438)	74 1/8" (1883)	63 1/4" (1607)	79 1/2" (2019)	64" (1626)	80" (2032)	14.51 (1.35)	27 1/4" (692)	29 1/4" (743)	71 7/16" (1815)	17.97 (1.67)	16.56 (1.54)	37.09 (3.45)	
6068	2	96" (2438)	72 5/8" (1845)	71 1/4" (1810)	79 1/2" (2019)	72" (1829)	80" (2032)	33.36 (3.10)	64 11/16" (1643)	68 5/8" (1743)	70" (1778)	21.25 (1.97)	38.33 (3.56)	41.27 (3.83)	
6068	1	96" (2438)	72 5/8" (1845)	71 1/4" (1810)	79 1/2" (2019)	72" (1829)	80" (2032)	16.16 (1.50)	31 1/4" (794)	33 1/4" (845)	70" (1778)	21.25 (1.97)	18.58 (1.73)	41.27 (3.83)	
6468	2	96" (2438)	71 13/16" (1824)	75 1/4" (1911)	79 1/2" (2019)	76" (1930)	80" (2032)	34.89 (3.24)	68 11/16" (1745)	72 5/8" (1845)	69 ³ / ₁₆ " (1757)	22.86 (2.12)	44.22 (4.11)	47.36 (4.40)	
6468	1	96" (2438)	71 13/16" (1824)	75 1/4" (1911)	79 1/2" (2019)	76" (1930)	80" (2032)	16.94 (1.57)	33 1/4" (845)	35 1/4" (895)	69 ³ / ₁₆ " (1757)	22.86 (2.12)	21.53 (2.00)	47.36 (4.40)	
40611	2	48" (1219)	76 ³ / ₁₆ " (1935)	47 1/4" (1200)	82 3/8" (2092)	48" (1219)	83" (2108)	22.82 (2.12)	40 11/16" (1033)	44 5/8" (1133)	73 5/8" (1870)	11.46 (1.06)	29.64 (2.75)	32.34 (3.00)	
40611	1	48" (1219)	76 ³ / ₁₆ " (1935)	47 1/4" (1200)	82 3/8" (2092)	48" (1219)	83" (2108)	10.86 (1.01)	19 1/4" (489)	21 1/4" (540)	73 5/8" (1870)	11.46 (1.06)	14.29 (1.33)	32.34 (3.00)	
50611	2	96" (2438)	77 11/16" (1973)	59 1/4" (1505)	82 3/8" (2092)	60" (1524)	83" (2108)	29.49 (2.74)	52 11/16" (1338)	56 5/8" (1438)	75" (1905)	17.09 (1.59)	37.35 (3.47)	40.32 (3.75)	
50611	1	96" (2438)	77 11/16" (1973)	59 1/4" (1505)	82 3/8" (2092)	60" (1524)	83" (2108)	14.19 (1.32)	25 1/4" (641)	27 1/4" (692)	75" (1905)	17.09 (1.59)	18.15 (1.69)	40.32 (3.75)	
54611	2	96" (2438)	77" (1956)	63 1/4" (1607)	82 3/8" (2092)	64" (1626)	83" (2108)	31.29 (2.91)	56 11/16" (1440)	60 5/8" (1540)	74 5/16" (1888)	18.84 (1.75)	39.77 (3.69)	42.80 (3.98)	
54611	1	96" (2438)	77" (1956)	63 1/4" (1607)	82 3/8" (2092)	64" (1626)	83" (2108)	15.09 (1.40)	27 1/4" (692)	29 1/4" (743)	74 5/16" (1888)	18.84 (1.75)	19.35 (1.80)	42.80 (3.98)	
60611	2	96" (2438)	75 1/2" (1918)	71 1/4" (1810)	82 3/8" (2092)	72" (1829)	83" (2108)	34.73 (3.23)	64 11/16" (1643)	68 5/8" (1743)	72 7/8" (1851)	22.28 (2.07)	44.53 (4.14)	47.71 (4.43)	
60611	1	96" (2438)	75 1/2" (1918)	71 1/4" (1810)	82 3/8" (2092)	72" (1829)	83" (2108)	16.83 (1.56)	31 1/4" (794)	33 1/4" (845)	72 7/8" (1851)	22.28 (2.07)	21.74 (2.02)	47.71 (4.43)	
64611	2	96" (2438)	74 11/16" (1897)	75 1/4" (1911)	82 3/8" (2092)	76" (1930)	83" (2108)	36.34 (3.38)	68 11/16" (1745)	72 5/8" (1845)	72 1/16" (1830)	23.98 (2.23)	50.78 (4.72)	54.16 (5.03)	
64611	1	96" (2438)	74 11/16" (1897)	75 1/4" (1911)	82 3/8" (2092)	76" (1930)	83" (2108)	17.64 (1.64)	33 1/4" (845)	35 1/4" (895)	72 1/16" (1830)	23.98 (2.23)	25.22 (2.34)	54.16 (5.03)	
4080	2		89 5/16" (2269)							44 5/8" (1133)					
4080	1									21 1/4" (540)					
5080	2	96" (2438)	90 13/16" (2307)	59 ¹ / ₄ " (1505)	95 1/2" (2426)	60" (1524)	96" (2438)	34.65 (3.22)	52 11/16" (1338)	56 5/8" (1438)	88 1/8" (2238)	20.50 (1.90)	42.47 (3.95)	45.67 (4.24)	
5080	1	96" (2438)	90 13/16" (2307)	59 ¹ / ₄ " (1505)	95 1/2" (2426)	60" (1524)	96" (2438)	16.68 (1.55)	25 1/4" (641)	27 1/4" (692)	88 1/8" (2238)	20.50 (1.90)	18.15 (1.69)	45.67 (4.24)	
5480	2									60 5/8" (1540)					
5480	1	96" (2438)	90 1/8" (2289)	63 1/4" (1607)	95 1/2" (2426)	64" (1626)	96" (2438)	17.76 (1.65)	27 1/4" (692)	29 1/4" (743)	87 7/16" (2221)	22.61 (2.10)	19.35 (1.80)	48.51 (4.51)	
6080	2	96" (2438)	88 5/8" (2251)	71 1/4" (1810)	95 1/2" (2426)	72" (1829)	96" (2438)	40.98 (3.81)	64 11/16" (1643)	68 5/8" (1743)			50.73 (4.71)		
6080	1									33 1/4" (845)			21.74 (2.02)		
6480	2									72 5/8" (1845)					
6480	1	96" (2438)	87 13/16" (2230)	75 1/4" (1911)	95 1/2" (2426)	76" (1930)	96" (2438)	20.85 (1.94)	33 1/4" (845)	35 1/4" (895)	85 ³ / ₁₆ " (2164)	28.83 (2.68)	25.22 (2.34)	60.95 (5.66)	

^{• &}quot;Door Dimension" always refers to outside frame-to-frame dimension.
• "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 210-211 for more details.
• Dimensions in parentheses are in millimeters or square meters.
• For two-panel patio doors with one panel open, clear opening is based on active panel being open and passive panel being closed.

COMPLEMENTARY CURVED TOP PATIO DOORS

Complementary Arch Patio Door Sidelights





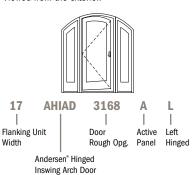


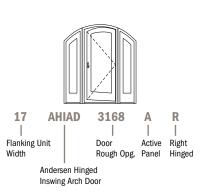
Custom sized in 1/8" (3) increments.

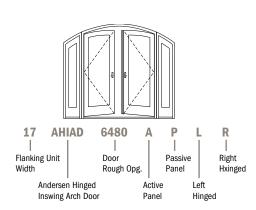
Standard sizes in two widths and heights. Contact your Andersen supplier for sidelight dimensions and specifications. Sash-set arch patio door sidelights, shown, are standard. Direct-set sidelights are available by special order.

Order Designation Description

Viewed from the exterior.



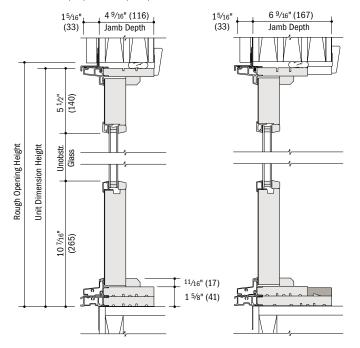




Arch inswing patio doors (AHIAD) shown above; for arch outswing patio doors use AOAD. Outswing patio doors open outward to the exterior.

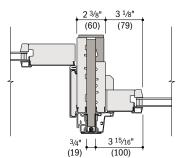
Complementary Arch Patio Door Sidelight Details

Scale $1^{1}/2^{1}$ (38) = 1'-0" (305) - 1:8



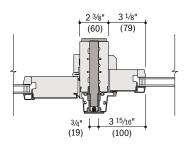
Vertical Joining Details

Scale $1^{1}/2$ " (38) = 1'-0" (305) - 1:8 3 1/8 (60)(79)3 15/16" (19)(100)



Complementary Arch Inswing Patio Door to Complementary Arch Patio Door Sidelight 4 9/16" (116) Jamb Depth

Complementary Arch Inswing Patio Door to Complementary Arch Patio Door Sidelight 6 9/16" (167) Jamb Depth



Complementary Arch Outswing Patio Door to Complementary Arch Patio Door Sidelight

• 4 9/16" (116) and 6 9/16" (167) overall jamb depth measurements are from back side of installation flange

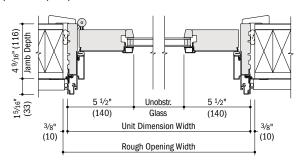
Vertical Sections

- · Light-colored areas are parts included with window and/or door. Dark-colored areas are additional Andersen* parts required to complete window and/or door assembly as shown.
- * Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 210-211.
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com.
- · Dimensions in parentheses are in millimeters.

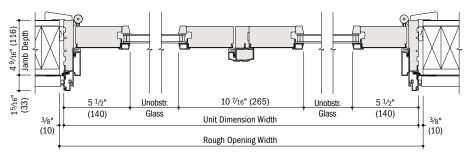


Complementary Arch Hinged Inswing Patio Door Details - 4 9/16" (116) Jamb Depth

Scale $1^{1}/2$ " (38) = 1'-0" (305) - 1:8

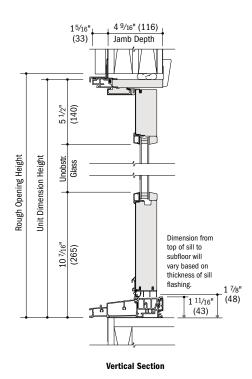


Horizontal Section



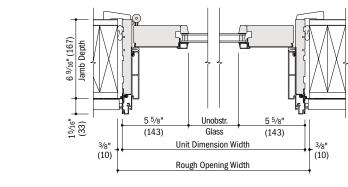
Horizontal Section

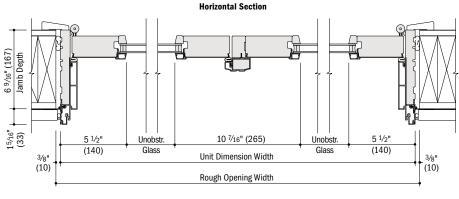
Two-Panel



Complementary Arch Hinged Inswing Patio Door Details - 6 9/16" (167) Jamb Depth

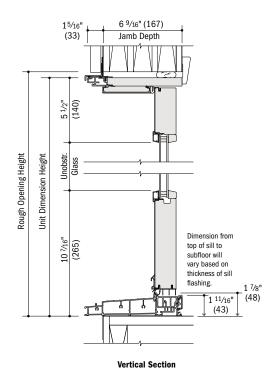
Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8







Two-Panel



^{• 4 9/16&}quot; (116) and 6 9/16" (167) overall jamb depth measurements are from back side of installation flange.

[·] Light-colored areas are parts included with door. Dark-colored areas are additional Andersen® parts required to complete door assembly as shown.

[•] Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 210-211.

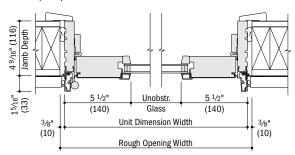
Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com

[·] Dimensions in parentheses are in millimeters.

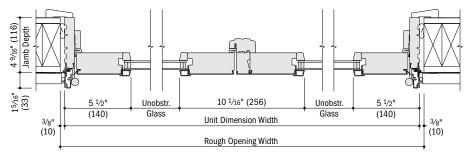
COMPLEMENTARY CURVED TOP PATIO DOORS

Complementary Arch Outswing Patio Door Details - 4 9/16" (116) Jamb Depth

Scale $1^{1}/2$ " (38) = 1'-0" (305) - 1:8



Horizontal Section



Two-Panel

Horizontal Section

4 9/16" (116)

Jamb Depth

(33)

5 1/2" (140)

Unobstr. Glass

10 7/16" (265)

Vertical Section

Dimension from

1 3/4"

(44)

top of sill to subfloor will vary based on thickness of sill flashing.

Rough Opening Height

Unit Dimension Height

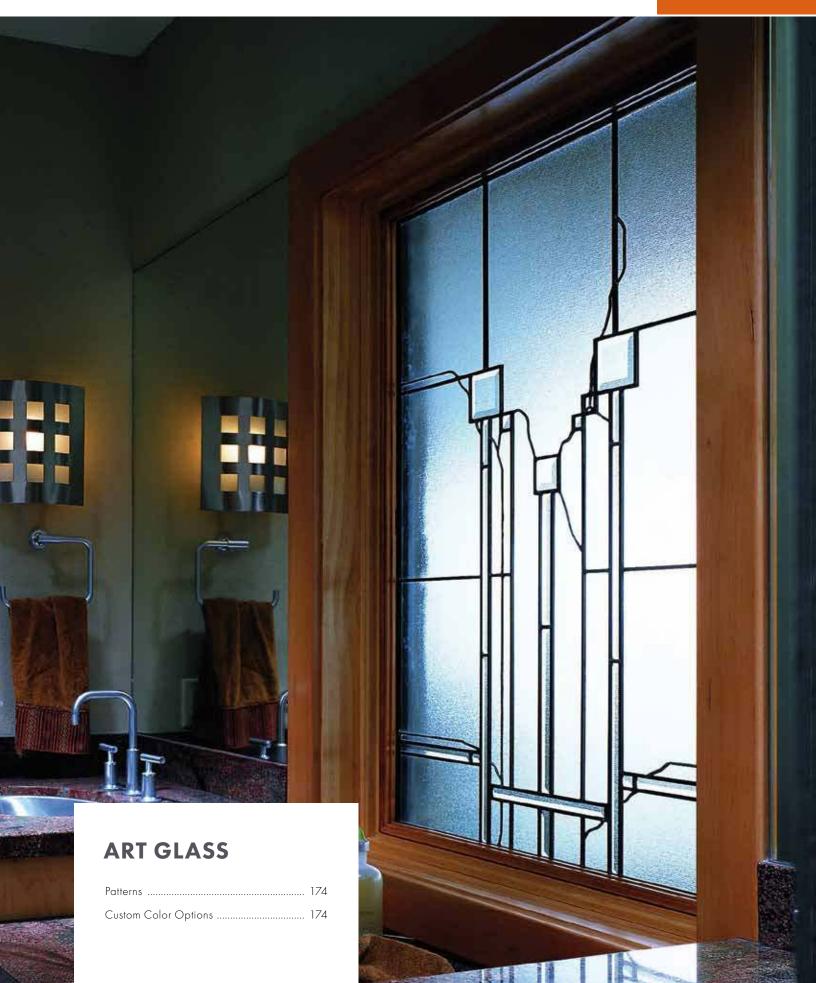
^{• 4 9/16&}quot; (116) overall jamb depth measurement is from back side of installation flange.

[·] Light-colored areas are parts included with door. Dark-colored areas are additional Andersen* parts required to complete door assembly as shown.

[•] Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 210-211.
• Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com.

[·] Dimensions in parentheses are in millimeters.





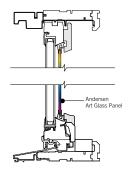
FEATURES

FRAME

For most units, Andersen® art glass panel kits include pine and laminated maple trim to give each installation a finished appearance. Panels are edged with steel-reinforced zinc caming for stability. Caming finish options are available in antique (bronze), bright goldtone and silvertone.

PACKAGE INCLUDES

Andersen art glass panel, installation brackets, wood trim pieces (where applicable), brass screws, and complete installation and cleaning instructions.



INSTALLATION

Panels are secured with polypropylene, snap-lock installation brackets.

AVAILABILITY

Andersen art glass panels are sized to fit Andersen casement, awning, half circle, elliptical, circle, oval, arch, Flexiframe, double-hung transom and picture windows, Frenchwood® hinged patio doors, sidelights and transoms.

GLASS

Designs are offered in several standard color palettes, or choose from the many optional colors for glass and accent "jewels" to create your own unique color combinations.

PATTERN DETAILS

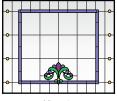
Each design can be ordered in many shapes and sizes, including detailed art glass patterns for specific unit sizes.

COLOR OPTIONS

Andersen gives you a choice of antique, silvertone or bright goldtone caming, the ornamental material used to hold sections of decorative glass in place.

For more information, see your Andersen supplier or visit andersenwindows.com/artglass.

PATTERNS



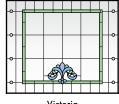
Victoria Violet, deep rose, deep green and amber jewels



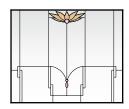
Lotus Light green, amber jewels and green jewels

Diamond Lights

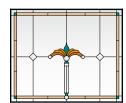
Clear fan-shaped bevels



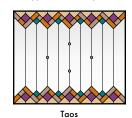
Victoria Light green, lilac, light blue, pink jewels and lilac jewels



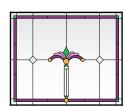
Lotus Sand and pink jewels



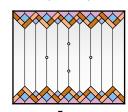
Regency Sand, deep teal, topaz, copper and smoke jewels



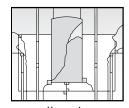
Dusty coral, copper, sand, deep rose, deep teal and lilac jewels



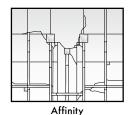
Regency Deep rose, deep green, rose and opal amber jewels



Taos Peach, copper, rose, lilac, light blue and pink jewels



Harmonics Opal, sage and clear bevels (right orientation)



No color, clear bevels (right orientation)

ARTISAN SERIES

Two designs influenced by 20th century American and European architectural schools feature striking visual patterns that evoke an extraordinary blend of art and nature. Artisan Series glass patterns are available in left or right orientations, as viewed from the exterior.

Clear, clear antique and

CLASSIC SERIES

The Classic Series includes five different styles that represent major architectural design themes from the late 1800s through the 1930s, as well as a Southwestern-inspired design. Classic Series glass patterns are also available with semi-privacy glass or clear antique glass in place of colored glass.

CUSTOM COLOR OPTIONS



semi-privacy glass are also available as custom art class color options. Deep Teal Light Blue Violet Lilac Pink Lilac Green

Andersen art glass panel patterns vary based on window size and shape. Contact your Andersen supplier for complete pattern information. Colors in the Classic Series and Artisan Series may vary from photos and actual glass samples due to the unique character of the mouthblown glass. Art glass changes appearance greatly based on lighting in its environment, making it beautiful to look at yet difficult to represent accurately in print. Printing limitations prevent exact color replication.





FEATURES

EXTERIOR TRIM SYSTEM

Fasier Installation

- Installs independently of water management system
- No nail holes to fill
- · No visible fasteners
- No painting



Made of Fibrex® material that is an environmentally smart composite, containing 40% pre-consumer reclaimed wood fiber by weight.



EXTERIOR TRIM

• For exceptional long-lasting performance, exterior trim is made from Fibrex material or high-density urethane with low-maintenance exterior finishes.

3 Sill nose profile, made from Fibrex material, is placed at the sill for a traditional look.

© Rigid vinyl exterior trim attachment strips (field applied) allow the trim to be securely fastened to the home.

• Trim surrounds are assembled with corner keys and stainless steel fasteners for stability and strength.

Profiles

Exterior trim is available in four profiles made from our Fibrex material. Profiles include 3 ½" (89) flat casing, 4 ½" (114) flat casing, 2" (51) brick mould and sill nose for the bottom trim piece. See profiles and sill options on the next page.

Thick trim profiles overlap the window frame to create clean lines without visible sealant joints.

Drip Cap

Full-length, color-matched aluminum drip cap is included with kits and surrounds.

End Caps

Provide a clean appearance when joining two trim members.

Corner Keys

Provide tight alignment of corner joints.



EXTERIOR TRIM OPTIONS

EXTERIOR TRIM COLORS



Design a window and view exterior trim installation guides at andersenwindows.com/exteriortrim.

Fasteners

Screws are made of high-quality stainless steel and provide corner joints with a secure, tight fit.

Head Trim Options

Three styles are available. All can be used above our flat casing and include an integrated installation flange. The decorative drip cap is made from our Fibrex material. Both the 2" (51) cornice and 35%" (92) cornice are made from highly durable urethane material. See head trim options on the next page.

Specialty Trim



Made of highly durable factoryfinished urethane material for selected shapes. Contact your Andersen supplier for availability.

INSTALLATION OPTIONS

Preassembled Trim Surrounds

Factory-assembled surrounds install quickly and eliminate measuring, cutting, mitering and filling nail holes.



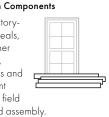
Precut Kits

Knock-down kits include precut and predrilled trim with all the necessary components for on-site assembly for windows.



Individual Trim Components

13' (3962) factoryfinished trim lineals, end caps, corner keys, fasteners, metal drip caps and field attachment strips allow for field fabrication and assembly.



^{*}See the 400 Series Limited Warranty for exterior trim applied to 400 Series products. Visit andersenwindows.com/warranty for details.

Dimensions in parentheses are in millimeters.

Printing limitations prevent exact duplication of colors. See your Andersen supplier for actual color samples.



PROFILES



2" (51) Brick Mould in dove gray with Terratone window



3 1/2" (89) Flat Casing in dark bronze with white window



4 1/2" (114) Flat Casing in canvas with forest green window

HEAD TRIM OPTIONS



Decorative Drip Cap with 3 ½" (89) flat casing in red rock with Sandtone window



2" (51) Cornice with 3 ½" (89) flat casing in red rock with Sandtone window



3 5/8" (92) Cornice with 3 1/2" (89) flat casing in red rock with Sandtone window

SILL OPTIONS



2" (51) Brick Mould with sill nose in dove gray with Terratone window

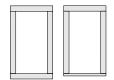


3 1/2" (89) Flat Casing with sill nose in dark bronze with white window

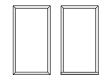


4 1/2" (114) Flat Casing with sill nose in canvas with forest green window

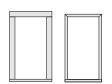
TRIM COMBINATIONS



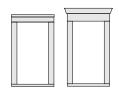
Flat Casing can be used on all four sides flush at the head and sill. Combine 3 ½" (89) and 4 ½" (114) flat casing or use with a flush sill nose.



Brick Mould can be used on all four sides or with a flush sill nose



Sill Nose can be used with flat casing or brick mould.



Decorative Drip Cap or Cornices can be used above flat casing at the head.

ACCESSORIES

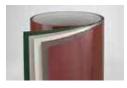
INSTALLATION

Fibrex® Trim Board



Andersen offers a 3 ½" (89) wide by ¾" (19) thick cellular Fibrex trim board in 10' (3048) lengths. Available in the same 11 colors as the exterior trim system, this solid trim board can be ripped to size and can be fastened using nails or screws.

Coil Stock



Factory finished in any of our 11 exterior trim colors, our aluminum coil stock allows you to form your own profiles in the field. Made from .018" thick aluminum, coil stock is available in 24" (610) x 50' (15240) rolls. Color-matched 1 1/4" (32)-long stainless steel trim nails are also available and can be ordered in 1 lb/.454 kg boxes.

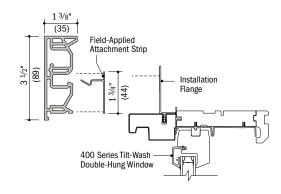
EXTERIOR TRIM

Window and Patio Door Attachment

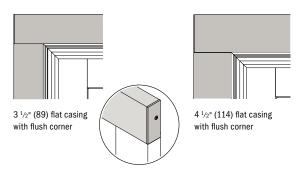
Field-Applied Attachment Strip

Field-applied attachment strip fastens to framing through window or patio door installation flange and flashing tape with screws. Exterior trim connects securely to the field-applied attachment strip.

Follow window and patio door installation guides for flashing instructions.

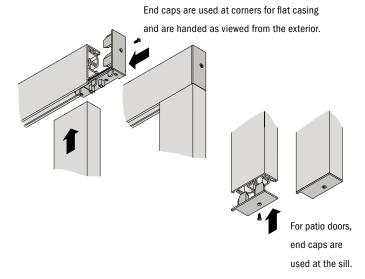


3 1/2" (89) and 4 1/2" (114) Flat Casing



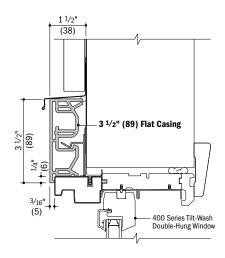
Formula for dimension of window/door plus exterior trim:

Add 4 $^{1}\!/_{4}"$ (108) per side for 4 $^{1}\!/_{2}"$ (114) flat casing Add 3 $^{1}\!/_{4}"$ (83) per side for 3 $^{1}\!/_{2}"$ (89) flat casing



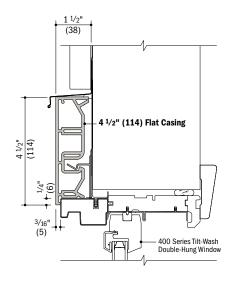
Trim Details

Scale 3" (76) = 1'-0" (305) - 1:4



Vertical Section

400 Series Tilt-Wash Double-Hung Window with 3 ½" (89) Flat Casing



Vertical Section

400 Series Tilt-Wash Double-Hung Window with 4 $^{1}\!/_{2}$ " (114) Flat Casing

[•] Dimensions in parentheses are in millimeters.

[•] Typical trim combinations shown. Additional combinations may also be used. Some restrictions apply. For more information, contact your Andersen supplier.

Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com.



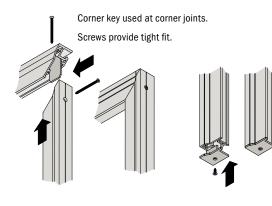
Brick Mould



Brick mould with mitered corners

Formula for dimension of window/door plus exterior trim:

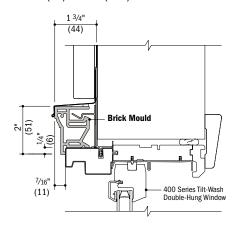
Add 1 3/4" (44) per side for brick mould



For patio doors, end caps are used at the sill.

Trim Detail

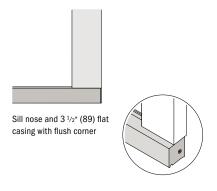
Scale 3" (76) = 1'-0" (305) - 1:4



Vertical Section

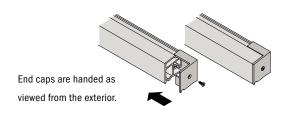
400 Series Tilt-Wash Double-Hung Window with Brick Mould

Sill Nose



Formula for dimension of window plus exterior trim:

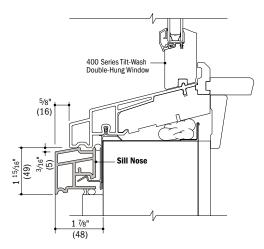
Add 1 15/16" (49) for sill nose



- Dimensions in parentheses are in millimeters.
 Typical trim combinations shown. Additional combinations may also be used. Some restrictions apply. For more information, contact your Andersen supplier.
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com.

Trim Detail

Scale 3" (76) = 1'-0" (305) - 1:4

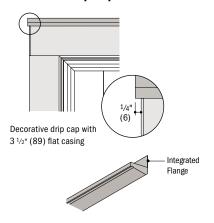


Vertical Section

400 Series Tilt-Wash Double-Hung Window with Sill Nose

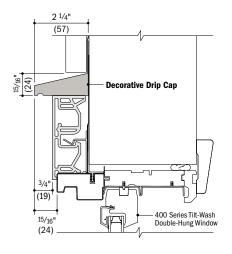
EXTERIOR TRIM

Decorative Drip Cap



Trim Detail

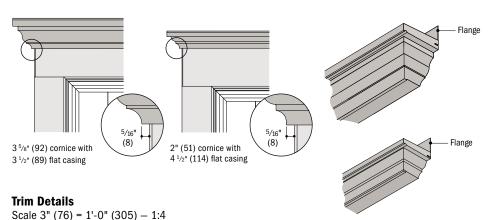
Scale 3" (76) = 1'-0" (305) - 1:4

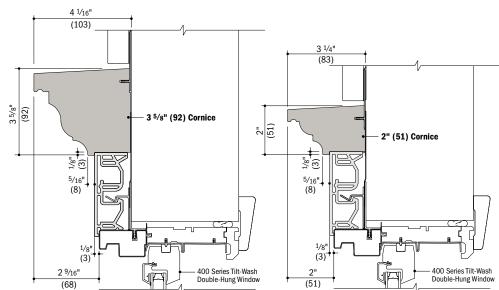


Vertical Section

400 Series Tilt-Wash Double-Hung Window with 3 $^1\!/\!_2$ " (89) Flat Casing and Decorative Drip Cap

Cornices





Vertical Section

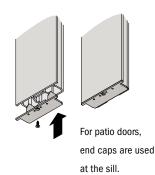
400 Series Tilt-Wash Double-Hung Window with 3 $^1\!/_2$ " (89) Flat Casing and 3 $^5\!/_8$ " (92) Cornice

Vertical Section

400 Series Tilt-Wash Double-Hung Window with 3 1 /2" (89) Flat Casing and 2" (51) Cornice

Mull Cover

3 3/4" (95) mull cover is available for installations where windows or patio doors have been installed into separate rough openings to obtain a joined appearance.

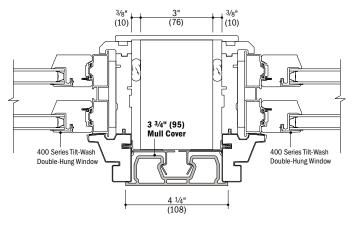


- Dimensions in parentheses are in millimeters.
- Typical trim combinations shown. Additional combinations may also be used. Some restrictions apply. For more information, contact your Andersen supplier.
- Details are for illustration only and are not intended to represent product installation
- methods or materials. Refer to product installation guides at andersenwindows.com.

 Consult with an architect or structural engineer regarding minimum requirements for structural support members between adjacent rough openings.

Separate Rough Openings Detail

Scale 3" (76) = 1'-0" (305) - 1:4



Horizontal Section

400 Series Tilt-Wash Double-Hung Windows and 3 $^{3}\!/_{4}$ " (95) Mull Cover



Andersen® window and patio doors make it easy to create a wide variety of combination designs

Combination Types

Ribbons

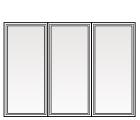
Ribbons are horizontal window combinations (vertical joins) where opposite ends (head and sill) of individual windows are fastened to the building structure.

Stacks

Stacks are vertical window combinations (horizontal joins) where opposite sides (both side jambs) of individual windows are fastened to the building structure.

Two basic configurations are used in combination designs: one-way or two-way.

One-Way

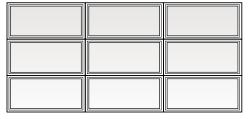






Stack Combination

Two-Way



Multiple Ribbon/Stack Combination

Two-way combinations exist when multiple vertical stacks and horizontal ribbons are joined together. Unlike one-way combinations, the adjacent sides (head and sill, or both side jambs) of individual units are not necessarily fastened directly to the building structure. Two-way combinations are joined with both vertical and horizontal joining material, and may require reinforced joining materials and brackets depending on the local building code requirement for design wind load (measured in pounds per square foot, psf).

Determining Design Wind Load Performance

Proper combination design in conformance with local wind load requirements is vital to the success of your project. To make sure a combination is safe and that it complies with local building codes, the combination design wind load performance capacity must be determined.

Correctly determining this performance capacity involves the following three steps:

STEP 1

Determine Building Code Requirement

Make sure that you have the proper local codes and have identified specified compliance values. This calculated value (psf) will be used to determine if the combination will be acceptable (STEP 3).



STEP 2

Determine Product Performance

Compare product Design Pressure Rating data to the local building code (psf) requirement. This will show whether the individual units in a combination design are acceptable.



STEP 3

Determine Combination Performance

This step helps determine whether a given product, size, configuration and joining material type will meet the local building code design wind load requirement. To determine what joining material type to use (fiberglass, LVL, steel, aluminum or wood), compare the local building code design wind load requirement to the design wind load table value for a particular joining material on the following pages.

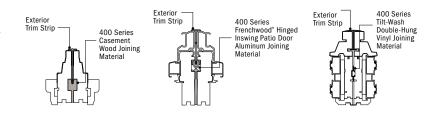
Andersen® Joining Materials and Installation Accessories

For a successful installation, designed to provide the required design pressure, it is important that Andersen joining materials and installation accessories be specified by a project architect or contractor. Andersen offers several types of joining materials. Each creates a joining system that maintains the look of Andersen products. Choose the type appropriate for your combination design. Components used with each joining system will vary depending on products being joined. Check with your Andersen supplier for more information. The addition of joining materials will affect the overall rough opening dimension, see page 210. **Instruction guides are available at andersenwindows.com.**Read and follow instruction guides in their entirety.

Andersen Exterior Trim Strips - A variety of trim strips for finishing the space between joined products are available in colors to match Andersen windows and doors.

Andersen Interior Wood Casing - Available in several wood types, pre-finished options, sizes and style options, including laminated arch casings, decorative plinths and key blocks.

Materials vary depending on type of units being joined and wind load requirements. Non-reinforced joining materials are used to create alignment and positive joining between windows. Joining materials are not connected to the rough opening structure. Non-reinforced joins can also be achieved using accessory items such as V-notch gusset plates. Please contact your Andersen supplier for specific performance and product recommendations.



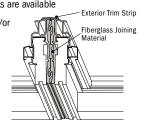
Reinforced joining materials are used to create product alignment, positive joining and load transfer between the Andersen windows and doors and the rough opening.

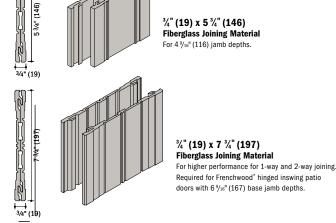
They provide added strength capable of withstanding a variety of wind load pressures. The structural performance of any combination is only as high as the lowest structural performance rating of any individual window or joining material in the combination.

Fiberglass Joining Material

Fiberglass joining material is now available for 400 Series patio doors. The fiberglass joining material utilizes either 34 " (19) x 5 34 " (146) fiberglass interlocking joining plates for 4 94 16" (116) jamb depths or 34 " (19) x 7 34 " (197) fiberglass interlocking joining plates for higher performance for one-way and two-way joining, and is required for Frenchwood* hinged inswing patio doors with 6 94 16" (167) exterior extension jambs. Fiberglass reinforced joining kits are available

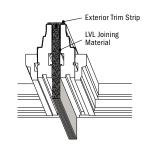
for joining and installing patio door, sidelight and/or transom combinations at the job site. Extension jamb kits are also available. In some situations, joining material may prohibit the application of perimeter extension jambs. For more information, contact your Andersen supplier.





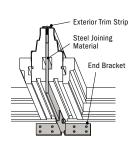
Laminated Veneer Lumber (LVL) Joining Material

Available in $^3/_4$ " (19) x 4 $^9/_{16}$ " (116) and $^3/_4$ " (19) x 6 $^9/_{16}$ " (167) sizes and includes an aluminum exterior trim strip retainer. Available in a variety of lengths up to 10' (3048). Use with casement, awning, double-hung and select specialty windows.



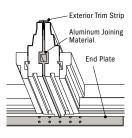
Steel Joining Material

Available in 8'-0 1 /4" (2445), 9'-6" (2896) and 12'-6" (3810) lengths. Treated for corrosion resistance, a 4" (102) depth of material provides strength and rigidity. Adjacent windows attach to the steel joining material with screws. Use with casement, awning, double-hung, select specialty windows and patio doors.



Aluminum Joining Material

Available in 6'-0 3/32" (1831) and 7'-8" (2337) lengths. High-quality aluminum provides increased stiffness and is anodized for corrosion resistance. Aluminum joining material stays within the basic jamb of the window so interior casing can be used without extension jambs. Adjacent windows attach to the aluminum joining material with screws. Use with casement, awning, select specialty windows and patio doors.



[•] Dimensions in parentheses are in millimeters

Structural performance of any combination is only as high as the lowest structural performance of any individual unit or joining material in the combination.

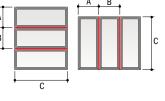


Casement and Awning Windows

1-Way Wood Joining

400 Series Casement, Awning, Complementary Specialty Joined with Flexiframe® Windows

	C = (length of join)	3'-6" (1067)	4'-0" (1219)	4'-6" (1372)	5'-0" (1524)	5'-6" (1676)	6'-0" (1829)	6'-6" (1981)	7'-0" (2134)	7'-6" (2286)	8'-0" (2438)
	(A + B) ÷ 2 = 1'-6" (457)	70	70	70	68	56	46	39	34	29	26
	(A + B) ÷ 2 = 2'-0" (610)	70	70	65	52	42	35	30	26	22	
	$(A + B) \div 2 = 2'-6'' (762)$	70	70	54	43	35	29	24	21		
	(A + B) ÷ 2 = 3'-0" (914)	70	63	47	37	30	25	21			
	(A + B) ÷ 2 = 3'-6" (1067)	70	59	43	33	27	22				
	(A + B) ÷ 2 = 4'-0" (1219)	70	58	41	31	24	20				
⋖	(A + B) ÷ 2 = 4'-6" (1372)	70	58	40	30	23	1				
Average Adjacent Window Dimension	(A + B) ÷ 2 = 5'-0" (1524)	70	58	40	29	22					
ge /	(A + B) ÷ 2 = 5'-6" (1676)	70	58	40	29	22					
√dja	(A + B) ÷ 2 = 6'-0" (1829)	70	58	40	29	22					
cen	(A + B) ÷ 2 = 6'-6" (1981)	70	58	40	29	22					
Ĭ.	(A + B) ÷ 2 = 7'-0" (2134)	70	58	40	29	22					
go	(A + B) ÷ 2 = 7'-6" (2286)	70	58	40	29	22					
<u>=</u>	(A + B) ÷ 2 = 8'-0" (2438)	70	58	40	29	22					
nen	(A + B) ÷ 2 = 8'-6" (2591)	70	58	40	29	22					
sion	(A + B) ÷ 2 = 9'-0" (2743)	70	58	40	29	22					
	(A + B) ÷ 2 = 9'-6" (2896)	70	58	40	29	22					
	$(A + B) \div 2 = 10' - 0'' (3048)$	70	58	40	29	22					
	$(A + B) \div 2 = 10' - 6'' (3200)$	70	58	40	29	22					
	$(A + B) \div 2 = 11' - 0'' (3353)$	70	58	40	29	22					В
	$(A + B) \div 2 = 11'-6'' (3505)$	70	58	40	29	22					^ _
	$(A + B) \div 2 = 12' - 0'' (3658)$	70	58	40	29	22					
	(A + B) ÷ 2 = 12'-6" (3810)	70	58	40	29	22]				



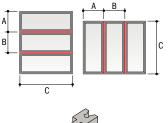


Note: Stacking of windows is allowed to a maximum height of 12'-6" (3810). Contact your Andersen supplier for information about taller combination heights.

1-Way Wood Joining

400 Series Casement, Awning and Complementary Specialty Windows

	C = (length of join)	3'-6" (1067)	4'-0" (1219)	4'-6" (1372)	5'-0" (1524)	5'-6" (1676)	6'-0" (1829)	6'-6" (1981)	7'-0" (2134)	7'-6" (2286)	8'-0" (2438)
	(A + B) ÷ 2 = 1'-6" (457)	70	70	70	70	70	67	57	49	42	35
	(A + B) ÷ 2 = 2'-0" (610)	70	70	70	70	61	51	43	37	32	27
	$(A + B) \div 2 = 2' - 6'' (762)$	70	70	70	62	50	42	35	30	26	22
	(A + B) ÷ 2 = 3'-0" (914)	70	70	68	54	43	36	30	25	22	
	(A + B) ÷ 2 = 3'-6" (1067)	70	70	63	48	38	31	26	22		
	(A + B) ÷ 2 = 4'-0" (1219)	70	70	59	45	35	29	24	20		
⋖	(A + B) ÷ 2 = 4'-6" (1372)	70	70	58	43	33	27	22	1		
wera	(A + B) ÷ 2 = 5'-0" (1524)	70	70	58	42	32	25	21			
ge /	(A + B) ÷ 2 = 5'-6" (1676)	70	70	58	42	32	25	20			
Adja	(A + B) ÷ 2 = 6'-0" (1829)	70	70	58	42	32	24	20			
cent	(A + B) ÷ 2 = 6'-6" (1981)	70	70	58	42	32	24	20			
Average Adjacent Window Dimension	(A + B) ÷ 2 = 7'-0" (2134)	70	70	58	42	32	24	20			
νopι	$(A + B) \div 2 = 7' - 6'' (2286)$	70	70	58	42	32	24	20			
V Dir	(A + B) ÷ 2 = 8'-0" (2438)	70	70	58	42	32	24	20			
nens	(A + B) ÷ 2 = 8'-6" (2591)	70	70	58	42	32	24	20			
sion	$(A + B) \div 2 = 9' - 0'' (2743)$	70	70	58	42	32	24	20			
	$(A + B) \div 2 = 9'-6'' (2896)$	70	70	58	42	32	24	20			
	$(A + B) \div 2 = 10'-0" (3048)$	70	70	58	42	32	24	20			
	$(A+B) \div 2 = 10'-6'' (3200)$	70	70	58	42	32	24	20			
	$(A+B) \div 2 = 11'-0" (3353)$	70	70	58	42	32	24	20			В
	$(A+B) \div 2 = 11'-6'' (3505)$	70	70	58	42	32	24	20			+=
	$\frac{(A+B) \div 2 = 12'-6" (3810)}{(A+B) \div 2 = 12'-0" (3658)}$	70 70	70 70	58 58	42 42	32 32	24	20			A





Note: Stacking of windows is allowed to a maximum height of 12'-6" (3810). Contact your Andersen supplier for information about taller combination heights.

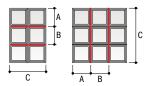
- · Numerical values in charts represent structural pressure only.
- Structural performance of any combination is only as high as the lowest structural performance of any individual unit or joining material in the combination.
- · Andersen* products must be installed and anchored properly according to joining and installation guides to meet rated structural performance. Refer to product joining and installation guides at
- Additional wind load tables are available at andersenwindows.com.
 Dimensions in parentheses are in millimeters.

Casement and Awning Windows

2-Way Wood Joining

400 Series Casement, Awning, Complementary Specialty and Flexiframe® Windows

	C = (length of join)	3'-6" (1067)	4'-0" (1219)	4'-6" (1372)	5'-0" (1524)	5'-6" (1676)	6'-0" (1829)	6'-6" (1981)	7'-0" (2134)	7'-6" (2286)
	(A + B) ÷ 2 = 1'-6" (457)	70	70	69	56	46	39	31	24	20
	(A + B) ÷ 2 = 2'-0" (610)	70	66	52	42	34	29	23		
4	(A + B) ÷ 2 = 2'-6" (762)	69	52	41	33	27	23			
Vers	(A + B) ÷ 2 = 3'-0" (914)	57	44	34	28	23				
ge/	(A + B) ÷ 2 = 3'-6" (1067)	49	37	29	24					
Adja	(A + B) ÷ 2 = 4'-0" (1219)	43	33	26	21					
Average Adjacent Window Dimension	(A + B) ÷ 2 = 4'-6" (1372)	38	29	23						
Ę.	(A + B) ÷ 2 = 5'-0" (1524)	34	26	20						
Б	(A + B) ÷ 2 = 5'-6" (1676)	31	24							
×	(A + B) ÷ 2 = 6'-0" (1829)	28	22							
m en	(A + B) ÷ 2 = 6'-6" (1981)	26	20]						
sion	(A + B) ÷ 2 = 7'-0" (2134)	24								
_	(A + B) ÷ 2 = 7'-6" (2286)	23								
	(A + B) ÷ 2 = 8'-0" (2438)	21								
	(A + B) ÷ 2 = 8'-6" (2591)	20								





1-Way or 2-Way Aluminum Joining

400 Series Casement, Awning, Complementary Specialty and Flexiframe® Windows

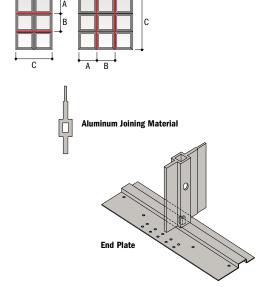
	C = (length of join)	4'-0" (1219)	4'-6" (1372)	5'-0" (1524)	5'-6" (1676)	6'-0" (1829)	6'-6" (1981)	7'-0" (2134)	7'-6" (2286)
	(A + B) ÷ 2 = 1'-6" (457)	70	70	70	70	70	70	70	63
	(A + B) ÷ 2 = 2'-0" (610)	70	70	70	70	70	70	59	48
	(A + B) ÷ 2 = 2'-6" (762)	70	70	70	70	70	60	48	39
Ave	(A + B) ÷ 2 = 3'-0" (914)	70	70	70	70	65	51	40	33
Average Adjacent	(A + B) ÷ 2 = 3'-6" (1067)	70	70	70	70	57	44	35	28
Ad	(A + B) ÷ 2 = 4'-0" (1219)	70	70	70	66	50	39	31	25
ace i	(A + B) ÷ 2 = 4'-6" (1372)	70	70	70	59	45	35	28	23
Ę	(A + B) ÷ 2 = 5'-0" (1524)	70	70	70	54	41	32	26	21
Window	(A + B) ÷ 2 = 5'-6" (1676)	70	70	66	49	38	29	23	
	(A + B) ÷ 2 = 6'-0" (1829)	70	70	60	45	35	27	21	
Dimension	(A + B) ÷ 2 = 6'-6" (1981)	70	70	56	42	32	25	20	
ensi	(A + B) ÷ 2 = 7'-0" (2134)	70	70	52	39	30	23		
=	(A + B) ÷ 2 = 7'-6" (2286)	70	67	49	36	28	22		
	(A + B) ÷ 2 = 8'-0" (2438)	70	63	46	34	26	21		
	(A + B) ÷ 2 = 8'-6" (2591)	70	60	43	32	25			
	(A + B) ÷ 2 = 9'-0" (2743)	70	56	41	31	23			



For a join with a continuous jamb on one side, multiply psf by 1.2.



For a join with a continuous jamb on both sides, multiply psf by 1.4.



[•] Numerical values in charts represent structural pressure only.

^{*} Structural performance of any combination is only as high as the lowest structural performance of any individual unit or joining material in the combination.

[•] Andersen' products must be installed and anchored properly according to joining and installation guides to meet rated structural performance. Refer to product joining and installation guides at andersenwindows.com.
• Additional wind load tables are available at andersenwindows.com.

[•] Dimensions in parentheses are in millimeters.



Casement and Awning Windows

1-Way or 2-Way Steel Joining

400 Series Casement, Awning, Complementary Specialty and Flexiframe® Windows

	(A+B)÷2=1'-6" (457) C = (length of join)	70 3'-0"	70 3'-6"	70	70	70	70	70 6'-0"	70	70	66	58 8'-0"	52	46	42	37	34	31	28 11'-6"	25 12'-0"	24
	$(A+B) \div 2 = 2'-0'' (610)$	70	70	70	70	70	70	70	66	57	50	44	39	35	31	28	26	23	21]	
	$(A+B) \div 2 = 2'-6'' (762)$	70	70	70	70	70	70	62	53	46	40	35	31	28	25	22	20	1			
	(A + B) ÷ 2 = 3'-6" (1067) (A + B) ÷ 2 = 3'-0" (914)	70	70	70	70	70	62	52	38 44	38	28 33	29	26	23	21]			~		
	$(A + B) \div 2 = 4' - 0'' (1219)$	70 70	70 70	70 70	69 70	56 64	46 53	39 45	33	29 33	25	22 25	22					~		•	
	$(A + B) \div 2 = 4' - 6'' (1372)$	70	70	70	62	50	41	35	30	26	22	22	1					•	0	J	
¥	(A + B) ÷ 2 = 5'-0" (1524)	70	70	70	55	45	37	31	27	23	20						End Bra	icket	0		
Average	(A + B) ÷ 2 = 5'-6" (1676)	70	70	64	50	41	34	28	24	21		1									
	(A + B) ÷ 2 = 6'-0" (1829)	70	70	58	46	37	31	26	22		1				Ш				0		
ace	(A + B) ÷ 2 = 6'-6" (1981)	70	70	54	43	34	28	24	20												
Aujacent Window Dimension	(A + B) ÷ 2 = 7'-0" (2134)	70	66	50	40	32	26	22											ſ.		
	(A + B) ÷ 2 = 7'-6" (2286)	70	61	47	37	30	25	21								01001 301		atoriui			
<u>≥</u>	(A + B) ÷ 2 = 8'-0" (2438)	70	57	44	35	28	23		,							³/ ₁₆ " (5) Steel Joi					
Ē	(A + B) ÷ 2 = 8'-6" (2591)	70	54	41	33	26	22														
5	(A + B) ÷ 2 = 9'-0" (2743)	69	51	39	31	25	21														
_	(A + B) ÷ 2 = 9'-6" (2896)	66	48	37	29	24															
	(A + B) ÷ 2 = 10'-0" (3048)	62	46	35	28	22							•	С	→	A	В				
	(A + B) ÷ 2 = 10'-6" (3200)	59	44	33	26	21															
	(A + B) ÷ 2 = 11'-0" (3353)	57	42	32	25	20]											+			
	$(A + B) \div 2 = 11'-6'' (3505)$	54	40	30	24										B			С			
	(A + B) ÷ 2 = 12'-6" (3810) (A + B) ÷ 2 = 12'-0" (3658)	52	38	29	23								Ī		A			1			

For a join with a continuous jamb on one side, multiply psf by 1.2.

For a join with a continuous jamb on both sides, multiply psf by 1.4.

[·] Numerical values in charts represent structural pressure only.

^{*} Structural performance of any combination is only as high as the lowest structural performance of any individual unit or joining material in the combination.

[•]Andersen' products must be installed and anchored properly according to joining and installation guides to meet rated structural performance. Refer to product joining and installation guides at andersenwindows.com.

•Additional wind load tables are available at andersenwindows.com.

[•] Dimensions in parentheses are in millimeters.

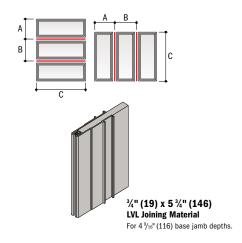
Casement and Awning Windows

1-Way LVL Joining

400 Series Casement, Awning, Complementary Specialty and Flexiframe® Windows

4 ⁹/₁₆" (116) Minimum Wall Depth

	(A + B) ÷ 2 = 6'-0" (1829)	70	70	56	45				
Ė	(A + B) ÷ 2 = 5'-6" (1676)	70	70	61	50				
Average Adjacent Window Dim.	(A + B) ÷ 2 = 5'-0" (1524)	70	70	68	55	45	36		
/ind	(A + B) ÷ 2 = 4'-6" (1372)	70	70	70	61	51	43	37	
i ×	(A + B) ÷ 2 = 4'-0" (1219)	70	70	70	70	58	49	42	35
Jace	(A + B) ÷ 2 = 3'-6" (1067)	70	70	70	70	68	56	49	39
e Ac	(A + B) ÷ 2 = 3'-0" (914)	70	70	70	70	70	63	53	45
erag	(A + B) ÷ 2 = 2'-6" (762)	70	70	70	70	70	70	62	53
¥	(A + B) ÷ 2 = 2'-0" (610)	70	70	70	70	70	70	62	53
	(A + B) ÷ 2 = 1'-6" (457)	70	70	70	70	70	70	62	53
	C = (length of join)	3'-6" (1067)	4'-0" (1219)	4'-6" (1372)	5'-0" (1524)	5'-6" (1676)	6'-0" (1829)	6'-6" (1981)	7'-0" (2134)

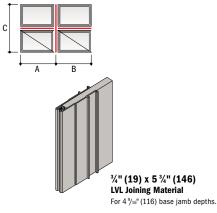


2-Way LVL Joining

400 Series Casement, Awning, Complementary Specialty and Flexiframe® Windows

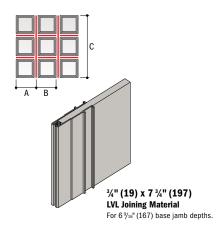
4 ⁹/₁₆" (116) Minimum Wall Depth

	C = (length of join)	3'-6" (1067)	4'-0" (1219)	4'-6" (1372)	5'-0" (1524)	5'-6" (1676)	6'-0" (1829)	6'-6" (1981)	7'-0" (2134)
	(A + B) ÷ 2 = 1'-6" (457)	70	70	70	70	61	69	59	51
¥	(A + B) ÷ 2 = 2'-0" (610)	70	70	70	70	61	69	59	51
Average Adjacent	(A + B) ÷ 2 = 2'-6" (762)	70	70	70	70	70	69	59	51
e Ad	(A + B) ÷ 2 = 3'-0" (914)	70	70	70	70	69	58	49	42
jace	(A + B) ÷ 2 = 3'-6" (1067)	70	70	70	70	59	49	42	36
T ×	(A + B) ÷ 2 = 4'-0" (1219)	70	70	70	62	51	43	37	32
Window Dim.	(A + B) ÷ 2 = 4'-6" (1372)	70	70	68	55	46	38	33	
Ν	(A + B) ÷ 2 = 5'-0" (1524)	70	70	62	50	41	34		
Ė	(A + B) ÷ 2 = 5'-6" (1676)	70	70	56	45				
	$(A + B) \div 2 = 6' - 0'' (1829)$	65	65	51	41				



6 ⁹/₁₆" (167) Minimum Wall Depth

	C = (length of join)	6'-0" (1829) or less	6'-6" (1981)	7'-0" (2134)	7'-6" (2286)	8'-0" (2438)	8'-6" (2591)	9'-0" (2743)	9'-6" (2896)	10'-0" (3048)
	(A + B) ÷ 2 = 1'-6" (457)	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 2'-0" (610)	70	70	70	70	70	70	70	70	66
	(A + B) ÷ 2 = 2'-6" (762)	70	70	70	70	70	70	70	68	56
	(A + B) ÷ 2 = 3'-0" (914)	70	70	70	70	70	70	66	57	47
	(A + B) ÷ 2 = 3'-6" (1067)	70	70	70	70	70	67	60	52	42
Average Adjacent Window	(A + B) ÷ 2 = 4'-0" (1219)	70	70	70	70	64	60	53	46	38
ge A	(A + B) ÷ 2 = 4'-6" (1372)	70	70	70	67	60	56	50	43	35
djac	(A + B) ÷ 2 = 5'-0" (1524)	70	70	68	63	56	52	46	39	32
ent	(A + B) ÷ 2 = 5'-6" (1676)	70	70	66	60	54	50	44	37	30
Wind	(A + B) ÷ 2 = 6'-0" (1829)	70	70	64	58	51	47	41	35	29
NO	(A + B) ÷ 2 = 6'-6" (1981)	70	70	63	57	50	46	40	34	28
Dimension	(A + B) ÷ 2 = 7'-0" (2134)	70	70	63	56	49	45	39	33	26
nsion	(A + B) ÷ 2 = 7'-6" (2286)	70	70	63	56	48	44	38	32	26
_	(A + B) ÷ 2 = 8'-0" (2438)	70	70	63	56	48	44	37	31	25
	(A + B) ÷ 2 = 8'-6" (2591)	70	70	63	56	48	44	37	31	25
	(A + B) ÷ 2 = 9'-0" (2743)	70	70	63	56	48	44	37	31	24
	(A + B) ÷ 2 = 9'-6" (2896)	70	70	63	56	48	44	37	31	24
	(A + B) ÷ 2 = 10'-0" (3048)	70	70	63	56	48	44	37	31	24



Note: 2-way joining must be assembled on the job site within the rough opening.

- Numerical values in charts represent structural pressure only.
 Structural performance of any combination is only as high as the lowest structural performance of any individual unit or joining material in the combination.
- Andersen* products must be installed and anchored properly according to joining and installation guides to meet rated structural performance. Refer to product joining and installation guides at andersenuindeus com
- andersenwindows.com.

 Additional wind load tables are available at andersenwindows.com.
- Dimensions in parentheses are in millimeters.

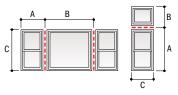


Double-Hung Insert Windows

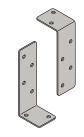
1-Way Joining with Joining Brackets

400 Series Woodwright[®] Double-Hung, Picture and Transom Insert Windows, and Tilt-Wash Double-Hung, Picture and Transom Insert Windows

	(A + B) ÷ 2 = 12'-0" (3658)	50	34	24	18					
<u></u>	(A + B) ÷ 2 = 11'-0" (3353)	50	34	24	18					
Average Adjacent Window Dimension	(A + B) ÷ 2 = 10'-0" (3048)	50	34	24	18					
Ë	(A + B) ÷ 2 = 9'-0" (2743)	50	34	24	18					
ng o	(A + B) ÷ 2 = 8'-0" (2438)	50	34	25	19	15				
ξ	(A + B) ÷ 2 = 7'-0" (2134)	50	35	26	20	16		_		
acen	(A + B) ÷ 2 = 6'-0" (1829)	50	38	28	22	18	15			
Adj	(A + B) ÷ 2 = 5'-0" (1524)	50	42	32	26	21	17			
rage	(A + B) ÷ 2 = 4'-0" (1219)	50	50	39	31	25	21	17		
Ave	(A + B) ÷ 2 = 3'-0" (914)	50	50	50	40	33	28	23	18	15
	(A + B) ÷ 2 = 2'-0" (610)	50	50	50	50	49	41	34	27	22
	C = (length of join)	3'-6" (1067) or less	4'-0" (1219)	4'-6" (1372)	5'-0" (1524)	5'-6" (1676)	6'-0" (1829)	6'-6" (1981)	7'-0" (2134)	7'-6" (2286)



Note: Only 1-way combinations similar to those shown above are allowed



Joining Brackets

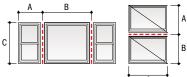
Joining brackets are used at the ends of each join to attach units to the opening.

Double-Hung Full-Frame Windows

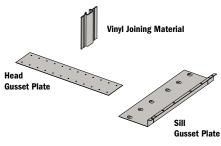
1-Way Vinyl Joining

400 Series Woodwright* Double-Hung, Picture and Transom Full-Frame Windows, and Tilt-Wash Double-Hung, Picture and Transom Full-Frame Windows

	C = (length of join)	4'-0" (1219) or less	4'-6" (1372)	5'-0" (1524)	5'-6" (1676)	6'-0" (1829)	6'-6" (1981)	7'-0" (2134)	7'-6" (2286)	8'-0" (2438)	8'-6" (2591)	9'-0" (2743)
	$(A + B) \div 2 = 1'-6'' (457)$	50	50	50	50	50	49	45	42	39	37	34
	(A + B) ÷ 2 = 2'-0" (610)	50	50	50	46	41	37	34	32	29	27	25
	(A + B) ÷ 2 = 2'-6" (762)	50	50	44	40	35	32	29	27	25	24	22
	(A + B) ÷ 2 = 3'-0" (914)	50	47	39	35	30	28	25	23	21	20	
	(A + B) ÷ 2 = 3'-6" (1067)	50	44	37	32	28	26	23	21			
	(A + B) ÷ 2 = 4'-0" (1219)	50	42	34	30	26	23	21				
	(A + B) ÷ 2 = 4'-6" (1372)	50	42	33	29	25	22	20				
Aver	(A + B) ÷ 2 = 5'-0" (1524)	50	42	33	28	24	21					
age	(A + B) ÷ 2 = 5'-6" (1676)	50	42	33	28	23	21					
Adja	(A + B) ÷ 2 = 6'-0" (1829)	50	42	33	28	23	20				u	usset Fl
cent	$(A + B) \div 2 = 6' - 6'' (1981)$	50	42	33	28	23	20					ead usset Pla
Average Adjacent Window Dimension	(A + B) ÷ 2 = 7'-0" (2134)	50	42	33	28	23	20					<u>(</u>
yop	$(A + B) \div 2 = 7' - 6'' (2286)$	50	42	33	28	23	20					
Dime	$(A + B) \div 2 = 8' - 0'' (2438)$	50	42	33	28	23	20					
nsio	$(A + B) \div 2 = 8' - 6'' (2591)$	50	42	33	28	23	20					
_	$(A + B) \div 2 = 9' - 6'' (2896)$ $(A + B) \div 2 = 9' - 0'' (2743)$	50	42	33	28	23	20					,
	$(A + B) \div 2 = 10' - 0'' (3048)$	50 50	42 42	33	28	23	20					!
	$(A + B) \div 2 = 10' - 6'' (3200)$	50	42	33	28	23	20					
	(A + B) ÷ 2 = 11'-0" (3353)	50	42	33	28	23	20					↓l
	(A + B) ÷ 2 = 11'-6" (3505)	50	42	33	28	23	20					С
	(A + B) ÷ 2 = 12'-0" (3658)	50	42	33	28	23	20					Ti
	(A + B) ÷ 2 = 12'-6" (3810)	50	42	33	28	23	20					1
		1	1	ı	1	I		1				



Note: Only 1-way combinations similar to those shown above are allowed



20

26

11'-6"

(3505)

25

12'-0" 12'-6"

(3658) (3810)

24

21 24

32

9'-6"

(2896)

23

30

10'-0'

(3048)

22

29

10'-6"

(3200)

20

27

11'-0"

(3353)

[·] Numerical values in charts represent structural pressure only.

[•] Structural performance of any combination is only as high as the lowest structural performance of any individual unit or joining material in the combination.

[•] Andersen* products must be installed and anchored properly according to joining and installation guides to meet rated structural performance. Refer to product joining and installation guides at andersenwindows.com.
• Additional wind load tables are available at andersenwindows.com.

[·] Dimensions in parentheses are in millimeters.

Double-Hung Full-Frame Windows

1-Way Vinyl Joining with V-Notch Gusset Plates

400 Series Woodwright® Double-Hung, Picture and Transom Full-Frame Windows, and Tilt-Wash Double-Hung, Picture and Transom Full-Frame Windows

	(A + B) ÷ 2 = 12'-6" (3810)	50	48	41	33	29	24	22										
	(A + B) ÷ 2 = 12'-0" (3658)	50	48	41	33	29	24	22				+ A	В			В		
	(A + B) ÷ 2 = 11'-6" (3505)	50	48	41	33	29	24	22							a ř	5 1		
	(A + B) ÷ 2 = 11'-0" (3353)	50	48	41	33	29	24	22				c -	-	l li⊦	_	A		
	(A + B) ÷ 2 = 10'-6" (3200)	50	48	41	33	29	24	22										
	(A + B) ÷ 2 = 10'-0" (3048)	50	48	41	33	29	24	22							•	C		
	(A + B) ÷ 2 = 9'-6" (2896)	50	48	41	33	29	24	22					ly 1-way co					
5	(A + B) ÷ 2 = 9'-0" (2743)	50	48	41	33	29	24	22				those sh	own above	are allowed	1.			
	(A + B) ÷ 2 = 8'-6" (2591)	50	48	41	33	29	24	22					_					
	(A + B) ÷ 2 = 8'-0" (2438)	50	48	41	33	29	24	22						Vinual La	ining Ma	4		
	(A + B) ÷ 2 = 7'-6" (2286)	50	48	41	33	29	24	22						Vinyi Jo	oining Ma	teriai		
	(A + B) ÷ 2 = 7'-0" (2134)	50	48	41	33	29	24	22					ĮI.			<u></u>		
	(A + B) ÷ 2 = 6'-6" (1981)	50	48	41	33	29	25	22							[,	
•	$(A + B) \div 2 = 6' - 0'' (1829)$	50	48	41	33	29	25	23	20						V-Notch Gusset P	late	·.·	>
	(A + B) ÷ 2 = 5'-6" (1676)	50	48	41	33	30	26	24	21									
Average Adjacent Window Dimension	(A + B) ÷ 2 = 5'-0" (1524)	50	48	41	34	31	27	24	22	20							•	
	(A + B) ÷ 2 = 4'-6" (1372)	50	48	42	36	32	28	26	23	22	1							
	(A + B) ÷ 2 = 4'-0" (1219)	50	49	43	37	34	30	28	25	23	21							
	(A + B) ÷ 2 = 3'-6" (1067)	50	50	47	40	37	33	31	28	26	24	23	20					
	(A + B) ÷ 2 = 3'-0" (914)	50	50	50	44	40	36	33	30	29	26	25	22	20				
	(A + B) ÷ 2 = 2'-6" (762)	50	50	50	50	47	42	39	36	34	31	30	26	24	21	20]	
	(A + B) ÷ 2 = 2'-0" (610)	50	50	50	50	50	49	46	42	40	37	35	31	31	27	25	22	
	$(A + B) \div 2 = 1'-6'' (457)$	50	50	50	50	50	50	50	50	50	49	47	44	41	37	34	30	26
	C = (length of join)	4'-6" (1372) or less	5'-0" (1524)	5'-6" (1676)	6'-0" (1829)	6'-6" (1981)	7'-0" (2134)	7'-6" (2286)	8'-0" (2438)	8'-6" (2591)	9'-0" (2743)	9'-6" (2896)	10'-0" (3048)	10'-6" (3200)	11'-0" (3353)	11'-6" (3505)	12'-0" (3658)	12'-6" (3810)
00	ay or 2-Way Steel Jo Series Woodwright* Doi Filt-Wash Double-Hung, (A+B)+2= 7'-6" (2286)	ining w	ng, Pict	ure and	Transoi	m Full-F	rame W lows				C	B			B		c	
	(A + B) ÷ 2 = 7'-0" (2134)	50	40	35	30	27	23	3 2	1					_ +	C	† _A † _B	+ +	С
<u> </u>	(A + B) ÷ 2 = 6'-6" (1981)	50	40	35	30	27	24	1 2	2 2	20								
	-								-					10				

5'-6"

(1676)

or less

6'-0"

(1829)

6'-6"

(1981)

7'-0"

(2134)

7'-6"

(2286)

8'-0"

(2438)

8'-6"

(2591)

9'-0"

(2743)

9'-6"

(2896)

10'-0"

(3048)

10'-6"

(3200)

11'-0"

(3353)

 $^{3}/_{16}$ " (5) x 4" (102) Steel Joining Material

V-Notch

11'-6"

(3505)

12'-0"

(3658)

12'-6"

(3810)

Gusset Plate

 $(A + B) \div 2 = 6'-0" (1829)$

 $(A + B) \div 2 = 5'-6'' (1676)$

 $(A + B) \div 2 = 5' - 0'' (1524)$

 $(A + B) \div 2 = 4'-6'' (1372)$

 $(A + B) \div 2 = 4'-0'' (1219)$

(A + B) ÷ 2 = **3'-6"** (1067)

(A + B) ÷ 2 = **3'-0"** (914) (A + B) ÷ 2 = **2'-6"** (762)

 $(A + B) \div 2 = 2' - 0'' (610)$

C = (length of join)

Average Adjacent Window Dimensi

[•] Numerical values in charts represent structural pressure only.

^{*} Structural performance of any combination is only as high as the lowest structural performance of any individual unit or joining material in the combination.

^{*}Andersen" products must be installed and anchored properly according to joining and installation guides to meet rated structural performance. Refer to product joining and installation guides at andersenwindows.com.

Additional wind load tables are available at andersenwindows.com.

 $[\]ensuremath{^{\bullet}}$ Dimensions in parentheses are in millimeters.



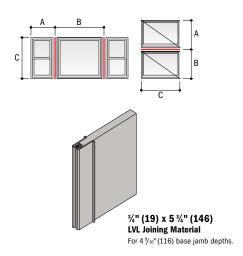
Double-Hung Full-Frame Windows

1-Way LVL Joining

400 Series Woodwright® Double-Hung, Picture and Transom Full-Frame Windows, Tilt-Wash Double-Hung, Picture and Transom Full-Frame Windows, and Flexiframe® Windows

4 %16" (116)Minimum Depth

	C = (length of join)	5'-6" (1676) or less	6'-0" (1829)	6'-6" (1981)	7'-0" (2134)	7'-6" (2286)	8'-0" (2438)
	$(A + B) \div 2 = 1'-0'' (305)$	50	50	50	50	50	50
Ä	(A + B) ÷ 2 = 1'-6" (457)	50	50	50	50	50	50
Average	(A + B) ÷ 2 = 2'-0" (610)	50	50	50	50	50	50
	(A + B) ÷ 2 = 2'-6" (762)	50	50	50	50	50	50
Adjacent Window Dimension	(A + B) ÷ 2 = 3'-0" (914)	50	50	50	50	50	48
it W	(A + B) ÷ 2 = 3'-6" (1067)	50	50	50	50	50	44
ndo	(A + B) ÷ 2 = 4'-0" (1219)	50	50	50	50	49	39
v Di	(A + B) ÷ 2 = 4'-6" (1372)	50	50	50	50	46	38
nens	(A + B) ÷ 2 = 5'-0" (1524)	50	50	50	50	43	35
ion	(A + B) ÷ 2 = 5'-6" (1676)	50	50	50	50	42	33
	(A + B) ÷ 2 = 6'-0" (1829)	50	50	50	50	40	32

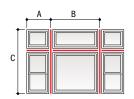


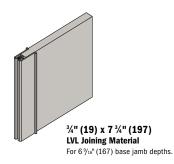
2-Way LVL Joining

400 Series Woodwright® Double-Hung, Picture and Transom Full-Frame Windows, Tilt-Wash Double-Hung, Picture and Transom Full-Frame Windows, and Flexiframe® Windows

6 1/16" (167)Minimum Wall Depth

	C = (length of join)	6'-0" (1829) or less	6'-6" (1981)	7'-0" (2134)	7'-6" (2286)	8'-0" (2438)	8'-6" (2591)	9'-0" (2743)	9'-6" (2896)	10'-0" (3048)
	(A + B) ÷ 2 = 1'-6" (457)	50	50	50	50	50	50	50	50	50
	(A + B) ÷ 2 = 2'-0" (610)	50	50	50	50	50	50	50	50	50
	(A + B) ÷ 2 = 2'-6" (762)	50	50	50	50	50	50	50	50	50
	(A + B) ÷ 2 = 3'-0" (914)	50	50	50	50	50	50	50	50	47
₹	(A + B) ÷ 2 = 3'-6" (1067)	50	50	50	50	50	50	50	50	42
verag	(A + B) ÷ 2 = 4'-0" (1219)	50	50	50	50	50	50	50	46	38
ge Ac	(A + B) ÷ 2 = 4'-6" (1372)	50	50	50	50	50	50	50	43	35
Average Adjacent Window Dimension	(A + B) ÷ 2 = 5'-0" (1524)	50	50	50	50	50	50	46	39	32
nt ×	(A + B) ÷ 2 = 5'-6" (1676)	50	50	50	50	50	50	44	37	30
Vind	(A + B) ÷ 2 = 6'-0" (1829)	50	50	50	50	50	47	41	35	29
W D	(A + B) ÷ 2 = 6'-6" (1981)	50	50	50	50	50	46	40	34	28
imer	(A + B) ÷ 2 = 7'-0" (2134)	50	50	50	50	49	45	39	33	26
Ision	(A + B) ÷ 2 = 7'-6" (2286)	50	50	50	50	48	44	38	32	26
	(A + B) ÷ 2 = 8'-0" (2438)	50	50	50	50	48	44	37	31	25
	(A + B) ÷ 2 = 8'-6" (2591)	50	50	50	50	48	44	37	31	25
	(A + B) ÷ 2 = 9'-0" (2743)	50	50	50	50	48	44	37	31	24
	(A + B) ÷ 2 = 9'-6" (2896)	50	50	50	50	48	44	37	31	24
	(A + B) ÷ 2 = 10'-0" (3048)	50	50	50	50	48	44	37	31	24





Note: 2-way joining must be assembled on the job site within the rough opening. When creating 2-way combinations for 6 %16" (167) minimum wall thickness, $6\,^9\!/_{16}"$ (167) LVL joining material is required.

[·] Numerical values in charts represent structural pressure only.

[•] Structural performance of any combination is only as high as the lowest structural performance of any individual unit or joining material in the combination.

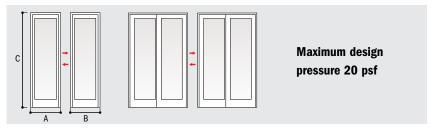
[•] Andersen* products must be installed and anchored properly according to joining and installation guides to meet rated structural performance. Refer to product joining and installation guides at andersenwindows.com.
• Additional wind load tables are available at andersenwindows.com.

[·] Dimensions in parentheses are in millimeters.

Gliding Patio Doors

1-Way Jamb-to-Jamb Joining

400 Series Stationary and Two-Panel Frenchwood® Gliding Patio Doors



1-Way Jamb-to-Jamb Vertical (Ribbon) Joining

400 Series Stationary and Two-Panel Frenchwood® Gliding Patio Doors, and Frenchwood Patio Door Sidelights

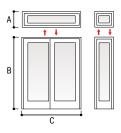
				_						_
(A + B) ÷ 2 = 8'-0" (2438)	65	65	65	65	61	51	44	37	33	29
(A + B) ÷ 2 = 7'-6" (2286)	65	65	65	65	61	51	44	37	33	29
(A + B) ÷ 2 = 7'-0" (2134)	65	65	65	65	61	51	44	37	33	29
(A + B) ÷ 2 = 6'-6" (1981)	65	65	65	65	61	51	44	38	33	30
(A + B) ÷ 2 = 6'-0" (1829)	65	65	65	65	61	51	44	38	34	31
(A + B) ÷ 2 = 5'-6" (1676)	65	65	65	65	61	52	45	39	35	32
(A + B) ÷ 2 = 5'-0" (1524)	65	65	65	65	62	53	46	41	37	33
$(A + B) \div 2 = 4'-6'' (1372)$	65	65	65	65	63	55	48	43	39	35
(A + B) ÷ 2 = 4'-0" (1219)	65	65	65	65	65	58	51	46	42	38
(A + B) ÷ 2 = 3'-6" (1067)	65	65	65	65	65	62	55	50	46	42
(A + B) ÷ 2 = 3'-0" (914)	65	65	65	65	65	65	62	56	51	47
(A + B) ÷ 2 = 2'-6" (762)	65	65	65	65	65	65	65	64	59	55
(A + B) ÷ 2 = 2'-0" (610)	65	65	65	65	65	65	65	65	65	65
(A + B) ÷ 2 = 1'-6" (457)	65	65	65	65	65	65	65	65	65	65
C = (length of join)	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"
, <u> </u>	(1067)	(1219)	(1372)	(1524)	(1676)	(1829)	(1981)	(2134)	(2286)	(2438)
	$\begin{array}{l} (A+B) \div 2 = \textbf{7'-6''} \ (2286) \\ (A+B) \div 2 = \textbf{7'-6''} \ (2134) \\ (A+B) \div 2 = \textbf{6'-6''} \ (1981) \\ (A+B) \div 2 = \textbf{6'-0''} \ (1829) \\ (A+B) \div 2 = \textbf{5'-6''} \ (1676) \\ (A+B) \div 2 = \textbf{5'-6''} \ (1524) \\ (A+B) \div 2 = \textbf{4'-6''} \ (1372) \\ (A+B) \div 2 = \textbf{4'-0''} \ (1219) \\ (A+B) \div 2 = \textbf{3'-6''} \ (1067) \\ (A+B) \div 2 = \textbf{3'-6''} \ (762) \\ (A+B) \div 2 = \textbf{2'-6''} \ (610) \\ (A+B) \div 2 = \textbf{1'-6''} \ (457) \\ \end{array}$	$\begin{array}{llllllllllllllllllllllllllllllllllll$	(A+B) ÷ 2 - 7'-6" (2286) 65 65 (A+B) ÷ 2 - 7'-0" (2134) 65 65 (A+B) ÷ 2 - 6'-6" (1981) 65 65 (A+B) ÷ 2 - 6'-0" (1829) 65 65 (A+B) ÷ 2 - 5'-6" (1676) 65 65 (A+B) ÷ 2 - 5'-0" (1524) 65 65 (A+B) ÷ 2 - 4'-6" (1372) 65 65 (A+B) ÷ 2 - 4'-0" (1219) 65 65 (A+B) ÷ 2 - 3'-6" (1067) 65 65 (A+B) ÷ 2 - 3'-6" (1067) 65 65 (A+B) ÷ 2 - 2'-6" (762) 65 65 (A+B) ÷ 2 - 2'-0" (610) 65 65 (A+B) ÷ 2 - 2'-0" (610) 65 65 (A+B) ÷ 2 - 1'-6" (457) 65 65 (C-1000000000000000000000000000000000000	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$						



1-Way Jamb-to-Jamb Horizontal (Stacked) Joining

400 Series Stationary and Two-Panel Frenchwood® Gliding Patio Doors, and Frenchwood Patio Door Transoms

	C = (length of join)	(1067)	(1219)	(1372)	(1524)	(1676)	(1829)	(1981)	(2134)	(2286)	(2438)
		3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"
	$(A + B) \div 2 = 1'-6'' (457)$	65	65	65	65	65	65	65	65	62	51
	(A + B) ÷ 2 = 2'-0" (610)	65	65	65	65	65	65	65	58	47	38
	(A + B) ÷ 2 = 2'-6" (762)	65	65	65	65	65	65	57	47	38	31
	(A + B) ÷ 2 = 3'-0" (914)	65	65	65	65	65	58	49	40	32	26
	(A + B) ÷ 2 = 3'-6" (1067)	65	65	65	65	63	51	43	35	28	23
	(A + B) ÷ 2 = 4'-0" (1219)	65	65	65	65	58	47	39	32	25	21
-	(A + B) ÷ 2 = 4'-6" (1372)	65	65	65	65	54	44	36	29	23	
Ave	(A + B) ÷ 2 = 5'-0" (1524)	65	65	65	65	53	41	34	28	22	
age	(A + B) ÷ 2 = 5'-6" (1676)	65	65	65	65	52	40	32	26	20	
Adj	(A + B) ÷ 2 = 6'-0" (1829)	65	65	65	65	52	40	32	25	20	
ace	(A + B) ÷ 2 = 6'-6" (1981)	65	65	65	65	52	40	31	25		
Ę	(A + B) ÷ 2 = 7'-0" (2134)	65	65	65	65	52	40	31	25		
Average Adjacent Door Dimension	(A + B) ÷ 2 = 7'-6" (2286)	65	65	65	65	52	40	31	25		
ğ	(A + B) ÷ 2 = 8'-0" (2438)	65	65	65	65	52	40	31	25		
ensic	(A + B) ÷ 2 = 8'-6" (2591)	65	65	65	65	52	40	31	25		
=	$(A + B) \div 2 = 9' - 0'' (2743)$	65	65	65	65	52	40	31	25		
	$(A + B) \div 2 = 9'-6'' (2896)$	65	65	65	65	52	40	31	25		
	$(A + B) \div 2 = 10' - 0'' (3048)$	65	65	65	65	52	40	31	25		
	$(A+B) \div 2 = 10'-6'' (3200)$	65	65	65	65	52	40	31	25		
	$(A+B) \div 2 = 11'-0" (3353)$	65	65	65	65	52	40	31	25		
	$(A + B) \div 2 = 12' - 0'' (3658)$ $(A + B) \div 2 = 11' - 6'' (3505)$	65	65	65	65	52	40	31	25		
		65	65	65	65	52	40	31	25		
	(A + B) ÷ 2 = 12'-6" (3810)	65	65	65	65	52	40	31	25]	



- Numerical values in charts represent structural pressure only.
- Structural performance of any combination is only as high as the lowest structural performance of any individual unit or joining material in the combination.
- Andersen* products must be installed and anchored properly according to joining and installation guides to meet rated structural performance. Refer to product joining and installation guides at andersenwindows.com.

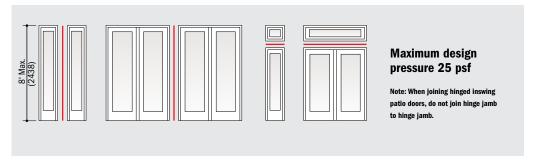
 • Additional wind load tables are available at andersenwindows.com.
- Dimensions in parentheses are in millimeters.



Hinged Patio Doors

1-Way Aluminum Joining

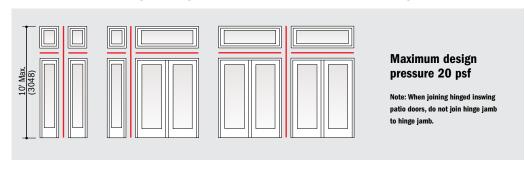
400 Series Frenchwood® Hinged Inswing Patio Doors, and Frenchwood Patio Doors Sidelights and Transoms

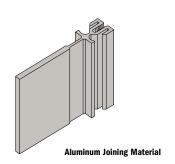




2-Way Aluminum Joining

400 Series Frenchwood® Hinged Inswing Patio Doors, and Frenchwood Patio Door Sidelights and Transoms





^{*} Structural performance of any combination is only as high as the lowest structural performance of any individual unit or joining material in the combination.

[•] Andersen* products must be installed and anchored properly according to joining and installation guides to meet rated structural performance. Refer to product joining and installation guides at andersenwindows.com.
• Additional wind load tables are available at andersenwindows.com.

[·] Dimensions in parentheses are in millimeters.

1-Way Fiberglass Joining

400 Series Frenchwood* Gliding, Frenchwood Hinged Inswing Patio Doors, and Frenchwood Patio Door Sidelights and Transoms

4 9/16" (116)Minimum Wall Depth

	C = (length of join)	2'-0" (610)	2'-6" (762)	3'-0" (914)	3'-6" (1067)	4'-0" (1219)	4'-6" (1372)	5'-0" (1524)	5'-6" (1676)	6'-0" (1829)	6'-6" (1981)	7'-0" (2134)	7'-6" (2286)	8'-0" (2438)
	(A + B) ÷ 2 = 1'-6" (457)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 2'-0" (610)	70	70	70	70	70	70	70	70	70	70	70	70	70
	$(A + B) \div 2 = 2' - 6'' (762)$	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 3'-0" (914)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 3'-6" (1067)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 4'-0" (1219)	70	70	70	70	70	70	70	70	70	70	70	70	70
Ave	(A + B) ÷ 2 = 4'-6" (1372)	70	70	70	70	70	70	70	70	70	70	70	70	70
rage	(A + B) ÷ 2 = 5'-0" (1524)	70	70	70	70	70	70	70	70	70	70	70	70	70
e Ad	(A + B) ÷ 2 = 5'-6" (1676)	70	70	70	70	70	70	70	70	70	70	70	70	70
jace	(A + B) ÷ 2 = 6'-0" (1829)	70	70	70	70	70	70	70	70	70	70	70	70	70
it .	(A + B) ÷ 2 = 6'-6" (1981)	70	70	70	70	70	70	70	70	70	70	70	70	70
Average Adjacent Window	(A + B) ÷ 2 = 7'-0" (2134)	70	70	70	70	70	70	70	70	70	70	70	70	68
NO.	(A + B) ÷ 2 = 7'-6" (2286)	70	70	70	70	70	70	70	70	70	70	70	70	67
Dim	(A + B) ÷ 2 = 8'-0" (2438)	70	70	70	70	70	70	70	70	70	70	70	70	67
Dimension	(A + B) ÷ 2 = 8'-6" (2591)	70	70	70	70	70	70	70	70	70	70	70	70	67
E	(A + B) ÷ 2 = 9'-0" (2743)	70	70	70	70	70	70	70	70	70	70	70	70	67
	(A + B) ÷ 2 = 9'-6" (2896)	70	70	70	70	70	70	70	70	70	70	70	70	67
	(A + B) ÷ 2 = 10'-0" (3048)	70	70	70	70	70	70	70	70	70	70	70	70	67
•	(A + B) ÷ 2 = 10'-6" (3200)	70	70	70	70	70	70	70	70	70	70	70	70	67
	(A + B) ÷ 2 = 11'-0" (3353)	70	70	70	70	70	70	70	70	70	70	70	70	67
	(A + B) ÷ 2 = 11'-6" (3505)	70	70	70	70	70	70	70	70	70	70	70	70	67
	(A + B) ÷ 2 = 12'-0" (3658)	70	70	70	70	70	70	70	70	70	70	70	70	67

continued on next page

1-Way Fiberglass Joining

400 Series Frenchwood Gliding, Frenchwood Hinged Inswing Patio Doors, and Frenchwood Patio Door Sidelights and Transoms

6 %16" (167)Minimum Wall Depth

	(A + B) ÷ 2 = 12'-0" (3658)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 11'-6" (3505)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 11'-0" (3048)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 10'-6" (3200)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 10'-0" (3048)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 9'-6" (2896)	70	70	70	70	70	70	70	70	70	70	70	70	70
5	(A + B) ÷ 2 = 9'-0" (2743)	70	70	70	70	70	70	70	70	70	70	70	70	70
Dimension	(A + B) ÷ 2 = 8'-6" (2591)	70	70	70	70	70	70	70	70	70	70	70	70	70
Ë	(A + B) ÷ 2 = 8'-0" (2438)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 7'-6" (2286)	70	70	70	70	70	70	70	70	70	70	70	70	70
Vin V	(A + B) ÷ 2 = 7'-0" (2134)	70	70	70	70	70	70	70	70	70	70	70	70	70
Ę	(A + B) ÷ 2 = 6'-6" (1981)	70	70	70	70	70	70	70	70	70	70	70	70	70
Adjacent Window	(A + B) ÷ 2 = 6'-0" (1829)	70	70	70	70	70	70	70	70	70	70	70	70	70
Ad	(A + B) ÷ 2 = 5'-6" (1676)	70	70	70	70	70	70	70	70	70	70	70	70	70
Average	(A + B) ÷ 2 = 5'-0" (1524)	70	70	70	70	70	70	70	70	70	70	70	70	70
Ave	(A + B) ÷ 2 = 4'-6" (1372)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 4'-0" (1219)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 3'-6" (1067)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 3'-0" (914)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 2'-6" (762)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 2'-0" (610)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 1'-6" (457)	70	70	70	70	70	70	70	70	70	70	70	70	70
	C = (length of join)	2'-0" (610)	2'-6" (762)	3'-0" (914)	3'-6" (1067)	4'-0" (1219)	4'-6" (1372)	5'-0" (1524)	5'-6" (1676)	6'-0" (1829)	6'-6" (1981)	7'-0" (2134)	7'-6" (2286)	8'-0" (2438)

[•] Numeric value represents the certified Performance Grade (PG) rating of the combination.

continued on next page

[•] Structural performance of any combination is only as high as the lowest structural performance of any individual unit or joining material in the combination.

[•] Andersen* products must be installed and anchored properly according to joining and installation guides to meet rated structural performance. Refer to product joining and installation guides at andersenwindows.com.

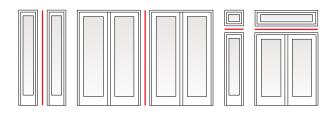
• Frenchwood* hinged inswing patio doors with a 6 9/1e" (167) or greater exterior extension jamb depth require 7 3/4" (197) fiberglass joining material.

• Dimensions in parentheses are in millimeters.



1-Way Fiberglass Joining continued from previous page

52	42	33	27	22			
52	42	33	27	22			
52	42	33	27	22			
52	42	33	27	22			
52	42	33	27	22			
52	42	33	27	23			
52	42	34	27	23			
52	42	34	28	23	20		
53	42	35	29	24	20		
53	43	35	29	25	21		
55	44	37	31	26	22		
56	46	38	32	27	2	20	
59	48	40	34	29	25	21	
62	51	43	36	31	26	23	20
66	55	46	39	33	28	25	21
70	59	50	42	36	31	27	24
70	65	55	47	40	35	30	26
70	70	62	53	45	39	34	30
70	70	70	61	52	45	39	34
70	70	70	70	62	54	47	41
70	70	70	70	70	67	58	51
70	70	70	70	70	70	70	68
8'-6" (2591)	9'-0" (2743)	9'-6" (2896)	10'-0" (3048)	10'-6" (3200)	11'-0" (3353)	11'-6" (3505)	12'-0" (3658)

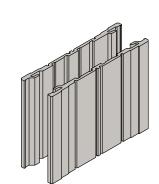




34" (19) x 5 34" (146) **Fiberglass Joining Material** For 4 $^9\!/_{16}\text{"}$ (116) base jamb depths.

Note: When joining hinged inswing patio doors, do not join hinge jamb to hinge jamb.

1-Way Fibergla	ss Joining conti	nued from prev	ious page								
70	70	66	58	47	39	33	28	23	20		
70	70	66	58	47	39	33	28	24	20		
70	70	66	58	47	39	33	28	24	21		
70	70	66	58	47	39	33	28	24	21		
70	70	66	58	48	40	34	29	25	21		
70	70	66	58	48	40	34	29	25	22		
70	70	66	59	49	41	35	30	26	23	20	
70	70	67	59	50	42	36	31	27	23	21	
70	70	68	61	51	43	37	32	28	24	21	
70	70	69	63	53	45	39	33	29	25	22	20
70	70	70	65	55	47	40	35	31	27	24	21
70	70	70	68	58	49	43	37	32	28	25	22
70	70	70	70	61	52	45	39	34	30	27	24
70	70	70	70	65	56	48	42	37	33	29	26
70	70	70	70	70	60	52	46	40	36	32	28
70	70	70	70	70	66	57	50	44	39	35	31
70	70	70	70	70	70	64	56	49	44	39	35
70	70	70	70	70	70	70	63	56	49	44	39
70	70	70	70	70	70	70	70	65	57	51	46
70	70	70	70	70	70	70	70	70	68	61	54
70	70	70	70	70	70	70	70	70	70	70	68
70	70	70	70	70	70	70	70	70	70	70	70
8'-6" (2591)	9'-0" (2743)	9'-6" (2896)	10'-0" (3048)	10'-6" (3200)	11'-0" (3353)	11'-6" (3505)	12'-0" (3658)	12'-6" (3810)	13'-0" (3962)	13'-6" (4114)	14'-0" (4267)



3/4" (19) x 7 3/4" (197) **Fiberglass Joining Material**

For higher performance for 1-way and 2-way joining. Required for Frenchwood* hinged inswing patio doors with 6 %16" (167) or greater exterior extension jamb depths.

Note: When joining hinged inswing patio doors, do not join hinge jamb to hinge jamb.

- Numeric value represents the certified Performance Grade (PG) rating of the combination.
- Structural performance of any combination is only as high as the lowest structural performance of any individual unit or joining material in the combination.
 Andersen* products must be installed and anchored properly according to joining and installation guides to meet rated structural performance. Refer to product joining and installation guides at andersenwindows.com.
 Frenchwood* hinged inswing patio doors with a 6 %1s" (167) or greater exterior extension jamb depth require 7 3/4" (197) fiberglass joining material.
- Dimensions in parentheses are in millimeters.

2-Way Fiberglass Joining

400 Series Frenchwood* Gliding, Frenchwood Hinged Inswing Patio Doors, and Frenchwood Patio Door Sidelights and Transoms

4 9/16" (116) Minimum Wall Depth

	C = (length of join)	2'-0" (610)	2'-6" (762)	3'-0" (914)	3'-6" (1067)	4'-0" (1219)	4'-6" (1372)	5'-0" (1524)	5'-6" (1676)	6'-0" (1829)	6'-6" (1981)	7'-0" (2134)	7'-6" (2286)	8'-0" (2438)
	$(A + B) \div 2 = 1'-6'' (457)$	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 2'-0" (610)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 2'-6" (762)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 3'-0" (914)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 3'-6" (1067)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 4'-0" (1219)	70	70	70	70	70	70	70	70	70	70	70	70	70
Ave	(A + B) ÷ 2 = 4'-6" (1372)	70	70	70	70	70	70	70	70	70	70	70	70	69
age.	(A + B) ÷ 2 = 5'-0" (1524)	70	70	70	70	70	70	70	70	70	70	70	70	62
e Ad	(A + B) ÷ 2 = 5'-6" (1676)	70	70	70	70	70	70	70	70	70	70	70	68	56
jace	(A + B) ÷ 2 = 6'-0" (1829)	70	70	70	70	70	70	70	70	70	70	70	62	51
mt .	(A + B) ÷ 2 = 6'-6" (1981)	70	70	70	70	70	70	70	70	70	70	65	58	47
Average Adjacent Window	(A + B) ÷ 2 = 7'-0" (2134)	70	70	70	70	70	70	70	70	70	65	61	53	44
NO.	(A + B) ÷ 2 = 7'-6" (2286)	70	70	70	70	70	70	70	70	66	61	57	50	41
E .	(A + B) ÷ 2 = 8'-0" (2438)	70	70	70	70	70	70	70	68	62	57	53	47	38
Dimension	(A + B) ÷ 2 = 8'-6" (2591)	70	70	70	70	70	70	70	64	58	54	50	44	36
5	$(A + B) \div 2 = 9'-0'' (2743)$	70	70	70	70	70	70	66	60	55	51	47	41	34
	(A + B) ÷ 2 = 9'-6" (2896)	70	70	70	70	70	70	63	57	52	48	45	39	32
	(A + B) ÷ 2 = 10'-0" (3048)	70	70	70	70	70	66	60	54	50	46	42	37	31
	(A + B) ÷ 2 = 10'-6" (3200)	70	70	70	70	70	63	57	51	47	44	40	35	29
-	(A + B) ÷ 2 = 11'-0" (3353)	70	70	70	70	68	60	54	49	45	42	39	34	28
	(A + B) ÷ 2 = 11'-6" (3505)	70	70	70	70	65	58	52	47	43	40	37	32	27
	(A + B) ÷ 2 = 12'-0" (3658)	70	70	70	70	62	55	50	45	41	38	35	31	25

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2-Way Fiberglass Joining

400 Series Frenchwood Gliding, Frenchwood Hinged Inswing Patio Doors, and Frenchwood Patio Door Sidelights and Transoms

6 %16" (167)Minimum Wall Depth

	(A + B) ÷ 2 = 12'-0" (3658)	70	70	70	70	62	55	50	45	41	38	35	33	31
	(A + B) ÷ 2 = 11'-6" (3505)	70	70	70	70	65	58	52	47	43	40	37	34	32
	(A + B) ÷ 2 = 11'-0" (3048)	70	70	70	70	68	60	54	49	45	42	39	36	34
	(A + B) ÷ 2 = 10'-6" (3200)	70	70	70	70	70	63	57	51	47	44	40	38	35
	(A + B) ÷ 2 = 10'-0" (3048)	70	70	70	70	70	66	60	54	50	46	42	40	37
	(A + B) ÷ 2 = 9'-6" (2896)	70	70	70	70	70	70	63	57	52	48	45	42	39
<u>5</u>	(A + B) ÷ 2 = 9'-0" (2743)	70	70	70	70	70	70	66	60	55	51	47	44	41
Dimension	(A + B) ÷ 2 = 8'-6" (2591)	70	70	70	70	70	70	70	64	58	54	50	47	44
Ë	(A + B) ÷ 2 = 8'-0" (2438)	70	70	70	70	70	70	70	68	62	57	53	50	46
	(A + B) ÷ 2 = 7'-6" (2286)	70	70	70	70	70	70	70	70	66	61	57	53	50
Ē	(A + B) ÷ 2 = 7'-0" (2134)	70	70	70	70	70	70	70	70	70	65	61	57	53
Ĭ	(A + B) ÷ 2 = 6'-6" (1981)	70	70	70	70	70	70	70	70	70	70	65	61	57
jace	(A + B) ÷ 2 = 6'-0" (1829)	70	70	70	70	70	70	70	70	70	70	70	66	62
A	(A + B) ÷ 2 = 5'-6" (1676)	70	70	70	70	70	70	70	70	70	70	70	70	68
Average Adjacent Window	(A + B) ÷ 2 = 5'-0" (1524)	70	70	70	70	70	70	70	70	70	70	70	70	70
Ave	(A + B) ÷ 2 = 4'-6" (1372)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 4'-0" (1219)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 3'-6" (1067)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 3'-0" (914)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 2'-6" (762)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 2'-0" (610)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 1'-6" (457)	70	70	70	70	70	70	70	70	70	70	70	70	70
	C = (length of join)	2'-0" (610)	2'-6" (762)	3'-0" (914)	3'-6" (1067)	4'-0" (1219)	4'-6" (1372)	5'-0" (1524)	5'-6" (1676)	6'-0" (1829)	6'-6" (1981)	7'-0" (2134)	7'-6" (2286)	8'-0" (2438)

[•] Numeric value represents the certified Performance Grade (PG) rating of the combination.

• Structural performance of any combination is only as high as the lowest structural performance of any individual unit or joining material in the combination.

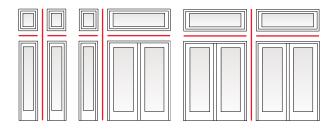
• Andersen* products must be installed and anchored properly according to joining and installation guides to meet rated structural performance. Refer to product joining and installation guides at andersenwindows.com.
• Frenchwood* hinged inswing patio doors with a 6 9/1e* (167) or greater exterior extension jamb depth require 7 3/4* (197) fiberglass joining material.
• Dimensions in parentheses are in millimeters.

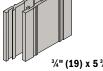
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2-Way Fiberglass Joining continued from previous page

28 30 32 34	24 25 27 29	20 21 23 24	21				
37	31	26	22	04	1		
39 43	33 36	28 30	24 26	21 22			
47	39	33	28	25	21		
51	43	37	31	27	23	20]
57	48	41	35	28	26	23	20
64	54	46	39	34	29	26	23
70	62	53	45	39	34	29	26
70	70	61	53	45	39	34	30
70	70	70	63	54	47	41	36
70	70	70	70	68	59	52	46
70	70	70	70	70	70	69	61
8'-6" (2591)	9'-0" (2743)	9'-6" (2896)	10'-0" (3048)	10'-6" (3200)	11'-0" (3353)	11'-6" (3505)	12'-0" (3658)



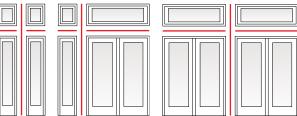


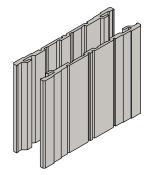
3/4" (19) x 5 3/4" (146) **Fiberglass Joining Material** For 4 $^9\!\!/_{16}\!"$ (116) base jamb depths.

Note: When joining hinged inswing patio doors, do not join hinge jamb to hinge jamb.

2-Way Fiberglass Joining continued from previous page

29 30	27 29	26 27	25 26	22 23	20 21						
32	30	28	27	25	22						
33	31	30	28	26	23	21					
35	33	31	30	27	25	22	21				
37	35	33	31	28	26	24	22			• الــــــا	
39	37	35	33	30	27	25	23	21			
41	39	37	35	32	29	27	24	22			
44	41	39	37	34	31	28	26	24	22		
47	44	42	40	36	33	30	28	25	23	22	
50	47	45	42	39	35	32	30	27	25	23	22
54	51	48	46	42	38	35	32	29	27	25	23
58	55	52	50	45	41	38	35	32	29	27	25
64	60	57	54	50	45	41	38	35	32	30	28
70	66	63	60	55	50	45	42	38	35	33	30
70	70	70	66	61	55	50	46	43	39	37	34
70	70	70	70	68	62	57	52	48	44	41	38
70	70	70	70	70	70	65	60	55	51	47	44
70	70	70	70	70	70	70	70	64	59	55	51
70	70	70	70	70	70	70	70	70	70	66	61
70	70	70	70	70	70	70	70	70	70	70	70
70	70	70	70	70	70	70	70	70	70	70	70
8'-6" (2591)	9'-0" (2743)	9'-6" (2896)	10'-0" (3048)	10'-6" (3200)	11'-0" (3353)	11'-6" (3505)	12'-0" (3658)	12'-6" (3810)	13'-0" (3962)	13'-6" (4114)	14'-0" (4267)





3/4" (19) x 7 3/4" (197) **Fiberglass Joining Material**

For higher performance for 1-way and 2-way joining. Required for Frenchwood® hinged inswing patio doors with 6 %16" (167) or greater exterior extension jamb depths.

Note: When joining hinged inswing patio doors, do not join hinge jamb to hinge jamb.

- Numeric value represents the certified Performance Grade (PG) rating of the combination.
- * Structural performance of any combination is only as high as the lowest structural performance of any individual unit or joining material in the combination.
- Andersen* products must be installed and anchored properly according to joining and installation guides to meet rated structural performance. Refer to product joining and installation guides at andersenwindows.com.
 Frenchwood* hinged inswing patio doors with a 6 9/16" (167) or greater exterior extension jamb depth require 7 3/4" (197) fiberglass joining material.
- Dimensions in parentheses are in millimeters.

Patio Doors and Windows

1-Way Steel Joining

400 Series Patio Doors and Windows

Average Adjacent Window/ Door Dimension	(A+B) ÷ 2 = 12'-6" (3810) (A+B) ÷ 2 = 11'-6" (3658) (A+B) ÷ 2 = 11'-6" (3505) (A+B) ÷ 2 = 11'-0" (3353) (A+B) ÷ 2 = 10'-6" (3200) (A+B) ÷ 2 = 10'-0" (3048) (A+B) ÷ 2 = 9'-6" (2896) (A+B) ÷ 2 = 9'-0" (2743) (A+B) ÷ 2 = 8'-6" (2591) (A+B) ÷ 2 = 8'-6" (2438) (A+B) ÷ 2 = 7'-6" (2286) (A+B) ÷ 2 = 7'-6" (2134)	40 40 40 40 40 40 40 40 40 40 40	37 38 39 40 40 40 40 40 40 40	33 34 35 36 37 37 39 40 40 40 40	25 26 27 29 30 32 34 36 37 39 40	22 23 24 25 27 28 30 32 34 36 37	21 22 23 25 27 28 31 32	20 21 22 24 27 28	21 22	c		A 5) x 4" (1 ning Mate		doc Ple tab reg bet Wh jam hin, con	ase refer full arding structure ween document using abs on Freged pation dittions a tallation of the case of the c	r use with dow joins to patio d ther inform uctural subors. exterior exemples enchwood doors, sp pply. For of details, vis	only. loor mation apport ktension becial complete sit
acent	(A + B) ÷ 2 = 6'-6" (1981)	40	40	40	40	40	36	31	25	23		1			^		
e Adj	(A + B) ÷ 2 = 6'-0" (1829)	40	40	40	40	40	39	36	27	24	20					• ; •	
rage	(A + B) ÷ 2 = 5'-6" (1676)	40	40	40	40	40	40	37	30	25	24			V-Notch Gusset F	Plate	····	
Å	(A + B) ÷ 2 = 5'-0" (1524)	40	40	40	40	40	40	40	36	28	25			1		N.	•
	(A + B) ÷ 2 = 4'-6" (1372)	40	40	40	40	40	40	40	37	31	27	23	20		1		
	(A + B) ÷ 2 = 4'-0" (1219)	40	40	40	40	40	40	40	40	37	30	26	25	21			
	(A + B) ÷ 2 = 3'-6" (1067)	40	40	40	40	40	40	40	40	40	36	27	26	25		1	
	(A + B) ÷ 2 = 3'-0" (914)	40	40	40	40	40	40	40	40	40	40	36	30	26	23		
	(A + B) ÷ 2 = 2'-6" (762)	40	40	40	40	40	40	40	40	40	40	40	38	34	26	20	
	(A + B) ÷ 2 = 2'-0" (610)	40	40	40	40	40	40	40	40	40	40	40	40	40	34	28	
	C = (length of join)	5'-6" (1676) or less	6'-0" (1829)	6'-6" (1981)	7'-0" (2134)	7'-6" (2286)	8'-0" (2438)	8'-6" (2591)	9'-0" (2743)	9'-6" (2896)	10'-0" (3048)	10'-6" (3200)	11'-0" (3353)	11'-6" (3505)	12'-0" (3658)	12'-6" (3810)	

Figure 1

Andersen recommends use of a separating structural header between the door head and sill of any transom unit(s). If you choose not to use a header, and a single row of transom units is desired above the door, make sure the units are securely fastened to the adjacent framing and securely "hung" by screwing through the transom unit frame(s) into the header above. Steel joining may be required.

IMPORTANT: HEADER SAG MAY ADVERSELY AFFECT THE PROPER FUNCTIONING AND PERFORMANCE OF THE DOOR AND/OR WINDOW. No weight from the transom unit(s) may be transferred to the door head if proper operation of the door is to be achieved. For four-panel gliding patio doors, see Figure 3.

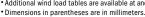
Figure 2

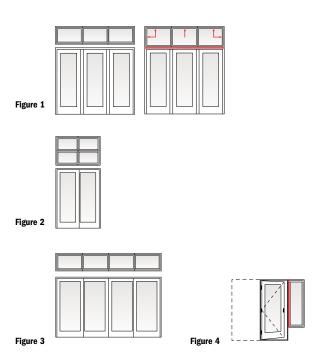
Any transom combination made up of more than a single row of windows must have a separating header (by others).

Always use a structural header to separate transom windows from four-panel gliding patio doors. For all other door types, see Figure 1.

Steel reinforcing is recommended whenever transom or sidelight windows are placed above or beside door units.

- · Numerical values in charts represent structural pressure only.
- Structural performance of any combination is only as high as the lowest structural performance of any individual unit or joining material in the combination.
- Andersen* products must be installed and anchored properly according to joining and installation guides to meet rated structural performance. Refer to product joining and installation guides at andersenwindows.com.
- Additional wind load tables are available at andersenwindows.com.







Andersen® 400 Series Window and Patio Door Altitude Limits

The chart below gives the altitude limit in feet for most 400 Series products in this catalog. If the installation of a given product is at an altitude greater than that shown in this chart, a capillary breather tube must be ordered. Be aware that the use of a capillary breather tube eliminates argon gas blend fill and will result in a slightly lower thermal performance (approximately 0.02 increase in window U-Factor). For NFRC certified total unit performance on units with capillary breather tubes for higher altitude applications, please visit andersenwindows.com/nfrc.

The use of dual-pane insulating glass without capillary breather tubes at altitudes higher than its rating will result in severe glass distortion, increased glass breakage potential and a risk for seal failure.

Smaller windows are most affected by altitude changes. An increase in altitude results in a decrease in atmospheric pressure. A sealed insulating glass unit attempts to combat this change by increasing its volume to reduce its pressure. One way to increase its volume is by glass deflection. A smaller window is stiffer and does not deflect as much as a larger window; therefore, it cannot relieve the pressure as readily. Thus, the load applied to the glass is greater, resulting in a greater risk for breakage. Another way the window tries to increase its volume is by increasing the edge area; i.e., the seal area. The increased pressure applied to the edge seal load for a smaller window is therefore greater, increasing the chance for seal failure.

Product	2,000	3,000	4,	000	5,0	000	6	,000	7,	000	8,	000	9,	000		10,000	
Casement and Awning Windows			4.000		CR12 CR13 CR135 CR14 CR15 CR16 CR45 CR155 CR125	CN12 CN13 CN135 CN14 CN145 CN15 CN15 CN15 CN16 AN251 AN281	C12 AN251 C13 C135 C145 A281 C125 CXW12	C14 C15 C155 C16 CW12			CW13 CW135 CW14 CX125 AX251 CW125 CXW125	CW145 CW15 CW155 CW16 AW251 AW281	CX13 CX135 CX14 CX145 CX15 CX15 CX15 CX16	AXW281 AX31 AX351 AX41 AX451 AX51 AX551 AX61	A335/CP353 CP3535 CXW3/CP303 CXW35 CXW4	CXW5/CP305	
Casement/Awning Transom and Picture Windows		CTR1510 CTR1810 CTR2010 CTR2410 CTR2810	CTR3010 CTR2910 CTR3410 CTR4010 CTR4810	CTR5010 CTR5210 CTR51110 CTR6010 CTR7010							P3030 P3035 P3040 P3045	P3050 P3055 P3060	P3535 P3540 P3545 P3550	P5050 P3555 P3560 P4040	P4045 P4050 P5055 P4055	P4060 P4545 P4550 P4555	P5060 P4560
Woodwright" Double-Hung Windows E = equal sash C = cottage sash Designate product code as WDH, WU, WH or WA.		4.	18210 20210 24210 30210 26210	34210 28210 210210 38210	1832 1836 18310 1842 2632 2636 2832 3436 1846 18410 1852 1856E 18510 21036	3032 3036 3832 1862 1856C 2032 2036 2432 2836 3432 21032 3836 2436	20310 2042 2046 20410 210310 21042 30310 3042 2052 2056E 20510 2062	2056C 3442 38310 3842 24310 2442 26310 2642 28310 34310 2842	2446 24410 2452 2456E 24510 2462 2456C	2646 2846 21046 3046 3048 3446 3846	26410 2652 2656E 26510 3052 34410 3452 38410 2662 2656C	28410 2852 2856E 28510 2862 2856C 210410 21052 3852 30410	21056E 210510 21062 21056C	3056E 3456E 3856E	30510 3062 3056C 34510 3462	3456C 38510 3862 3856C	
Woodwright Transom Windows	WTR1817 WTR18111 WTR18121 WTR31010 WTR2815 WTR2817 WTR3010 WTR3015 WTR3017	WTR1831	WTR41010	WTR31017 WTR4217 WTR41017 WTR6210 WTR5617	WIR20111 WIR20121 WIR2023 WIR2027 WIR2031 WIR310111 WIR42111 WIR410111 WIR56111 WIR62111	WTR6221 WTR30121 WTR34111 WTR34121	WTR2423 WTR2427 WTR2431 WTR2823 WTR3023 WTR3423	WTR3823 WTR31023 WTR4223 WTR41023 WTR5623 WTR6223	WTR2827 WTR2831 WTR3027 WTR3427 WTR3827	WTR31027 WTR4227 WTR41027 WTR5627 WTR6227	WTR3031 WTR3431 WTR3831		WTR31031 WTR4231 WTR41031 WTR5631 WTR6231				
Woodwright Picture Windows		WPW10310 WPW1042 WPW1046 WPW10410 WPW1052 WPW1056 WPW10510 WPW1062		000	WIRZOITI		0.000		7,000		WPW3042 WPW3046 WPW30410 WPW3052	WPW3056 WPW30510 WPW3062	WPW3442 WPW3446 WPW34410) WPW3456 WPW34510 WPW3462) WPW3452	WPW31046 WPW310410 WPW4262 WPW410310 WPW41042 WPW41046	WPW310510 WPW31062 WPW42310 WPW41052 WPW41056 WPW410510 WPW41062 WPW56310 WPW4242) WPW4252 WPW4256 WPW5642 WPW5646 WPW56410) WPW5652 WPW5651 WPW5662 WPW42510
Tilt-Wash Double-Hung Windows E = equal sash C = cottage sash		TW18210 TW1832 TW1836 TW18310 TW2432 TW26210 TW2632 TW28210	5, TW2828 TW1842 TW1846 TW18410 TW1852 TW1856E TW2832 TW210210	TW3032 TW30210 TW18510 TW1862 TW1856C TW20210	TW34210 TW3432 TW38210 TW3832 TW24210 TW1872 TW1876	TW2036 TW20310 TW2042 TW2046 TW28310 TW21036 TW210310 TW3036 TW2072	6,000 TW20410 TW2052 TW2056E TW20510 TW2062 TW3436 TW34310 TW3836 TW2076	TW38310 TW2056C TW2436 TW24310 TW2636 TW26310 TW30310 TW2836	7,000 TW2442 TW2642 TW2842 TW21042 TW3042 TW3442 TW3842	8, TW2446 TW24410 TW2452 TW2456E TW24510 TW2462 TW2456C TW2472 TW2476	TW2646 TW2846 TW21046 TW3046 TW3048 TW3446 TW3846	TW210410 TW21052	9,000 TW2656C TW28410 TW2852 TW2856E TW3052 TW34410 TW3452 TW38410 TW3852 TW28510	TW2672 TW2676 TW2872 TW2876	TW21056E TW210510 TW21062 TW21056C TW3056E TW30510 TW3062 TW3056C	WPW31052 TW3456E TW34510 TW3462 TW3456C TW3856E TW38510 TW386C TW3862	WPW4246 TW21072 TW21076 TW3072 TW3076 TW3472 TW3476 TW3872 TW3876

continued on next page

[•] Deflection of glass will occur on units with larger glass areas. If interior/exterior grilles are used on double-hung windows, gliding windows or gliding patio doors, some interference may occur, affecting operation of these units.

^{*}Altitude limits for patio doors shown in two-panel configurations. These limits also qualify for same size panels used in one or multiple panel configurations

[•] Contact your Andersen supplier for altitude limits for custom-sized windows and patio doors.

PRODUCT PERFORMANCE

Andersen* 400 Series Window and Patio Door Altitude Limits (continued)

Product	2,000	3,000	4,	000	5,	000	6,000	7,	000	8,000	9,	000		10,000	
Tilt-Wash Picture Windows		DP10310 DP1042 DP1046 DP10410 DP1052 DP1056 DP10510 DP1062	000							DP3062	DP30310 DP3042 DP30410	DP3052 DP3056 DP30510 DP3462	DP34310 DP3442 DP3446 DP34410 DP42310 DP4242 DP4246 DP42410 DP41062 DP56310 DP41042 DP5642 DP3452	DP3456 DP34510 DP310310 DP31042 DP4256 DP42510 DP4262 DP410310 DP5652 DP56566 DP410510 DP56510 DP31046	DP310510 DP41046 DP410410 DP41052 DP41056 DP5646 DP5662
Tilt-Wash Transom Windows	TWT1810 TWT1815 TWT1817 TWT18111 TWT1821 TWT1823 TWT1827 TWT1831 TWT2010 TWT2015	TWT2017 TWT2410 TWT2415	TWT21010 TWT21015 TWT21017	TWT31010	TWT2021 TWT2023 TWT2027 TWT2031	TWT26111 TWT28111 TWT210111 TWT310111 TWT34111 TWT38111	TWT2423 TWT21023 TWT2427 TWT3021			TWT21031 TWT3031	TWT3431 TWT3831			5.010.10	5.02002
Gliding Windows			G32 G33 G336	G34 G35 G42	G43 G436	G44 G45		G53 G536	G54 G55	G63	G636 G64 G65				
Half Circle, Quarter Circle and Elliptical Windows			CTC1 CTCW1 CTN20	CTN24 CTCX1	CTN28 CTN30	ET8	CTN34 CTC2	CTC42 CTQC1 CTCW2		CTCX2 CTQCW1	CTC3 CTN28-2 CTQCX		CTN30-2 CTQA3		
Circle and Oval Windows					0VL1824		CIR20 OVL2030			CIR24	0VL3048		CIR30		
Flexiframe® Windows Rectangular®	0-19" (0-483)	20-24" (508-610)	25-28" (635-711)		29-31" (737-787)		32-36" (508-610)	37-41" (508-610)		42-46" (1067-1168)	47-51" (1194-1295)		>51" (>1295)		
Flexiframe Windows Non-Rectangular*	0-35" (0-889)	36-46" (914-1168)	47-54" (1194-1372)		55-60" (1397-1524)		61-70" (1549-1778)	71-80" (1803-2032)		>80" (>2032)	(,		(====,		
Arch Windows		AFC06 AFC11 AFCW06 AFCW11 AFCP3006 AFFW5006 AFCP301 AFCW206 AFC12	AFC13 AFC135 AFC14 AFC14 AFFW801 AFC145 AFC15 AFC15 AFC16 AFC16 AFC18 AFFW601	AFC206 AF21 AFCW21 AFFW501 AFFW6006 AFFW601 AFFW8006 AFFW801 AFFW1206	AFCW12 AFCW13 AFCW135 AFCW14 AFCW145 AFCW15	AFCW155 AFCW16 AFCW18 AFCP302 AFFW1201	AFC9303 AFC22 AFCW22 AFFW502	AFCP3035 AFCP304 AFCP3045 AFCP305 AFCP3055	AFCP308	AFFW1202 AFC23 AFCW23	AFC235 AFFW5035 AFFW603 AFFW6035 AFC24		AFCW24 AFCW245 AFCW255 AFFW6055 AFFW606 AFFW606 AFFW8035 AFCW26 AFCW28 AFFW504 AFFW5045	AFFW5055 AFFW506 AFFW508 AFFW604 AFFW6045 AFFW804	AFC25 AFC255 AFC26
Springline™ Windows	3,000		4,000		SE3106		SE311	SE312 SE313 SE3135 SE314 SE3145		SE315 SE3155 SE316 SE5406 SE5806 SE6006	SE541 SE581 SP402 SP403 SP4035	SE601 SP404 SP4045 SP405 SP4055 SP406 ELFW6006 ELFW8006	SE546 SE582 SE583 SE5835 SE6055 SE606 SP8006 SP801 SE584 ELFW601 ELFW602	SE5845 SE585 SE585 SE586 SE542 SE543 SE5435 SE544 SE602 ELFW801 ELFW802	SE603 SE6035 SE604 SE6045 SE545 SE5455 SP802 SE5445 SE605
Springline Flanker Windows	SF CR3 SF CR35	SF CR4 SF CR5 SF CR6 SF CN3	SF CN35 SF CN4 SF CN5 SF CN6	SF C5 SF C6	SF CW35 SF CW4 SF CW5	SF CW6 SF C35 SF C4		SF CXW4 SF CXW5 SF CXW6					EE WOOL	EE WOOL	
Eyebrow Windows	FCD34 FCCXW3	FCCW2 FCFW50	FCD28 FCD30	4,000 FCD38 FCC2	FCFW60										
Extended Gothic, Octagon, Monumental Circle and Quarter Circle Windows	GT2036 GT2440 GT3046	0C20	0C24	1002	GT4056					0C30			FR40 10,000	QR40	FR60
Frenchwood® Gliding												FWG5080		FWG8068	FWG8080
Patio Doors Frenchwood Hinged Inswing Patio Doors		1.0	000		4168 41611	4180					FWG50611 5068 50611	FWG6068 5080	FWG6080 5468 54611	FWG80611 5480 6068	60611 6080
Frenchwood Patio Door Transoms	FWT5416 FWT5411	FWT5016 FWT2111 FWT5011 FWT4116	FWT4111 FWT3116 FWT3111 FWT2916	FWT2716 FWT2711 FWT2116	FWT54110 FWT50110	FWT31110 FWT29110 FWT27110 FWT21110									
Frenchwood Patio Door Sidelights		FWSL1380 FWSL1768													
Frenchwood Patio Door		FWSLT1311)								-			
Sidelight Transoms		FWSLT1711													

[•] Deflection of glass will occur on units with larger glass areas. If interior/exterior grilles are used on double-hung windows, gliding windows or gliding patio doors, some interference may occur, affecting operation of these units.

Altitude limits for patio doors shown in two-panel configurations. These limits also qualify for same size panels used in one or multiple panel configurations.
 Contact your Andersen supplier for altitude limits for custom-sized windows and patio doors.
 Dimensions in parentheses are in millimeters.

^{*}Maximum short side window dimension. For Flexiframe units, use shortest dimension, width or length, and round to nearest whole number, then use limits given above for Flexiframe windows.



PERFORMANCE STANDARDS

The Window and Door Manufacturers Association (WDMA), the American Architectural Manufacturers Association (AAMA) and the Canadian Standards Association (CSA) jointly release the North American Fenestration Standard/Specification for Windows, Doors and Skylights (NAFS-11) where "-11" refers to the most recent publication year of 2011. NAFS is also referred to as AAMA/WDMA/CSA 101/I.S.2/A440, which is how the International Code Council (ICC) lists this standard in the 2012, 2015 and 2018 International Residential Code (IRC) and International Building Code (IBC) as the means to indicate the window, door or skylights design pressure rating used to determine compliance to the jobsite design pressure requirements.

A product only achieves a "Performance Grade" or "PG" rating when it complies with all of the NAFS performance requirements such as ease of operation, air infiltration resistance, resistance to water penetration and resistance to forced entry, etc. A "Design Pressure Rating" or "DP" rating only depicts the design and structural load performance.

Performance Classes

The NAFS Standard/Specification defines requirements for four performance classes. Performance classes are designated R, LC, CW and AW. This classification system provides for several levels of performance. Product selection is always based on the performance and building code requirements of the particular project.

Elements of Performance Grade (PG) Designations

In order to qualify for a given performance grade (PG), test specimens need to pass all required performance tests for the following, in addition to all required auxiliary (durability) and applicable material/component tests (not shown here) for the applicable product type and desired performance class:

- **(a) Operating force (if applicable):** Maximum operating force varies by product type and performance class.
- (b) Air leakage resistance: Tested in accordance with ASTM E283 at a test pressure of 1.57 psf. Allowable air infiltration for R, LC and CW class designations is 0.3 cubic feet per minute per square foot of frame (cfm/ft²).
- (c) Water penetration resistance: Tested in accordance with ASTM E547 with the specified test pressure applied per NAFS-11. Test consists of four cycles. Each cycle consists of five minutes with pressure applied and one minute with the pressure released, during which the water spray is continuously applied. Water spray shall be uniformly applied at a constant rate of 5 U.S. gal/ft²·hr. (d) Uniform load deflection test: Tested in accordance with ASTM E330 for both possible of the property of the state of the NASTM E330 for both possible of the state of the st
- (d) Uniform load deflection test: Tested in accordance with ASTM E330 for both positive and negative pressure (pressure defined by NAFS-11) with the load maintained for a period of 10 seconds. The test specimen shall be evaluated for deflection during each load for permanent damage after each load and for any effects on the normal operation of the specimen. Starting with the 2008 version of NAFS, design pressure (DP) will only represent the "uniform load deflection test"
- (e) Uniform load structural test: Tested in accordance with ASTM E330 for both positive and negative pressure (pressure defined by NAFS-11) with the load maintained for a period of 10 seconds. After loads are removed, there shall be no permanent deformation in excess of 0.4% of its span and no damage to the unit, which would make it inoperable.
- **(f) Forced-entry resistance (if applicable):** Tested in accordance with ASTM F588 (windows), F476 (swinging doors) and F842 (sliding doors) at a performance level 10 rating.

Performance Grades (PG) and Corresponding Test Pressures (psf)

Cla Perfo	rmance ass/ rmance ade		Itration ressure	Allowa Infiltr	Maximum Allowable Air Infiltration/ Exfiltration Rate				Pressure		ural Test ssure
R	LC	Pa	psf	L/s·m²	cfm/ft²	Pa	psf	Pa	psf	Pa	psf
15	-	75	1.57	1.5	0.30	140	2.92	720	15.04	1080	22.56
20	-	75	1.57	1.5	0.30	150	3.13	960	20.05	1440	30.08
25	25	75	1.57	1.5	0.30	180	3.76	1200	25.06	1800	37.59
30	30	75	1.57	1.5	0.30	220	4.59	1440	30.08	2160	45.11
35	35	75	1.57	1.5	0.30	260	5.43	1680	35.09	2520	52.63
40	40	75	1.57	1.5	0.30	290	6.06	1920	40.10	2880	60.15
45	45	75	1.57	1.5	0.30	330	6.89	2160	45.11	3240	67.67
50	50	75	1.57	1.5	0.30	360	7.52	2400	50.13	3600	75.19
55	55	75	1.57	1.5	0.30	400	8.35	2640	55.14	3960	82.71
60	60	75	1.57	1.5	0.30	440	9.19	2880	60.15	4320	90.23
65	65	75	1.57	1.5	0.30	470	9.82	3120	65.16	4680	97.74
70	70	75	1.57	1.5	0.30	510	10.65	3360	70.18	5040	105.26
75	75	75	1.57	1.5	0.30	540	11.28	3600	75.19	5400	112.78
80	80	75	1.57	1.5	0.30	580	12.11	3840	80.20	5760	120.30
85	85	75	1.57	1.5	0.30	580	12.11	4080	85.21	6120	127.82
90	90	75	1.57	1.5	0.30	580	12.11	4320	90.23	6480	135.34
95	95	75	1.57	1.5	0.30	580	12.11	4560	95.24	6840	142.86
100	100	75	1.57	1.5	0.30	580	12.11	4800	100.25	7200	150.38

HALLMARK CERTIFICATION

The Window and Door Manufacturers Association (WDMA)-sponsored Hallmark Certification Program provides manufacturers with certification to the AAMA/WDMA/CSA 101/I.S.2/A440-11 Standard and is designed to provide builders, architects, specifiers and consumers with an easily recognizable means of identifying products that have been manufactured and tested in accordance with NAFS (AAMA/WDMA/CSA 101/I.S.2/A440) industry standards and other applicable performance standards. Conformance is determined by periodic in-plant inspections by a third-party administrator. Inspections include auditing licensee quality control procedures and processes, and a review to confirm products are manufactured in accordance with the appropriate performance standards. Periodic testing of representative product constructions and components by an independent testing laboratory is also required. When all of the program requirements are met, the licensee is authorized to use the WDMA Hallmark registered logo on their certification label as a means of identifying products and their performance ratings.

Products successfully obtaining Hallmark Certification will be labeled with a three-part code, which includes performance class, performance grade and size tested. In addition to this mandatory requirement, you are allowed to list the design pressure on a separate line.

WDMA Hallmark Certified www.wdma.com	Andersen Corporation 400 SERIES CASEMENT WINDOW Manufacturer stipulates certification as indicated below.
STANDARD	RATING
AAMA/WDMA/CSA 101/I.S.2/A440-11	Class LC ⁽¹⁾ – PG50 ⁽²⁾ – Size Tested 56 x 71.8 in. ⁽³⁾ DP+50/-50 ⁽⁴⁾
AAMA/WDMA/CSA 101/I.S.2/A440-08	Class LC ⁽¹⁾ – PG50 ⁽²⁾ – Size Tested 56 x 71.8 in. ⁽³⁾ DP+50/-50 ⁽⁴⁾

- (1) Performance Class
- (2) Performance Grade
- (3) Size Tested
- (4) Design Pressure

In the example above, the performance class is LC, the performance grade (PG) is 50 pounds per square foot (psf) and the size tested is 56" x 71.8". What this means to the specifier is, based on the performance grade chart, the laboratory-tested air infiltration was less than 0.3 cfm/ft² (test pressure is always 1.57 psf and the allowable airflow is 0.3 cfm/ft²), the product tested successfully resisted a laboratory water penetration test at a test pressure of 7.5 psf, the product tested successfully withstood a laboratory positive test pressure of 75 psf and a laboratory negative test pressure of 75 psf, and the product tested passed the laboratory requirements for operational force and forced-entry resistance. Based on this test, all products of the same design that are smaller than the tested size can be labeled with this product performance rating.

IMPORTANT

Building codes prescribe design pressure based on a variety of criteria (i.e., windspeed zone, building height, building type, jobsite exposure, etc.). Design pressures derived from Performance Grade (PG) test requirements should be used to determine compliance to building code required design pressures. Structural test pressures, which are tested at 1.5 times the design pressure, should not be used for determining design pressure code compliance. In the example above, a PG 50 performance grade rating, which passes a 50 psf design pressure, should be used for determining code compliance, not the structural test pressure of 75 psf.

If you need further details about how Andersen* products perform to this standard, contact your Andersen supplier.

If you need further information about the AAMA/WDMA/CSA 101/I.S.2/A440-11 standard or the Hallmark Certification Program, please contact: WDMA, 330 N. Wabash Avenue, Suite 2000, Chicago, IL 60611. Phone: 312-321-6802 Website: wdma.com

Where designated, Andersen products are tested, certified and labeled to the requirements of the Hallmark Certification Program. Actual performance may vary based on variations in manufacturing, shipping, installation, environmental conditions and conditions of use.

PRODUCT PERFORMANCE

Performance Grade and Air Infiltration Ratings — 400 Series Windows

For current performance information, please visit andersenwindows.com.

	AAMA/WDMA/CSA 101/I.S.2/A440	+/- Corresponding	Air Infiltratio
Andersen® Product	Performance Grade (PG)	Design Pressure (DP)	CFM/FT ²
Casement Windows			
Single Stationary (CXW16)	Class LC-PG50 Size Tested 35" x 71"	50/50	< 0.2
Single Venting (CXW16-155, CX16-155)	Class LC-PG40 Size Tested 35" x 71"	40/40	< 0.2
Single Venting (CXW15)	Class LC-PG45 Size Tested 71" x 60"	45/45	< 0.2
Single Venting (CW16 and smaller)	Class LC-PG50 Size Tested 60" x 71"	50/50	< 0.2
Single Venting (CXW145 and smaller)	Class LC-PG50 Size Tested 71" x 52" *	50/50	< 0.2
Single Venting (CX15 and smaller)	Class LC-PG50 Size Tested 62" x 59" *	50/50	< 0.2
win Stationary (CXW245, CX25, CW26 and smaller)	Class LC-PG50 Size Tested 56" x 71" *	50/50	< 0.2
win Venting (CXW25)	Class LC-PG45 Size Tested 71" x 60"	45/45	< 0.2
win Venting (CXW245 and smaller)	Class LC-PG50 Size Tested 71" x 52"	50/50	< 0.2
win Venting (CX25 and smaller)	Class LC-PG50 Size Tested 62" x 59"	50/50	< 0.2
win Venting (CW26 and smaller)	Class LC-PG50 Size Tested 60" x 71"	50/50	< 0.2
riple Venting (CW35 and smaller)	Class LC-PG40 Size Tested 84" x 60"	40/40	< 0.2
riple Venting (C35 and smaller)	Class LC-PG50 Size Tested 71" x 60"	50/50	< 0.2
Casement/Awning Picture Windows (P5060 and smaller)	Class LC-PG70 Size Tested 59" x 71"	70/70	< 0.2
casement/Awning Transom Windows (CTR32410 and smaller)	Class LC-PG70 Size Tested 84" x 12"	70/70	< 0.2
asement Windows, PG Upgrade			
Single Stationary (tempered glass, CXW16)	Class LC-PG70 Size Tested 35" x 71"	70/70	< 0.2
Single Venting (CXW145 and smaller)	Class LC-PG70 Size Tested 35" x 52"	70/70	< 0.2
ingle Venting (CX16 and smaller)	Class LC-PG70 Size Tested 31" x 71"	70/70	< 0.2
win Venting (CW26 and smaller)	Class LC-PG70 Size Tested 56" x 71"	70/70	< 0.2
riple Venting (C35 and smaller)	Class LC-PG70 Size Tested 71" x 59"	70/70	< 0.2
Complementary Casement Windows			
Casement Venting	Class LC-PG50 Size Tested 35" x 84"	50/50	< 0.2
Casement Stationary	Class LC-PG60 Size Tested 120" x 78"	60/60	< 0.2
rench Casement Venting	Class LC-PG30 Size Tested 56" x 72"	30/30	< 0.2
wning Windows			
Single Stationary (AXW61)	Class LC-PG50 Size Tested 35" x 71"	50/50	< 0.2
ingle Venting (AXW51 and smaller)	Class LC-PG35 Size Tested 59" x 35"	35/35	< 0.2
Single Venting (AX61 and smaller)	Class LC-PG35 Size Tested 72" x 31"	35/35	< 0.2
win Venting (AXW231 and smaller)	Class LC-PG35 Size Tested 71" x 36"	35/35	< 0.2
riple Venting (AX3251 and smaller)	Class LC-PG35 Size Tested 84" x 31"	35/35	< 0.2
riple Venting (A313 and smaller)	Class LC-PG35 Size Tested 35" x 71"	35/35	< 0.2
icture Venting (PA4060 and smaller)	Class LC-PG35 Size Tested 48" x 71"	35/35	< 0.2
wning Windows, PG Upgrade			
Single Stationary (tempered glass, AXW61)	Class LC-PG70 Size Tested 35" x 71"	70/70	< 0.2
Single, Twin and Triple Venting (AX3251 and smaller)	Class LC-PG60 Size Tested 84" x 31"	60/60	< 0.2
Triple Venting (A313 and smaller)	Class LC-PG60 Size Tested 35" x 71"	60/60	< 0.2

continued on next page

ratings, see page 202.

For sound transmission

^{• &}quot;Performance Grade (PG)" ratings may vary from tested performance rating for larger or smaller units of a particular type.

Performance caracter (Fs) Tradings may vary from tessets oper-ormance rating for larger or sinaler units or a particular type.
 This data is accurate as of May 2021. Due to ongoing product changes, updated test results or new industry standards, this data may change over time.
 Where designated, Andersen products are certified and labeled to the requirements of the Hallmark Certification Program. Actual performance may vary based on variations in manufacturing, shipping, installation, environmental conditions and conditions of use.
 Contact your Andersen supplier for more information.
 Window size tested is an integral twin or triple window, and qualifies the window listed under the same test.



Performance Grade and Air Infiltration Ratings — 400 Series Windows (continued)

For current performance information, please visit andersenwindows.com.

Andersen° Product	AAMA/WDMA/CSA 101/I.S.2/A440 Performance Grade (PG)	+/- Corresponding Design Pressure (DP)	Air Infiltration CFM/FT ²
Woodwright* Full-Frame Windows			,
Double-Hung (3862 and smaller)	Class LC-PG30 Size Tested 45" x 76"	30/30	< 0.2
Double-Hung (cottage sash, 3862 and smaller)	Class R-20 Size Tested 45" x 76"	20/20	< 0.2
Arch Double-Hung (3862 and smaller)	Class LC-PG30 Size Tested 45" x 76"	30/30	< 0.2
Springline" Single-Hung (3872 and smaller)	Class LC-PG30 Size Tested 45" x 86"	30/30	< 0.2
Picture (5662 and smaller)	Class LC-PG65 Size Tested 67" x 76"	65/65	< 0.2
ransom (6231 and smaller)	Class LC-PG70 Size Tested 75" x 39"	70/70	< 0.2
Voodwright Full-Frame Windows, PG Upgrade			
Double-Hung (3052 and smaller)	Class LC-PG50 Size Tested 37" x 64"	50/50	< 0.2
Arch Double-Hung (3054)	Class LC-PG50 Size Tested 37" x 64"	50/50	< 0.2
Springline Single-Hung (3057)	Class LC-PG50 Size Tested 37" x 67"	50/50	< 0.2
Woodwright Insert Windows			
Oouble-Hung (3862 and smaller)	Class R-PG25 Size Tested 45" x 77"	25/25	< 0.2
Double-Hung (cottage sash, 3862 and smaller)	Class R-PG20 Size Tested 45" x 68"	20/20	< 0.2
Picture (5662 and smaller)	Class LC-PG30 Size Tested 68" x 78"	30/30	< 0.2
ransom (6878 and smaller)	Class LC-PG30 Size Tested 68" x 78"	30/35	< 0.2
ilt-Wash Full-Frame Windows			
ouble-Hung (3862 and smaller)	Class LC-PG40 Size Tested 45" x 76"	40/40	< 0.2
ouble-Hung (cottage sash, 3856 and smaller)	Class LC-PG40 Size Tested 45" x 68"	40/40	< 0.2
ouble-Hung** (3876 and smaller)	Class LC-PG30 Size Tested 45" x 92"	30/35	< 0.2
icture (5662 and smaller)	Class LC-PG50 Size Tested 67" x 76"	50/65	< 0.2
ransom (6231 and smaller)	Class LC-PG50 Size Tested 75" x 39"	50/50	< 0.2
lt-Wash Windows, PG Upgrade			
ouble-Hung	Class LC-PG50 Size Tested 45" x 76"	50/50	< 0.2
it-Wash Insert Windows			
ouble-Hung (double lock)	Class R-PG20 Size Tested 45" x 92"	20/20	< 0.2
ouble-Hung (single lock)	Class R-PG20 Size Tested 35" x 92"	20/20	< 0.2
ouble-Hung	Class LC-PG30 Size Tested 45" x 76"	30/30	< 0.2
iliding Windows (G65 and smaller)	Class LC-PG30 Size Tested 71" x 59"	30/30	< 0.2
pecialty Windows			
rch (AFFW6080 and smaller)	Class LC-PG50 Size Tested 71" x 105"	50/50	< 0.2
lexiframe* (12050 and smaller)	Class LC-PG50 Size Tested 144" x 60"	50/50	< 0.2
pringline (SP802 and smaller)	Class LC-PG50 Size Tested 96" x 72"	50/50	< 0.2
pecialty Windows, PG Upgrade			
rch (tempered glass, AFFW6080 and smaller)	Class LC-PG70 Size Tested 71" x 105"	70/70	< 0.2
Plexiframe (tempered glass, 12050 and smaller)	Class LC-PG70 Size Tested 144" x 60"	70/70	< 0.2
springline (tempered glass, SP802 and smaller)	Class LC-PG70 Size Tested 96" x 72"	70/70	< 0.2
Complementary Specialty Windows (direct-set, fixed)	Class LC-PG50 Size Tested 125" x 84"	50/50	< 0.2

For sound transmission ratings, see page 202.

^{• &}quot;Performance Grade (PG)" ratings may vary from tested performance rating for larger or smaller units of a particular type.
• This data is accurate as of May 2021. Due to ongoing product changes, updated test results or new industry standards, this data may change over time.

^{*}Where designated, Andersen products are certified and labeled to the requirements of the Hallmark Certification Program. Actual performance may vary based on variations in manufacturing, shipping, installation, environmental conditions and conditions of use.

*Contact your Andersen supplier for more information.

**Window heights equal to or greater than 7'-4 9/1s" (2250) and 7'-8 7/8" (2359) have interior and exterior brackets. Interior brackets, located on each side of the

meeting rail, must be flipped up for proper product performance.

PRODUCT PERFORMANCE

Performance Grade and Air Infiltration Ratings - 400 Series Patio Doors

For current performance information, please visit andersenwindows.com.

Andersen* Product	AAMA/WDMA/CSA 101/I.S.2/A440 Performance Grade (PG)	+/- Corresponding Design Pressure (DP)	Air Infiltration CFM/FT ²
Frenchwood® Gliding Patio Doors			
Single Stationary	Class LC-PG40 Size Tested 50" x 95"	40/40	< 0.2
Two-Panel	Class LC-PG40 Size Tested 95" x 95"	40/40	< 0.2
Four-Panel (8')	Class LC-PG35 Size Tested 189" x 95"	35/35	< 0.2
Four-Panel (6'-11", 6'-8")	Class LC-PG25 Size Tested 189" x 82"	25/25	< 0.2
Frenchwood Hinged Inswing Patio Doors			
Single Active	Class LC-PG40 Size Tested 107" x 95"	40/40	< 0.2
Two-Panel	Class LC-PG40 Size Tested 71" x 95"	40/40	< 0.2
Three-Panel	Class LC-PG40 Size Tested 107" x 95"	40/40	< 0.2
Frenchwood Patio Door Sidelights	Class LC-PG40 Size Tested 18" x 95"	40/40	< 0.2
Frenchwood Patio Door Transoms	Class LC-PG40 Size Tested 71" x 21"	40/40	< 0.2
Complementary Springline™ and Arch Hinged Inswing Patio Doors			
Single Stationary	Class LC-PG45 Size Tested 37" x 95"	45/45	< 0.2
Single Active†	Class LC-PG45 Size Tested 37" x 95"	45/45	< 0.2
Two-Panel Stationary	Class LC-PG45 Size Tested 75" x 95"	45/45	< 0.2
Two-Panel Active†	Class LC-PG45 Size Tested 75" x 95"	45/45	< 0.2
Complementary Springline and Arch Hinged Outswing Patio Doors			
Single Stationary	Class LC-PG45 Size Tested 37" x 95"	45/45	< 0.2
Single Active†	Class LC-PG45 Size Tested 37" x 95"	45/45	< 0.2
Two-Panel Stationary	Class LC-PG45 Size Tested 75" x 95"	45/45	< 0.2
Two-Panel Active [↑]	Class LC-PG45 Size Tested 75" x 95"	45/45	< 0.2

For sound transmission ratings, see chart below.

Performance Grade (PG)" ratings may vary from tested performance rating for larger or smaller units of a particular type.
This data is accurate as of May 2021. Due to ongoing product changes, updated test results or new industry standards, this data may change over time.
Where designated, Andersen products are certified and

• Where designated, Andersen products are certified and labeled to the requirements of the Hallmark Certification Program. Actual performance may vary based on variations in manufacturing, shipping, installation, environmental conditions and conditions of use. • Contact your Andersen supplier for more information.

†Tested with standard multipoint hardware.

Sound Transmission Ratings for 400 Series Windows and Patio Doors

For current performance information, please visit andersenwindows.com.

Andersen° Product	Test Size	Sound Transmission Class (STC)	Outdoor/Indoor Transmission Class (OITC)
Casement Windows	36" x 72"	26	22
Awning Windows	30" x 60"	26	21
Casement/Awning Picture Windows	60" x 72"	29	25
Woodwright* Double-Hung Windows			
Double-Hung Full-Frame	46" x 77"	28	23
Picture Full-Frame	48" x 48"	28	23
Transom Full-Frame	40" x 46"	28	22
Double-Hung Insert	20" x 60"	26	21
Picture Insert	53" x 78"	30	26
Transom Insert	53" x 78"	30	26
Tilt-Wash Double-Hung Windows			
Double-Hung Full-Frame	46" x 78"	29	24
Picture Full-Frame	68" x 77"	30	25
Transom Full-Frame	-	-	-
Double-Hung Insert	32" x 76"	27	24
Picture Insert	-	-	-
Transom Insert	-	-	-
Gliding Windows	72" x 60"	26	22
Specialty Windows	72" x 60"	30	25

Andersen° Product	Test Size	Sound Transmission Class (STC)	Outdoor/Indoor Transmission Class (OITC)
Complementary Specialty Windows	72" x 60"	30	25
Frenchwood® Gliding Patio Doors			
Single Stationary	50" x 80"	31	26
Two-Panel	72" x 80"	31	26
Four-Panel	-	-	-
Frenchwood Hinged Inswing Patio Doors			
Single Active	36" x 80"	30	26
Two-Panel	72" x 80"	30	26
Three-Panel	-	-	-
Frenchwood Patio Door Sidelights & Transc	oms		
Sidelight	18" x 82"	32	26
Transom	72" x 22"	29	25
Complementary Springline™ & Arch Hinged	Inswing Patio Doors		
Single Active	38" x 90"	30	25
Two-Panel	75" x 90"	30	25
Complementary Springline & Arch Hinged	Outswing Patio Doors		
Single-Panel	38" x 90"	31	25
Two-Panel	75" x 90"	31	25

^{• &}quot;Sound Transmission Class (STC)" and "Outdoor/Indoor Transmission Class (OITC)" ratings are for individual units based on independent tests and represent entire unit.

^{*}This data is accurate as of May 2021. Due to ongoing product changes, updated test results or new industry standards, this data may change over time.

[•] Contact your Andersen supplier for more information.



Center of Glass Performance Data for products with Low-E4° Glass

For current performance information, please visit andersenwindows.com.

					Fad	ling	%RH	
Andersen Product	VT ¹	SC ²	SHGC ³	RHG ⁴	Tuv ⁵	Tdw ⁶	@ Center ⁷	IGST ⁸
400 Series Casement, Awning, and Tilt-Wash Double-Hung Full-Frame Windows	73%	0.48	0.42	100	17%	34%	61%	56°F
400 Series Gliding Window, Half Circle, Circle, and Oval Windows	73%	0.48	0.42	99	17%	34%	61%	56°F
400 Series Casement/Awning Picture and Transom, Woodwright Double-Hung, Picture and Transom Full-Frame, Woodwright Double-Hung, Picture and Transom Insert, Tilt-Wash Picture and Transom Full-Frame, Tilt-Wash Double-Hung, Picture and Transom Insert Windows	72%	0.47	0.41	98	16%	33%	61%	56°F
400 Series Elliptical Windows, Frenchwood Hinged Inswing Patio Doors, Frenchwood Patio Door Sidelights, Sidelight Transoms and Transoms	72%	0.48	0.41	98	16%	33%	61%	56°F
400 Series Frenchwood Gliding Patio Doors	71%	0.47	0.41	98	16%	33%	61%	56°F
400 Series Flexiframe", Arch and Springline" Windows	70%	0.46	0.40	95	14%	31%	61%	56°F
400 Series Complementary Curved Top Springline and Arch Hinged Inswing Patio Doors	72%	0.48	0.41	310	16%	33%	61%	56°F

Center of Glass Performance Data for products with Low-E4° SmartSun™ Glass

For current performance information, please visit andersenwindows.com.

					Fad	ing	%RH	
Andersen® Product	VT ¹	SC ²	SHGC ³	RHG⁴	Tuv ⁵	Tdw ⁶	@ Center ⁷	IGST ⁸
400 Series Casement, Awning, and Tilt-Wash Double-Hung Full-Frame Windows	66%	0.32	0.28	66	5%	21%	61%	56°F
400 Series Gliding Window, Half Circle, Circle, and Oval Windows	66%	0.31	0.27	66	5%	21%	61%	56°F
400 Series Casement/Awning Picture and Transom, Woodwright Double-Hung, Picture and Transom Full-Frame, Woodwright Double-Hung, Picture and Transom Insert, Tilt-Wash Picture and Transom Full-Frame, Tilt-Wash Double-Hung, Picture and Transom Insert Windows	65%	0.31	0.27	65	5%	21%	61%	56°F
400 Series Elliptical Windows, Frenchwood Hinged Inswing Patio Doors, Frenchwood Patio Door Sidelights, Sidelight Transoms and Transoms	65%	0.31	0.27	66	5%	21%	61%	56°F
400 Series Frenchwood Gliding Patio Doors	64%	0.32	0.27	66	5%	21%	61%	56°F
400 Series Flexiframe*, Arch and Springline* Windows	63%	0.31	0.27	65	4%	20%	61%	56°F
400 Series Complementary Curved Top Springline and Arch Hinged Inswing Patio Doors	65%	0.31	0.27	207	5%	21%	61%	56°F

Center of Glass Performance Data for products with Low-E4° Sun Glass

For current performance information, please visit andersenwindows.com.

					Fad	ing	%RH	
Andersen Product	VT ¹	SC ²	SHGC ³	RHG ⁴	Tuv ⁵	Tdw ⁶	@ Center ⁷	IGST ⁸
400 Series Casement, Awning, and Tilt-Wash Double-Hung Full-Frame Windows	40%	0.30	0.26	62	17%	25%	61%	56°F
400 Series Gliding Window, Half Circle, Circle, and Oval Windows	40%	0.29	0.26	62	17%	25%	59%	55°F
400 Series Casement/Awning Picture and Transom, Woodwright Double-Hung, Picture and Transom Full-Frame, Woodwright Double-Hung, Picture and Transom Insert, Tilt-Wash Picture and Transom Full-Frame, Tilt-Wash Double-Hung, Picture and Transom Insert Windows	40%	0.29	0.25	61	16%	24%	59%	55°F
400 Series Elliptical Windows, Frenchwood* Hinged Inswing Patio Doors, Frenchwood Patio Door Sidelights, Sidelight Transoms and Transoms	40%	0.29	0.25	61	16%	24%	59%	55°F
400 Series Frenchwood Gliding Patio Doors	39%	0.29	0.25	61	15%	23%	61%	56°F
400 Series Flexiframe", Arch and Springline" Windows	37%	0.28	0.24	59	13%	22%	61%	56°F
400 Series Complementary Curved Top Springline and Arch Hinged Inswing Patio Doors	40%	0.29	0.25	193	16%	24%	59%	55°F

^{• &}quot;Low-E4"," "Low-E4" SmartSun™" and "Low-E4" Sun" are Andersen trademarks for "Low-E" glass.

^{*}Based on NFRC testing/simulation conditions using Windows v7.4.6.0 and NFRC validated spectral data. 0°F outside temperature, 70°F inside temperature and a 15 mph wind.

¹⁾ Visible Transmittance (VT) measures how much light comes through the glass. The higher the value, from 0 to 1, the more daylight the glass lets in. Visible Transmittance is measured over the 380 to 760 nanometer portion of the solar spectrum.

²⁾ Shading Coefficient (SC) defines the amount of heat gain through the glass compared to a single light of clear $\frac{1}{8}$ " (3) glass.

³⁾ Solar Heat Gain Coefficient (SHGC) defines the fraction of solar radiation admitted through the glass directly transmitted, as well as absorbed and subsequently released inward. The lower the value, the less heat is transmitted through the product.

⁴⁾ Relative Heat Gain (RHG) is the amount of heat gain through a glazing incorporating U-Factor and Solar Heat Gain Coefficient.

⁵⁾ Transmission Ultra-Violet Energy (Tuv). The transmission of short-wave energy in the 300-380 nanometer portion of the solar spectrum. The energy can cause fabric fading.
6) Transmission Damage Function (Tdw). The transmission of UV and visible light energy in the 300-600 nanometer portion of the solar spectrum. The value includes both the UV and visible light energy that can cause fabric fading. This rating has also been referred to as the Krochmann Damage Function. This rating better predicts fading potential than UV transmission alone. The lower the Damage Function rating, the less transmission of short-wave energy

through the glass that can potentially cause fabric fading. Fabric type is also a key component of fading potential.

7) Percent relative humidity before condensation occurs at the center of glass, taken using center of glass temperature.

⁸⁾ Inside glass surface temperatures are taken at the center of glass.

[•] This data is accurate as of May 2021. Due to ongoing product changes, updated test results or new industry standards, this data may change over time. Contact your Andersen supplier for current performance information or upgrade options.

[•] Contact your Andersen supplier or visit andersenwindows.com/nfrc for total unit performance data on windows and patio doors (including units with patterned glass, tempered glass and glass with capillary breather tubes).

PRODUCT PERFORMANCE

Andersen® NFRC Certified Total Unit Performance

For current performance information, please visit andersenwindows.com.

Andersen® Product	High-Per	formance Dual-Pane Glass Type	U-Factor ¹	SHGC ²	VT ³
	J	Without Grilles	0.29	0.32	0.54
	*	Simulated Divided Light Grilles	0.29	0.29	0.49
	Low-E4*	Finelight™ Grilles	0.30	0.29	0.49
	3	Full Divided Light Grilles	0.29	0.29	0.49
	*_	Without Grilles	0.25	0.31	0.53
	Low-E4 /HeatLock*	Simulated Divided Light Grilles	0.25	0.28	0.48
	ow- leat	Finelight Grilles	0.26	0.28	0.48
400 Series	× ×	Full Divided Light Grilles	0.26	0.28	0.48
Casement Windows		Without Grilles	0.29	0.20	0.30
AND-N-1	1 E	Simulated Divided Light Grilles	0.29	0.18	0.27
	-ow-E4 Sun	Finelight Grilles	0.30	0.18	0.27
	_	Full Divided Light Grilles	0.30	0.18	0.27
	2_	Without Grilles	0.28	0.21	0.49
	Low-E4 SmartSun"	Simulated Divided Light Grilles	0.28	0.20	0.44
	Low	Finelight Grilles	0.29	0.20	0.44
	_ \overline{\sigma}	Full Divided Light Grilles	0.29	0.20	0.44
	خ ے	Without Grilles	0.25	0.21	0.47
	tSur tLo	Simulated Divided Light Grilles	0.25	0.19	0.43
	Low-E4 SmartSun w/HeatLock	Finelight Grilles	0.25	0.19	0.43
	δ ×	Full Divided Light Grilles	0.26	0.19	0.43
		Without Grilles	0.30	0.28	0.47
	Low-E4*	Simulated Divided Light Grilles	0.30	0.25	0.42
	NO	Finelight [™] Grilles	0.31	0.25	0.42
		Full Divided Light Grilles	0.31	0.25	0.42
	**	Without Grilles	0.27	0.27	0.46
	tF4	Simulated Divided Light Grilles	0.27	0.25	0.41
	Low-E4 w/HeatLock	Finelight Grilles	0.27	0.25	0.41
400 Series		Full Divided Light Grilles	0.28	0.25	0.41
Complementary Casement Windows		Without Grilles	0.30	0.17	0.26
AND-N-107	Low-E4 Sun	Simulated Divided Light Grilles	0.30	0.16	0.23
		Finelight Grilles	0.31	0.16	0.23
		Full Divided Light Grilles	0.31	0.16	0.23
	+ ≟=	Without Grilles	0.30	0.18	0.42
	Low-E4 SmartSun"	Simulated Divided Light Grilles	0.30	0.17	0.38
	Sma	Finelight Grilles	0.30	0.17	0.38
		Full Divided Light Grilles	0.30	0.17	0.38
	4 = 8	Without Grilles	0.26	0.18	0.41
	Low-E4 SmartSun w/HeatLock	Simulated Divided Light Grilles	0.26	0.17	0.37
	Sm.	Full Divided Light Grilles	0.26	0.17	0.37
	_	Full Divided Light Grilles	0.28	0.17	0.53
	*4	Without Grilles Simulated Divided Light Grilles	0.29	0.31	0.53
	Low-E4*	Finelight™ Grilles	0.29	0.29	0.48
	2	Full Divided Light Grilles	0.29	0.29	0.48
	*~	Without Grilles	0.26	0.29	0.48
	Low-E4 'HeatLock	Simulated Divided Light Grilles	0.26	0.28	0.47
	ow- leat	Finelight Grilles	0.26	0.28	0.47
400 Series	J H/W	Full Divided Light Grilles	0.27	0.28	0.47
Awning Windows		Without Grilles	0.29	0.19	0.29
AND-N-2	4 c	Simulated Divided Light Grilles	0.29	0.18	0.27
	Sun	Finelight Grilles	0.30	0.18	0.27
		Full Divided Light Grilles	0.30	0.18	0.27
	2_	Without Grilles	0.28	0.21	0.48
	Low-E4 SmartSun"	Simulated Divided Light Grilles	0.28	0.19	0.43
	Low	Finelight Grilles	0.29	0.19	0.43
		Full Divided Light Grilles	0.29	0.19	0.43
	5 ء	Without Grilles	0.25	0.20	0.47
	tSu affo	Simulated Divided Light Grilles	0.25	0.19	0.42
	Low-E4 SmartSun n/HeatLock	Finelight Grilles	0.25	0.19	0.42
	0 >	Full Divided Light Grilles	0.26	0.19	0.42

Important information on NFRC Cerfified Total Unit Performance:

• "Low-E4"," "Low-E4" SmartSun,"" "Low-E4" Sun" and "HeatLock"" are Andersen trademarks for "Low-E" glass. 1) U-Factor defines the amount of heat loss through the total unit in BTU/hr-ft²-°F. The lower the value, the less heat is lost through the entire product. Window values represent non-tempered glass. Use of tempered glass can increase U-Factor ratings. See andersenwindows.com/nfrc for specific performance values. Door values represent tempered glass. 2) Solar Heat Gain Coefficient (SHGC) defines the fraction of solar radiation admitted through the glass directly transmitted, as well as absorbed and subsequently released inward. The lower the value, the less heat is transmitted through the product. 3) Visible Transmittance (VT) measures how much light comes through a product (glass and frame). The higher the value, from 0 to 1, the more daylight the product lets in over the product's total unit area. Visible Light Transmittance is measured over the 380 to 760 nanometer portion of the solar spectrum.

• NFRC ratings are based on modeling by a third-party agency as validated by an independent test lab in

compliance with NFRC program and procedural requirements.

•This data is accurate as of May 2021. Due to ongoing product changes, updated test results, or new industry standards or requirements, this data may change over time. Ratings are for sizes specified by NFRC for testing and certification. Ratings may vary depending on use of tempered glass, different grille options, glass with capillary breather tubes for high altitudes, etc.

Andersen° Product	High-Per	formance Dual-Pane Glass Type	U-Factor ¹	SHGC ²	VT ³
	*	Without Grilles	0.27	0.34	0.60
	Low-E4*	Simulated Divided Light Grilles Finelight™ Grilles	0.27	0.31	0.53
		Full Divided Light Grilles	0.28	0.31	0.53
	* \$	Without Grilles	0.22	0.34	0.58
400 Series	Low-E4 w/HeatLock*	Simulated Divided Light Grilles Finelight Grilles	0.22	0.31	0.52
Casement/Awning	M, FC	Full Divided Light Grilles	0.25	0.31	0.52
Picture and Transom		Without Grilles	0.27	0.21	0.33
Windows AND-N-54	Low-E4 Sun	Simulated Divided Light Grilles	0.27	0.19	0.30
	20	Finelight Grilles Full Divided Light Grilles	0.27	0.19 0.19	0.30
	2	Without Grilles	0.29	0.19	0.54
	Low-E4 SmartSun [™]	Simulated Divided Light Grilles	0.26	0.21	0.48
	Low	Finelight Grilles	0.26	0.21	0.48
		Full Divided Light Grilles	0.28	0.21	0.48
	Low-E4 SmartSun w/HeatLock	Without Grilles Simulated Divided Light Grilles	0.22	0.22	0.52
	Low-	Finelight Grilles	0.22	0.20	0.47
	ο ≽	Full Divided Light Grilles	0.24	0.20	0.47
	*	Without Grilles Simulated Divided Light Grilles	0.30	0.30	0.52
	Low-E4®	Finelight™ Grilles	0.30	0.27	0.46
	7	Full Divided Light Grilles	0.31	0.27	0.46
	수 첫	Without Grilles	0.26	0.30	0.51
	Low-E4 w/HeatLock*	Simulated Divided Light Grilles	0.26	0.27	0.45
400.0 1	2¥	Finelight Grilles Full Divided Light Grilles	0.27	0.27	0.45
400 Series Woodwright* Double-Hung Full-Frame		Without Grilles	0.30	0.19	0.28
Windows	Low-E4 Sun	Simulated Divided Light Grilles	0.30	0.17	0.25
AND-N-66	S	Finelight Grilles	0.31	0.17	0.25
		Full Divided Light Grilles Without Grilles	0.31	0.17	0.25 0.47
	Low-E4 SmartSun W/HeatLock	Simulated Divided Light Grilles	0.29	0.19	0.42
		Finelight Grilles	0.30	0.19	0.42
		Full Divided Light Grilles	0.30	0.19	0.42
		Without Grilles Simulated Divided Light Grilles	0.26	0.20	0.46
		Finelight Grilles	0.26	0.18	0.41
	_ S ≥	Full Divided Light Grilles	0.27	0.18	0.41
	Low-E4*	Without Grilles	0.27	0.32	0.55
		Simulated Divided Light Grilles Finelight™ Grilles	0.27	0.29	0.49
		Full Divided Light Grilles	0.28	0.29	0.49
	, * 3	Without Grilles	0.23	0.31	0.54
	Low-E4 w/HeatLock*	Simulated Divided Light Grilles	0.23	0.28	0.48
400.0 1	3¥/	Finelight Grilles Full Divided Light Grilles	0.23 0.25	0.28	0.48
400 Series Woodwright* Picture Full-Frame		Without Grilles	0.27	0.20	0.31
Windows	Sun	Simulated Divided Light Grilles	0.27	0.18	0.27
AND-N-67	SP	Finelight Grilles	0.27	0.18	0.27
	,	Full Divided Light Grilles Without Grilles	0.29	0.18	0.27
	Low-E4 SmartSun"	Simulated Divided Light Grilles	0.26	0.19	0.44
	Low	Finelight Grilles	0.26	0.19	0.44
		Full Divided Light Grilles	0.28	0.19	0.44
	E4 Sun Lock	Without Grilles Simulated Divided Light Grilles	0.22	0.21	0.48
	Low-E4 SmartSun w/HeatLock	Finelight Grilles	0.22	0.19	0.43
	⊗ ×	Full Divided Light Grilles	0.25	0.19	0.43
	**	Without Grilles Simulated Divided Light Grilles	0.27	0.33	0.57
	Low-E4°	Finelight™ Grilles	0.27 0.27	0.30	0.51 0.51
		Full Divided Light Grilles	0.29	0.30	0.51
	,**	Without Grilles	0.23	0.33	0.56
	Low-E4 w/HeatLock*	Simulated Divided Light Grilles Finelight Grilles	0.23 0.23	0.29	0.50 0.50
400 Series Woodwright®	¥,	Full Divided Light Grilles	0.25	0.29	0.50
Transom Full-Frame		Without Grilles	0.28	0.20	0.32
Windows AND-N-68	Sun	Simulated Divided Light Grilles	0.28	0.18	0.29
	ō s	Finelight Grilles Full Divided Light Grilles	0.28	0.18	0.29
	2	Without Grilles	0.29 0.27	0.18	0.29
	-E4 tSun	Simulated Divided Light Grilles	0.27	0.20	0.46
	Low-E4 SmartSun"	Finelight Grilles	0.27	0.20	0.46
		Full Divided Light Grilles	0.28	0.20	0.46
	Sun Lock	Without Grilles Simulated Divided Light Grilles	0.22	0.22	0.50 0.45
	Low-E4 SmartSun w/HeatLock	Finelight Grilles	0.22	0.20	0.45
	× ×	Full Divided Light Grilles	0.25	0.20	0.45

continued on next page



For current performance information, please visit andersenwindows.com.

Andersen® Product SHGC² High-Performance Dual-Pane Glass Type U-Factor¹ Without Grilles 0.53 0.30 0.31 Low-E4* Simulated Divided Light Grilles 0.30 0.28 0.47 Finelight™ Grilles 0.30 0.28 0.47 Full Divided Light Grilles 0.31 0.28 0.47 Without Grilles 0.26 0.30 0.52 Low-E4 'HeatLock* Simulated Divided Light Grilles 0.27 0.46 0.26 Finelight Grilles 0.26 0.27 0.46 Full Divided Light Grilles 0.28 0.27 0.46 400 Series Woodwright 0.30 0.30 Double-Hung Insert Without Grilles 0.19 Low-E4 Sun Windows Simulated Divided Light Grilles 0.30 0.17 0.26 AND-N-74 Finelight Grilles 0.30 0.17 0.26 Full Divided Light Grilles 0.31 0.17 0.26 0.48 Without Grilles 0.29 0.21 Low-E4 SmartSun" Simulated Divided Light Grilles 0.29 0.19 0.43 0.43 Finelight Grilles 0.29 0.19 Full Divided Light Grilles 0.30 0.19 0.43 Without Grilles 0.26 0.20 0.47 v-E4 rtSun atLock Simulated Divided Light Grilles 0.26 0.18 0.42 0.26 0.18 0.42 Sma V/He Finelight Grilles Full Divided Light Grilles 0.27 0.18 0.42 Without Grilles 0.29 0.32 0.55 Low-E4* Simulated Divided Light Grilles 0.29 0.29 0.49 0.29 0.29 0.49 Finelight™ Grilles Full Divided Light Grilles 0.30 0.29 0.49 Without Grilles 0.24 0.32 0.54 Low-E4 'HeatLock* Simulated Divided Light Grilles 0.24 0.29 0.48 Finelight Grilles 0.29 0.48 400 Series Woodwright Full Divided Light Grilles 0.27 0.29 0.48 Picture Insert Windows Without Grilles 0.29 0.20 0.31 AND-N-77 Low-E. Simulated Divided Light Grilles 0.29 0.18 0.27 Finelight Grilles 0.29 0.18 0.27 Full Divided Light Grilles 0.30 0.18 0.27 Without Grilles 0.28 0.21 0.50 Low-E4 SmartSun" Simulated Divided Light Grilles 0.28 0.19 0.44 0.28 0.19 0.44 Finelight Grilles Full Divided Light Grilles 0.29 0.19 0.44 Without Grilles 0.24 0.21 0.49 rtSun atLock Simulated Divided Light Grilles 0.24 0.19 0.43 Smarl v/Hea Finelight Grilles 0.24 0.19 0.43 Full Divided Light Grilles 0.26 0.19 0.43 Without Grilles 0.29 0.33 0.56 Low-E4* Simulated Divided Light Grilles 0.29 0.30 0.50 0.29 0.30 0.50 Finelight™ Grilles Full Divided Light Grilles 0.30 0.30 0.50 Low-E4 w/HeatLock* Without Grilles 0.24 0.32 0.55 Simulated Divided Light Grilles 0.24 0.29 0.49 0.24 0.29 0.49 Finelight Grilles 400 Series Woodwright® Full Divided Light Grilles 0.27 0.29 0.49 Transom Insert Windows 0.29 0.20 0.31 Without Grilles AND-N-78 Low-E. Sun Simulated Divided Light Grilles 0.29 0.18 0.28 Finelight Grilles 0.29 0.18 0.28 Full Divided Light Grilles 0.31 0.18 0.28 Without Grilles 0.28 0.22 0.51 Low-E4 SmartSun" 0.45 Simulated Divided Light Grilles 0.28 0.20 Finelight Grilles 0.28 0.20 0.45 Full Divided Light Grilles 0.30 0.20 0.45 0.24 0.21 Without Grilles 0.50 -E4 rtSun atLock Simulated Divided Light Grilles 0.24 0.19 0.44 Low-E Smart? w/Heat Finelight Grilles 0.24 0.19 0.44 Full Divided Light Grilles 0.26 0.19 0 44 0.28 0.30 0.52 Without Grilles Low-E4® Simulated Divided Light Grilles 0.28 0.27 0.46 Finelight™ Grilles 0.29 0.27 0.46 Full Divided Light Grilles 0.29 0.27 0.46 Without Grilles 0.24 0.30 0.51 Low-E4 w/HeatLock* Simulated Divided Light Grilles 0.25 0.27 0.45 Finelight Grilles 0.25 0.27 0.45 400 Series Woodwright® Full Divided Light Grilles 0.26 0.27 0.45 Springline™ Single-Hung, 0.28 Arch Double-Hung Without Grilles 0.19 0.29 Low-E4 Sun Simulated Divided Light Grilles 0.28 0.17 0.26 **Full-Frame Windows** AND-N-111 Finelight Grilles 0.29 0.17 0.26 Full Divided Light Grilles 0.29 0.17 0.26 Without Grilles 0.28 0.20 0.47 Low-E4 SmartSun" Simulated Divided Light Grilles 0.27 0.18 0.42 0.28 0.18 0.42 Finelight Grilles Full Divided Light Grilles 0.29 0.18 0.42 0.24 0.46 Without Grilles 0.20 Low-E4 SmartSun w/HeatLock Simulated Divided Light Grilles 0.24 0.41 0.18 Finelight Grilles 0.25 0.18 0.41

Refer to notes on page 204 for important information on performance data.

Refer to notes o	on page	204 for important inform	nation on	performa	nce data
Andersen° Product	High-Per	formance Dual-Pane Glass Type	U-Factor ¹	SHGC ²	VT ³
		Without Grilles	0.30	0.31	0.53
	E4*	Simulated Divided Light Grilles	0.30	0.28	0.47
	Low-E4*	Finelight™ Grilles	0.32	0.28	0.47
		Full Divided Light Grilles	0.31	0.28	0.47
	Low-E4 w/HeatLock*	Without Grilles	0.27	0.30	0.52
	v-E4 atLo	Simulated Divided Light Grilles	0.27	0.27	0.46
400.0 1 7711.111	ξĒ	Finelight Grilles	0.28	0.27	0.46
400 Series Tilt-Wash Double-Hung Full-Frame	*	Full Divided Light Grilles	0.28	0.27	0.46
Windows	4	Without Grilles	0.31	0.19	0.29
AND-N-24	Low-E4 Sun	Simulated Divided Light Grilles	0.31	0.17	0.26
	3 "	Finelight Grilles Full Divided Light Grilles	0.32	0.17	0.26
		Without Grilles	0.30	0.11	0.48
	Low-E4 SmartSun"	Simulated Divided Light Grilles	0.29	0.19	0.42
	ow-	Finelight Grilles	0.31	0.19	0.42
	1 <i>S</i>	Full Divided Light Grilles	0.30	0.19	0.42
	드 중	Without Grilles	0.26	0.20	0.47
	Low-E4 SmartSun w/HeatLock	Simulated Divided Light Grilles	0.26	0.18	0.41
	Low mar	Finelight Grilles	0.27	0.18	0.41
	S ×	Full Divided Light Grilles	0.28	0.18	0.41
	٠.	Without Grilles	0.29	0.33	0.57
	Low-E4*	Simulated Divided Light Grilles	0.29	0.30	0.51
	Lov	Finelight™ Grilles	0.29	0.30	0.51
		Full Divided Light Grilles	0.31	0.30	0.51
	00°	Without Grilles	0.25	0.32	0.56
	Low-E4 w/HeatLock*	Simulated Divided Light Grilles	0.25	0.29	0.50
400 Series Tilt-Wash	Z#/	Finelight Grilles Full Divided Light Grilles	0.25	0.29	0.50
Picture Full-Frame		Without Grilles	0.27	0.29	0.32
Windows	4 c	Simulated Divided Light Grilles	0.30	0.18	0.28
AND-N-27	Low-E4 Sun	Finelight Grilles	0.30	0.18	0.28
		Full Divided Light Grilles	0.31	0.18	0.28
	2_	Without Grilles	0.29	0.22	0.51
	Low-E4 SmartSun"	Simulated Divided Light Grilles	0.29	0.20	0.46
	Low	Finelight Grilles	0.29	0.20	0.46
		Full Divided Light Grilles	0.30	0.20	0.46
	Low-E4 SmartSun w/HeatLock	Without Grilles	0.25	0.21	0.50
		Simulated Divided Light Grilles	0.25	0.19	0.45
		Finelight Grilles	0.25	0.19	0.45
	Low-E4*	Full Divided Light Grilles	0.27	0.19	0.45
		Without Grilles Simulated Divided Light Grilles	0.27	0.32	0.55
		Finelight™ Grilles	0.27	0.29	0.49
		Full Divided Light Grilles	0.28	0.29	0.49
		Without Grilles	0.22	0.31	0.54
	t E4	Simulated Divided Light Grilles	0.22	0.28	0.48
	Low-E4 w/HeatLock*	Finelight Grilles	0.22	0.28	0.48
400 Series Tilt-Wash	/w	Full Divided Light Grilles	0.25	0.28	0.48
Transom Full-Frame		Without Grilles	0.27	0.19	0.31
Windows AND-N-76	Low-E4 Sun	Simulated Divided Light Grilles	0.27	0.18	0.27
	S	Finelight Grilles	0.27	0.18	0.27
		Full Divided Light Grilles	0.28	0.18	0.27
	Low-E4 SmartSun"	Without Grilles	0.26	0.21	0.49
	artSi	Simulated Divided Light Grilles Finelight Grilles	0.26	0.19	0.44
	Smi	Full Divided Light Grilles	0.28	0.19	0.44
		Without Grilles	0.22	0.13	0.48
	Low-E4 SmartSun w/HeatLock	Simulated Divided Light Grilles	0.22	0.19	0.43
	Low- mart Hea:	Finelight Grilles	0.22	0.19	0.43
	N S	Full Divided Light Grilles	0.24	0.19	0.43
		Without Grilles	0.30	0.31	0.53
	Low-E4*	Simulated Divided Light Grilles	0.32	0.28	0.47
	Low	Finelight [™] Grilles	0.30	0.28	0.47
		Full Divided Light Grilles	0.31	0.28	0.47
	* \$	Without Grilles	0.26	0.31	0.52
	Low-E4 w/HeatLock*	Simulated Divided Light Grilles	0.29	0.27	0.46
Narroline* Double-Hung	9 ×	Finelight Grilles	0.26	0.27	0.46
Window Conversion Kit	>	Full Divided Light Grilles Without Grilles	0.28	0.27	0.46
AND-N-101	44	Without Grilles Simulated Divided Light Grilles	0.30	0.19	0.30
	Low-E4 Sun	Finelight Grilles	0.32	0.17	0.26
		Full Divided Light Grilles	0.31	0.17	0.26
	2	Without Grilles	0.29	0.21	0.48
	Low-E4 SmartSun"	Simulated Divided Light Grilles	0.31	0.19	0.43
	Low	Finelight Grilles	0.29	0.19	0.43
	Š	Full Divided Light Grilles	0.30	0.19	0.43
	규 득 첫	Without Grilles	0.26	0.20	0.47
	Low-E4 SmartSun w/HeatLock	Simulated Divided Light Grilles	0.28	0.18	0.42
	Sma //He	Finelight Grilles	0.26	0.18	0.42
	\$	Full Divided Light Grilles	0.28	0.18	0.42

[•]This data is accurate as of May 2021. Due to ongoing product changes, updated test results, or new industry standards or requirements, this data may change over time. Ratings are for sizes specified by NFRC for testing and certification. Ratings may vary depending on use of tempered glass, different grille options, glass for high altitudes, etc.

0.18

0.41

0.26

Full Divided Light Grilles

For current performance information, please visit andersenwindows.com.

SHGC² Andersen® Product High-Performance Dual-Pane Glass Type U-Factor¹ Without Grilles 0.31 0.53 0.31 Low-E4® Simulated Divided Light Grilles 0.28 0.31 0.47 Finelight™ Grilles 0.32 0.28 0.47 Full Divided Light Grilles 0.32 0.28 0.47 Without Grilles 0.27 0.31 0.52 Low-E4 'HeatLock* Simulated Divided Light Grilles 0.28 0.46 0.27 Finelight Grilles 0.28 0.28 0.46 400 Series Tilt-Wash Full Divided Light Grilles 0.29 0.28 0.46 **Double-Hung Insert** Without Grilles 0.19 0.30 0.31 Windows Low-E4 Sun Simulated Divided Light Grilles 0.31 0.18 0.26 AND-N-132 Finelight Grilles 0.32 0.18 0.26 Full Divided Light Grilles 0.32 0.18 0.26 Without Grilles 0.30 0.21 0.48 Low-E4 SmartSun" Simulated Divided Light Grilles 0.30 0.19 0.43 0.43 Finelight Grilles 0.31 0.19 Full Divided Light Grilles 0.31 0.19 0.43 Without Grilles 0.27 0.20 0.47 Low-E4 SmartSun w/HeatLock Simulated Divided Light Grilles 0.27 0.19 0.42 0.19 0.42 Finelight Grilles 0.28 Full Divided Light Grilles 0.29 0.19 0.42 0.32 Without Grilles 0.29 0.55 Low-E4® Simulated Divided Light Grilles 0.29 0.29 0.49 Finelight™ Grilles 0.29 0.29 0.49 Full Divided Light Grilles 0.30 0.29 0.49 Without Grilles 0.24 0.32 0.54 Low-E4 w/HeatLock* Simulated Divided Light Grilles 0.24 0.29 0.48 Finelight Grilles 0.29 0.48 Full Divided Light Grilles 0.27 0.29 0.48 400 Series Tilt-Wash 0.31 Picture Insert Window Without Grilles 0.29 0.20 AND-N-133 Simulated Divided Light Grilles 0.29 0.18 0.27 Finelight Grilles 0.29 0.18 0.27 Full Divided Light Grilles 0.30 0.18 0.27 Without Grilles 0.28 0.21 0.50 Low-E4 SmartSun" Simulated Divided Light Grilles 0.28 0.19 0.44 0.28 0.19 0.44 Finelight Grilles Full Divided Light Grilles 0.29 0.19 0.44 Without Grilles 0.24 0.21 0.49 Low-E4 SmartSun w/HeatLock Simulated Divided Light Grilles 0.24 0.19 0.43 Finelight Grilles 0.24 0.19 0.43 Full Divided Light Grilles 0.26 0.19 0.43 Without Grilles 0.29 0.33 0.56 Low-E4® Simulated Divided Light Grilles 0.29 0.30 0.50 Finelight™ Grilles 0.29 0.30 0.50 Full Divided Light Grilles 0.30 0.30 0.50 Without Grilles 0.24 0.32 0.55 Low-E4 w/HeatLock Simulated Divided Light Grilles 0.24 0.29 0.49 Finelight Grilles 0.24 0.29 0.49 Full Divided Light Grilles 0.27 0.29 0.49 400 Series Tilt-Wash 0.29 0.20 0.31 Without Grilles Transom Insert Windows Low-E4 Sun AND-N-134 Simulated Divided Light Grilles 0.29 0.18 0.28 Finelight Grilles 0.29 0.18 0.28 Full Divided Light Grilles 0.31 0.18 0.28 Without Grilles 0.28 0.22 0.51 Low-E4 SmartSun" 0.20 Simulated Divided Light Grilles 0.28 0.45 Finelight Grilles 0.28 0.20 0.45 Full Divided Light Grilles 0.30 0.20 0.45 0.21 0.50 Without Grilles 0.24 Low-E4 SmartSun w/HeatLock Simulated Divided Light Grilles 0.24 0.19 0.44 Finelight Grilles 0.24 0.19 0.44 Full Divided Light Grilles 0.26 0.19 0 44 0.30 0.29 0.50 Without Grilles Low-E4* Simulated Divided Light Grilles 0.30 0.26 0.44 Finelight™ Grilles 0.30 0.26 0.44 Full Divided Light Grilles 0.44 0.31 0.26 Without Grilles 0.27 0.28 0.48 Low-E4 w/HeatLock® Simulated Divided Light Grilles 0.27 0.25 0.43 Finelight Grilles 0.27 0.25 0.43 400 Series Full Divided Light Grilles 0.28 0.25 0.43 **Gliding Windows** Without Grilles 0.31 0.18 0.27 AND-N-19 Simulated Divided Light Grilles 0.31 0.16 0.24 Finelight Grilles 0.31 0.16 0.24 Full Divided Light Grilles 0.32 0.16 0.24 Without Grilles 0.30 0.19 0.45 Low-E4 SmartSun" Simulated Divided Light Grilles 0.30 0.17 0.39 0.30 0.17 0.39 Finelight Grilles Full Divided Light Grilles 0.31 0.17 0.39 0.26 0.19 0.44 Low-E4 SmartSun w/HeatLock Without Grilles Simulated Divided Light Grilles 0.26 0.39 0.17 Finelight Grilles 0.26 0.17 0.39 Full Divided Light Grilles 0.28 0.17 0.39

Refer to notes on page 207 for important information on performance data.

Refer to notes o	n page :	207 for important inform	ation on	performai	ıce data.
Andersen° Product	High-Per	formance Dual-Pane Glass Type	U-Factor ¹	SHGC ²	VT ³
		Without Grilles	0.27	0.34	0.59
	Low-E4°	Simulated Divided Light Grilles	0.27	0.31	0.53
	Low	Finelight™ Grilles	0.27	0.31	0.53
		Full Divided Light Grilles	0.29	0.31	0.53
	Low-E4 w/HeatLock*	Without Grilles	0.23	0.34	0.58
	Low-E4 /HeatLoc	Simulated Divided Light Grilles Finelight Grilles	0.23	0.30	0.52
400 Series	Ĭ,	Full Divided Light Grilles	0.25	0.30	0.52
Elliptical Windows		Without Grilles	0.28	0.21	0.33
AND-N-16	₽ ⊏	Simulated Divided Light Grilles	0.28	0.19	0.29
	Low-E4 Sun	Finelight Grilles	0.28	0.19	0.29
		Full Divided Light Grilles	0.29	0.19	0.29
	_ [‡] =	Without Grilles	0.27	0.23	0.53
	Low-E4 SmartSun"	Simulated Divided Light Grilles	0.27	0.21	0.48
	Sms	Finelight Grilles Full Divided Light Grilles	0.27	0.21	0.48
		Without Grilles	0.28	0.22	0.52
	Low-E4 SmartSun w/HeatLock	Simulated Divided Light Grilles	0.22	0.20	0.46
	Low- mart Hea	Finelight Grilles	0.22	0.20	0.46
	_ \si_\si_	Full Divided Light Grilles	0.25	0.20	0.46
		Without Grilles	0.27	0.35	0.60
	Low-E4*	Simulated Divided Light Grilles	0.27	0.32	0.53
	Lov	Finelight™ Grilles	0.27	0.31	0.53
	-	Full Divided Light Grilles	0.28	0.31	0.53
	E4 Lock	Without Grilles Simulated Divided Light Grilles	0.22	0.34	0.58
	Low-E4 w/HeatLock*	Finelight Grilles	0.22	0.31	0.52
400 Series	M/H	Full Divided Light Grilles	0.25	0.31	0.52
Half Circle Windows		Without Grilles	0.27	0.21	0.33
Casement AND-N-147	Low-E4 Sun	Simulated Divided Light Grilles	0.27	0.19	0.30
AND IV 141	S	Finelight Grilles	0.27	0.19	0.30
		Full Divided Light Grilles	0.29	0.19	0.30
	4. P	Without Grilles	0.26	0.23	0.54
	Low-E4 SmartSun"	Simulated Divided Light Grilles Finelight Grilles	0.26	0.21	0.48
	Sm	Full Divided Light Grilles	0.27	0.21	0.48
	Low-E4 SmartSun w/HeatLock	Without Grilles	0.22	0.22	0.52
		Simulated Divided Light Grilles	0.22	0.20	0.47
		Finelight Grilles	0.22	0.20	0.47
	Low-E4*	Full Divided Light Grilles	0.24	0.20	0.47
		Without Grilles	0.27	0.35	0.60
		Simulated Divided Light Grilles Finelight™ Grilles	0.27	0.31	0.53
		Full Divided Light Grilles	0.28	0.31	0.53
	*	Without Grilles	0.22	0.34	0.58
	the feature of the fe	Simulated Divided Light Grilles	0.22	0.31	0.52
	Low-E4 w/HeatLock*	Finelight Grilles	0.22	0.31	0.52
400 Series Circle and Oval Windows	≥`	Full Divided Light Grilles	0.25	0.31	0.52
AND-N-148	4	Without Grilles	0.27	0.21	0.33
	Low-E4 Sun	Simulated Divided Light Grilles Finelight Grilles	0.27	0.19	0.30
		Full Divided Light Grilles	0.29	0.19	0.30
	2_	Without Grilles	0.26	0.23	0.54
	v-E4 tSun	Simulated Divided Light Grilles	0.26	0.21	0.48
	Low-E4 SmartSun"	Finelight Grilles	0.26	0.21	0.48
		Full Divided Light Grilles	0.28	0.21	0.48
	Low-E4 SmartSun w/HeatLock	Without Grilles Simulated Divided Light Grilles	0.22	0.22	0.52
	ow-E narts leatl	Finelight Grilles	0.22	0.20	0.47
	L Sn √	Full Divided Light Grilles	0.24	0.20	0.47
		Without Grilles	0.27	0.33	0.58
	Low-E4*	Simulated Divided Light Grilles	0.27	0.30	0.52
	Low	Finelight [™] Grilles	0.27	0.30	0.52
		Full Divided Light Grilles	0.28	0.30	0.52
	.0ck*	Without Grilles	0.23	0.32	0.56
	ow-E	Simulated Divided Light Grilles Finelight Grilles	0.23	0.29	0.50
400 Series	Low-E4 w/HeatLock*	Full Divided Light Grilles	0.25	0.29	0.50
Arch Windows		Without Grilles	0.27	0.20	0.31
AND-N-18	Low-E4 Sun	Simulated Divided Light Grilles	0.27	0.18	0.28
	Lov	Finelight Grilles	0.27	0.18	0.28
		Full Divided Light Grilles	0.29	0.18	0.28
	45 E	Without Grilles Simulated Divided Light Grilles	0.26 0.26	0.23 0.21	0.52 0.46
	Low-E4 SmartSun"	Finelight Grilles	0.26	0.21	0.46
	Sm	Full Divided Light Grilles	0.28	0.21	0.46
	_ 5	Without Grilles	0.22	0.22	0.51
	Low-E4 SmartSun w/HeatLock	Simulated Divided Light Grilles	0.22	0.20	0.45
	Lov Sma //He	Finelight Grilles	0.22	0.20	0.45
	>	Full Divided Light Grilles	0.24	0.20	0.45

[•]This data is accurate as of May 2021. Due to ongoing product changes, updated test results, or new industry standards or requirements, this data may change over time.
Ratings are for sizes specified by NFRC for testing and certification. Ratings may vary depending on use of tempered glass, different grille options, glass for high altitudes, etc.



For current performance information, please visit andersenwindows.com.

Andersen [®] Product	High-Perl	formance Dual-Pane Glass Type	U-Factor ¹	SHGC ²	VT ³
	*-	Without Grilles	0.28	0.33	0.57
	Low-E4*	Simulated Divided Light Grilles	0.28	0.30	0.51
	٥	Finelight™ Grilles	0.28	0.30	0.51
		Full Divided Light Grilles	0.29	0.30	0.51
	4 %	Without Grilles	0.24	0.32	0.56
	Low-E4 w/HeatLock*	Simulated Divided Light Grilles	0.24	0.29	0.50
	9€	Finelight Grilles	0.24	0.29	0.50
400 Series	>	Full Divided Light Grilles	0.26	0.29	0.50
Springline™ Windows		Without Grilles	0.28	0.20	0.31
AND-N-25	Low-E4 Sun	Simulated Divided Light Grilles	0.28	0.18	0.28
	S	Finelight Grilles	0.28	0.18	0.28
		Full Divided Light Grilles	0.30	0.18	0.28
	. =	Without Grilles	0.27	0.23	0.52
	Low-E4 SmartSun"	Simulated Divided Light Grilles	0.27	0.21	0.46
	Low	Finelight Grilles	0.27	0.21	0.46
	S	Full Divided Light Grilles	0.29	0.21	0.46
	드 중	Without Grilles	0.23	0.22	0.50
	Low-E4 SmartSun w/HeatLock	Simulated Divided Light Grilles	0.23	0.20	0.45
	Low	Finelight Grilles	0.23	0.20	0.45
	_ \(\sigma \)	Full Divided Light Grilles	0.25	0.20	0.45
		Without Grilles	0.27	0.33	0.58
	£4*	Simulated Divided Light Grilles	0.27	0.30	0.52
	Low-E4®	Finelight™ Grilles	0.27	0.30	0.52
	7	Full Divided Light Grilles	0.28	0.30	0.52
		Without Grilles	0.28	0.30	0.52
	Low-E4 w/HeatLock*	Simulated Divided Light Grilles			
	w-E		0.22	0.29	0.50
100 Series	그북	Finelight Grilles	0.22	0.29	0.50
lou Series Texiframe® Windows	≥`	Full Divided Light Grilles	0.25	0.29	0.50
I exitrame Windows ND-N-17		Without Grilles	0.27	0.20	0.31
	.ow-E4 Sun	Simulated Divided Light Grilles	0.27	0.18	0.28
	S	Finelight Grilles	0.27	0.18	0.28
		Full Divided Light Grilles	0.28	0.18	0.28
	2	Without Grilles	0.26	0.23	0.52
	Low-E4 SmartSun"	Simulated Divided Light Grilles	0.26	0.21	0.46
	Low	Finelight Grilles	0.26	0.21	0.46
	- vs	Full Divided Light Grilles	0.27	0.21	0.46
	c ×	Without Grilles	0.22	0.22	0.51
	Low-E4 SmartSun w/HeatLock	Simulated Divided Light Grilles	0.22	0.20	0.45
	ow- nart leat	Finelight Grilles	0.22	0.20	0.45
	_ S. ×	Full Divided Light Grilles	0.24	0.20	0.45
		Without Grilles	0.24	0.20	0.43
	*4	Simulated Divided Light Grilles	0.29	0.33	0.61
	Low-E4*		0.29	0.32	0.55
		Finelight™ Grilles			
		Full Divided Light Grilles	0.30	0.32	0.55
	Low-E4 w/HeatLock*	Without Grilles	0.24	0.35	
	w-E	Simulated Divided Light Grilles	0.24	0.31	0.54
INA Series Complementers	으类	Finelight Grilles	0.24	0.31	0.54
100 Series Complementary Specialty Windows	≥`	Full Divided Light Grilles	0.26	0.31	0.54
100 Series Casement, Awning	-	Without Grilles	0.29	0.22	0.34
nd Picture Windows	ow-E4 Sun	Simulated Divided Light Grilles	0.29	0.20	0.30
IND-N-105	Si	Finelight Grilles	0.29	0.20	0.30
		Full Divided Light Grilles	0.30	0.20	0.30
	2_	Without Grilles	0.28	0.23	0.55
	Sun.	Simulated Divided Light Grilles	0.28	0.21	0.49
	Low-E4 SmartSun"	Finelight Grilles	0.28	0.21	0.49
	S	Full Divided Light Grilles	0.29	0.21	0.49
	~ X	Without Grilles	0.24	0.23	0.54
	Sur tLoc	Simulated Divided Light Grilles	0.24	0.21	0.48
	Low-E4 SmartSun w/HeatLock	Finelight Grilles	0.24	0.21	0.48
	S.W.	Full Divided Light Grilles	0.24	0.21	0.48
		Without Grilles	0.27	0.21	0.48
	*4	Simulated Divided Light Grilles			
	Low-E4*	Simulated Divided Light Grilles Finelight™ Grilles	0.28	0.33	0.57
	Ŝ		0.28	0.33	0.57
		Full Divided Light Grilles	0.29	0.33	0.57
	Low-E4 w/HeatLock*	Without Grilles	0.23	0.36	0.62
	v-E₂ atLo	Simulated Divided Light Grilles	0.23	0.33	0.56
	, Fe	Finelight Grilles	0.23	0.33	0.56
00 Series Complementary))	Full Divided Light Grilles	0.25	0.33	0.56
		Without Grilles	0.29	0.22	0.35
	Ē.	Simulated Divided Light Grilles	0.29	0.20	0.32
100 Series Double-Hung	Low-E4 Sun	Finelight Grilles	0.29	0.20	0.32
00 Series Double-Hung Vindows and Patio Doors			0.30	0.20	0.32
00 Series Double-Hung /indows and Patio Doors	250	ruii Divided Ligiit Gillies			
00 Series Double-Hung Vindows and Patio Doors		Full Divided Light Grilles Without Grilles	0.27	0.24	0.57
100 Series Double-Hung Vindows and Patio Doors		Without Grilles	0.27	0.24	0.57
00 Series Double-Hung Vindows and Patio Doors		Without Grilles Simulated Divided Light Grilles	0.27	0.22	0.51
100 Series Double-Hung Vindows and Patio Doors	Low-E4 Lov SmartSun ^w S	Without Grilles Simulated Divided Light Grilles Finelight Grilles	0.27 0.27	0.22 0.22	0.51 0.51
Specialty Windows 100 Series Double-Hung Windows and Patio Doors ND-N-105	Low-E4 SmartSun ^w	Without Grilles Simulated Divided Light Grilles Finelight Grilles Full Divided Light Grilles	0.27 0.27 0.28	0.22 0.22 0.22	0.51 0.51 0.51
100 Series Double-Hung Vindows and Patio Doors	Low-E4 SmartSun ^w	Without Grilles Simulated Divided Light Grilles Finelight Grilles Full Divided Light Grilles Without Grilles	0.27 0.27 0.28 0.23	0.22 0.22 0.22 0.24	0.51 0.51 0.51 0.56
100 Series Double-Hung Vindows and Patio Doors		Without Grilles Simulated Divided Light Grilles Finelight Grilles Full Divided Light Grilles	0.27 0.27 0.28	0.22 0.22 0.22	0.51 0.51 0.51

And are an Dread and	High Defenses Duel Date Class Time III Festeral CHOO? MT3					
Andersen® Product	High-Per	formance Dual-Pane Glass Type	U-Factor ¹	SHGC ²	VT ³	
		Without Grilles	0.30	0.26	0.45	
	.E4*	Blinds-Between-the-Glass*	0.36	0.24	0.40	
	Low-E4*	Simulated Divided Light Grilles Finelight™ Grilles	0.30	0.23	0.38	
	_	Full Divided Light Grilles	0.32	0.23	0.38	
	•	Without Grilles	0.32	0.26	0.44	
	Low-E4 w/HeatLock*	Simulated Divided Light Grilles	0.27	0.23	0.37	
400 Carles Franchiscad	ow- leat	Finelight Grilles	0.27	0.23	0.37	
400 Series Frenchwood® Gliding Patio Doors		Full Divided Light Grilles	0.29	0.23	0.37	
Two-Panel		Without Grilles	0.31	0.16	0.25	
AND-N-6	ow-E4 Sun	Simulated Divided Light Grilles	0.31	0.14	0.21	
	Low	Finelight Grilles	0.31	0.14	0.21	
		Full Divided Light Grilles	0.32	0.14	0.21	
	_ =	Without Grilles	0.30	0.18	0.40	
	Low-E4 SmartSun"	Simulated Divided Light Grilles	0.30	0.16	0.35	
	L P	Finelight Grilles	0.30	0.16	0.35	
		Full Divided Light Grilles	0.31	0.16	0.35	
	Low-E4 SmartSun w/HeatLock	Without Grilles	0.27	0.17	0.39	
	w-E	Simulated Divided Light Grilles	0.27	0.15	0.34	
	S S	Finelight Grilles	0.27	0.15	0.34	
	>	Full Divided Light Grilles	0.29	0.15	0.34	
		Without Grilles Blinds-Between-the-Glass*	0.30	0.24	0.41	
	Low-E4*	Simulated Divided Light Grilles	0.34	0.24	0.41	
	-wo	Simulated Divided Light Grilles Finelight™ Grilles	0.30	0.21	0.35	
	_	Full Divided Light Grilles	0.32	0.21	0.35	
		Without Grilles	0.32	0.21	0.35	
	47 S	Simulated Divided Light Grilles	0.27	0.24	0.40	
	ow-F	Finelight Grilles	0.27	0.21	0.34	
400 Series Frenchwood®	Low-E4 w/HeatLock*	Full Divided Light Grilles	0.29	0.21	0.34	
Hinged Inswing Patio Doors		Without Grilles	0.31	0.15	0.23	
AND-N-10	25 -	Simulated Divided Light Grilles	0.31	0.13	0.19	
	ow-E4 Sun	Finelight Grilles	0.31	0.13	0.19	
	_	Full Divided Light Grilles	0.32	0.13	0.19	
	2_	Without Grilles	0.30	0.16	0.37	
	Sur E4	Simulated Divided Light Grilles	0.30	0.14	0.31	
	Low-E4 SmartSun"	Finelight Grilles	0.30	0.14	0.31	
	S	Full Divided Light Grilles	0.31	0.14	0.31	
	౼౼ౢ	Without Grilles	0.27	0.16	0.36	
	Low-E4 SmartSun w/HeatLock	Simulated Divided Light Grilles	0.27	0.14	0.31	
	Sma //He	Finelight Grilles	0.27	0.14	0.31	
	0, ≽	Full Divided Light Grilles	0.29	0.14	0.31	
	***	Without Grilles	0.30	0.22	0.37	
	Low-E4°	Simulated Divided Light Grilles	0.30	0.20	0.32	
	9	Finelight™ Grilles Full Divided Light Grilles	0.30	0.20	0.32	
		Without Grilles	0.31	0.20	0.32	
	Low-E4 w/HeatLock*	Simulated Divided Light Grilles	0.27	0.22	0.36	
	Low-E4 'HeatLoc	Finelight Grilles	0.27	0.20	0.32	
400 Carias F 1 1*	W/H	Full Divided Light Grilles	0.29	0.20	0.32	
400 Series Frenchwood® Patio Door Sidelights		Without Grilles	0.30	0.14	0.20	
AND-N-64	ь 4	Simulated Divided Light Grilles	0.30	0.13	0.18	
	Low-E4 Sun	Finelight Grilles	0.30	0.13	0.18	
	_	Full Divided Light Grilles	0.31	0.13	0.18	
	2_	Without Grilles	0.29	0.15	0.33	
	Low-E4 SmartSun"	Simulated Divided Light Grilles	0.29	0.14	0.29	
	Low	Finelight Grilles	0.29	0.14	0.29	
	Š	Full Divided Light Grilles	0.30	0.14	0.29	
	_ = ઙૢૼ	Without Grilles	0.27	0.15	0.32	
	Low-E4 SmartSun w/HeatLock	Simulated Divided Light Grilles	0.27	0.13	0.28	
	Sma / He	Finelight Grilles	0.27	0.13	0.28	
	3, ≥	Full Divided Light Grilles	0.28	0.13	0.28	

continued on next page

Important information on NFRC Certified Total Unit Performance:

• "Low-E4;" "Low-E4* SmartSun;" "Low-E4* Sun" and "HeatLock" are Andersen trademarks for "Low-E" glass.

1) U-Factor defines the amount of heat loss through the total unit in BTU/hr-ft-2*F. The lower the value, the less heat is lost through the entire product. Window values represent non-tempered glass. Use of tempered glass can increase U-Factor ratings. See andersenwindows.com/nfrc for specific performance values. Door values represent tempered glass. 2) Solar Heat Gain Coefficient (SHGC) defines the fraction of solar radiation admitted through the glass directly transmitted, as well as absorbed and subsequently released inward. The lower the value, the less heat is transmitted through the product. 3) Visible Transmittance (VT) measures how much light comes through a product (glass and frame). The higher the value, from 0 to 1, the more daylight the product lets in over the product's total unit area. Visible Light Transmittance is measured over the 380 to 760 nanometer portion of the solar spectrum.

• NFRC ratings are based on modeling by a third-party agency as validated by an independent test lab in compliance with NFRC program and procedural requirements.

•This data is accurate as of May 2021. Due to ongoing product changes, updated test results, or new industry standards or requirements, this data may change over time. Ratings are for sizes specified by NFRC for testing and certification. Ratings may vary depending on use of tempered glass, different grille options, glass with capillary breather tubes for high altitudes, etc.

*Available for select patio door sizes. Data based on blinds in full open position.

For current performance information, please visit andersenwindows.com.

		**			
Andersen° Product	High-Per	formance Dual-Pane Glass Type	U-Factor ¹	SHGC ²	VT ³
	٠.	Without Grilles	0.29	0.24	0.40
	Low-E4°	Simulated Divided Light Grilles	0.29	0.21	0.35
	Ś	Finelight™ Grilles Full Divided Light Grilles	0.29	0.21	0.35
	*~	Without Grilles	0.26	0.23	0.39
	Low-E4 w/HeatLock	Simulated Divided Light Grilles	0.26	0.21	0.34
	Low-E4 'HeatLoc	Finelight Grilles	0.26	0.21	0.34
400 Series Frenchwood®	/w	Full Divided Light Grilles	0.28	0.21	0.34
Patio Door Transoms	€+	Without Grilles	0.29	0.15	0.22
AND-N-65	Low-E4 Sun	Simulated Divided Light Grilles	0.29	0.13	0.20
	9"	Finelight Grilles Full Divided Light Grilles	0.29	0.13	0.20
	2	Without Grilles	0.29	0.16	0.36
	Sun Sun	Simulated Divided Light Grilles	0.29	0.14	0.32
	Low-E4 SmartSun™	Finelight Grilles	0.29	0.14	0.32
	S	Full Divided Light Grilles	0.29	0.14	0.32
	4 H 2	Without Grilles	0.26	0.16	0.35
	Low-E4 SmartSun w/HeatLock	Simulated Divided Light Grilles Finelight Grilles	0.26	0.14	0.31
	λ. Υ.Υ.Υ.	Full Divided Light Grilles	0.27	0.14	0.31
		Without Grilles	0.32	0.24	0.41
	-E4*	Simulated Divided Light Grilles	0.32	0.21	0.35
	Low-E4	Finelight™ Grilles	0.32	0.21	0.35
		Full Divided Light Grilles	0.33	0.21	0.35
	.0ck	Without Grilles Simulated Divided Light Grilles	0.29	0.24	0.40
	Low-E4 w/HeatLock*	Simulated Divided Light Grilles Finelight Grilles	0.29	0.21	0.34
400 Series Complementary		Full Divided Light Grilles	0.30	0.21	0.34
Springline™ and Arch		Without Grilles	0.33	0.15	0.23
Hinged Inswing Patio Doors	ow-E4 Sun	Simulated Divided Light Grilles	0.33	0.13	0.20
AND-N-127	δ	Finelight Grilles	0.33	0.13	0.20
		Full Divided Light Grilles	0.34	0.13	0.20
	Low-E4 SmartSun"	Without Grilles Simulated Divided Light Grilles	0.32	0.16	0.37
	-ow-l	Finelight Grilles	0.32	0.14	0.32
	15	Full Divided Light Grilles	0.33	0.14	0.32
	Low-E4 SmartSun w/HeatLock	Without Grilles	0.29	0.16	0.36
		Simulated Divided Light Grilles	0.29	0.14	0.31
		Finelight Grilles Full Divided Light Grilles	0.29	0.14	0.31
		Without Grilles	0.33	0.14	0.31
	Low-E4*	Simulated Divided Light Grilles	0.33	0.22	0.35
		Finelight™ Grilles	0.33	0.22	0.35
		Full Divided Light Grilles	0.34	0.22	0.35
	4. %X	Without Grilles	0.30	0.24	0.40
	Low-E4 w/HeatLock*	Simulated Divided Light Grilles Finelight Grilles	0.30	0.21	0.34
400 Series Complementary Springline™ and Arch	M/H ∠	Full Divided Light Grilles	0.32	0.21	0.34
Hinged Outswing Patio		Without Grilles	0.33	0.16	0.23
Doors	ow-E4 Sun	Simulated Divided Light Grilles	0.33	0.14	0.20
AND-N-127	S	Finelight Grilles	0.33	0.14	0.20
		Full Divided Light Grilles Without Grilles	0.34	0.14	0.20
	Low-E4 SmartSun"	Without Grilles Simulated Divided Light Grilles	0.33	0.17	0.37
	Low-I	Finelight Grilles	0.33	0.15	0.32
	Sn	Full Divided Light Grilles	0.34	0.15	0.32
	4 m Sc	Without Grilles	0.28	0.16	0.36
	Low-E4 SmartSun w/HeatLock	Simulated Divided Light Grilles	0.30	0.14	0.31
	Sm.	Finelight Grilles Full Divided Light Grilles	0.30	0.14	0.31
		Without Grilles	0.31	0.14	0.31
	É4*	Simulated Divided Light Grilles	0.32	0.21	0.34
	Low-E4°	Finelight [™] Grilles	0.32	0.21	0.34
		Full Divided Light Grilles	0.33	0.21	0.34
	2ck*	Without Grilles	0.29	0.23	0.38
	Low-E4 w/HeatLock*	Simulated Divided Light Grilles Finelight Grilles	0.29	0.21	0.34
400 Sories Complement	×/F	Full Divided Light Grilles	0.29	0.21	0.34
400 Series Complementary Arch Patio Door Sidelights		Without Grilles	0.33	0.15	0.22
AND-N-131	Low-E4 Sun	Simulated Divided Light Grilles	0.33	0.13	0.19
	Low	Finelight Grilles	0.33	0.13	0.19
		Full Divided Light Grilles	0.34	0.13	0.19
		Without Grilles Simulated Divided Light Grilles	0.32	0.16	0.35
	Low-E4 SmartSun"	Finelight Grilles	0.32	0.14	0.31
	Sur	Full Divided Light Grilles	0.33	0.14	0.31
	- *	Without Grilles	0.29	0.15	0.34
			0.00	0.14	0.20
	w-E4 artSur atLoc	Simulated Divided Light Grilles	0.29	0.14	0.30
	Low-E4 SmartSun w/HeatLock	Simulated Divided Light Grilles Finelight Grilles Full Divided Light Grilles	0.29 0.29 0.30	0.14 0.14 0.14	0.30

Andersen® Products Total Unit Recycled Content Percentages

For current product certificates, please visit andersenwindows.com.

Andersen° Product	% Pre-Consumer Recycled Content
400 Series Windows	
Casement Window	4%
Awning Window	4%
Casement/Awning Picture Window	8%
Complementary Casement Window	5%
Woodwright [®] Double-Hung Full-Frame Window	13%
Woodwright Picture Full-Frame Window	14%
Woodwright Transom Full-Frame Window	13%
Woodwright Double-Hung Insert Window	9%
Woodwright Picture Insert Window	11%
Woodwright Transom Insert Window	10%
Woodwright Arch Double-Hung Window	9%
Woodwright Springline™ Single-Hung Window	8%
Tilt-Wash Double-Hung Full-Frame Window	6%
Tilt-Wash Picture Full-Frame Window	10%
Tilt-Wash Double-Hung Insert Window	6%
Gliding Window	4%
Specialty Window (all, based on Flexiframe* windows)	8%
Complementary Specialty Window (rectangular)	7%
400 Series Patio Doors	
Frenchwood® Gliding Patio Door	4%
Frenchwood Hinged Inswing Patio Door	4%
Frenchwood Patio Door Sidelight	3%
Frenchwood Patio Door Transom	3%
Complementary Springline Hinged Inswing Patio Door	3%
Complementary Arch Hinged Inswing Patio Door	3%

^{• &}quot;% Pre-Consumer Recycled Content" is calculated to meet ISO 14021 standards based on NFRC sizing. Actual recycled content dependent on product size.

^{• &}quot;Low-E4," "Low-E4" SmartSun," "Low-E4" Sun" and "HeatLock" are Andersen trademarks for "Low-E" glass. 1) U-Factor defines the amount of heat loss through the total unit in BTU/h-ft²-ºF. The lower the value, the less heat is lost through the entire product. Window values represent non-tempered glass. Use of tempered glass can increase U-Factor ratings. See andersenwindows.com/nfrc for specific performance values. Door values represent tempered glass. 2) Solar Heat Gain Coefficient (SHGC) defines the fraction of solar radiation admitted through the glass directly transmitted, as well as absorbed and subsequently released inward. The lower the value, the less heat is transmitted through the product. 3) Visible Transmittance (VT) measures how much light comes through a product (glass and frame). The higher the value, from 0 to 1, the more daylight the product lets in over the product's total unit area. Visible Light Transmittance is measured over the 380 to 760 nanometer portion of the solar spectrum.

<sup>NRC ratings are based on modeling by a third-party agency as validated by an independent test lab in compliance with NFRC program and procedural requirements.
This data is accurate as of May 2021. Due to ongoing product changes, updated test results, or new industry</sup>

^{*}This data is accurate as of May 2021. Due to ongoing product changes, updated test results, or new industry standards or requirements, this data may change over time. Ratings are for sizes specified by NFRC for testing and certification. Ratings may vary depending on use of tempered glass, different grille options, glass with capillary breather tubes for high altitudes, etc.



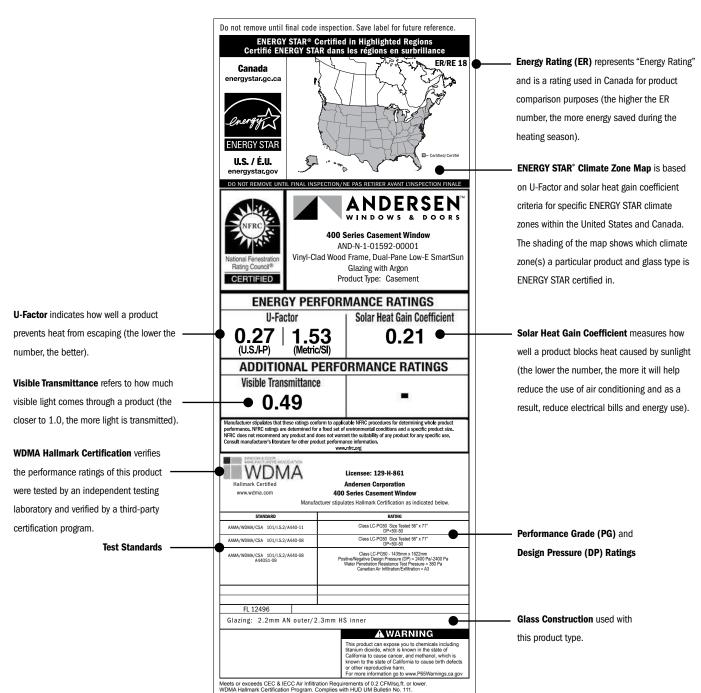
About the NFRC

The National Fenestration Rating Council (NFRC) is a nonpartisan coalition of professionals whose purpose is to provide fair, accurate and credible energy performance ratings for fenestration products. NFRC's membership includes manufacturers, suppliers, designers, specifiers, utility companies, government agencies and other building industry representatives.

Andersen Corporation is a founding member of the NFRC and continues to support its work by providing fair, accurate and credible energy performance ratings to consumers and the building industry. If you have any questions about the NFRC, its program or energy performance ratings, write them at: NFRC, 6305 lvy Lane, Suite 140, Greenbelt, MD 20770. Phone: 301-589-1776 Website: www.nfrc.org

About the Label

Look for this certification label on every window and patio door you buy. The NFRC section was designed by the National Fenestration Rating Council to provide accurate information that helps you promote the energy efficiency of the homes you build. These ratings allow you — and your customers — to measure and compare the energy performance of similar products. If the product does not have this label, the NFRC has not verified its claims.



[•] NFRC ratings are based on modeling by a third-party agency as validated by an independent test lab in compliance with NFRC program and procedural requirements.

 [&]quot;ENERGY STAR" is a registered trademark of the U.S. Environmental Protection Agency.

INSTALLATION ACCESSORIES

Optional accessories available for the installation of Andersen® windows and patio doors. Keep instruction guidelines and safety information in mind when considering the installation and use of any Andersen product. For questions, contact your local Andersen supplier.

COIL STOCK



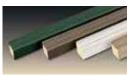
Andersen aluminum coil stock can be ordered to match any of our 11 exterior trim colors. Made from .018" thick aluminum, coil stock is available in 24" (610) x 50' (15240) rolls. Colormatched 1 1 /4" (32)-long stainless steel trim nails are also available and can be ordered in 1 1 /4 by boxes.

FIBREX® TRIM BOARD



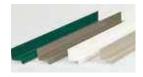
Available in the same 11 colors as our exterior trim, this solid cellular Fibrex trim board can be cut or ripped to size, and be fastened using nails or screws. 3 ½" (89) x ¾" (19) thick in 10' (3048) lengths.

AUXILIARY CASING



Made of cellular Fibrex material. Available in white, canvas, Sandtone, Terratone, forest green, dark bronze and black. 1 ³/16" (30) x 1 ³/16" (30) in 150" (3810) lengths.

DRIP CAP



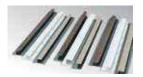
Included on 400 Series windows with vertical (ribbon) joins. Heavy 24-gauge corrosion-resistant aluminum construction. Available in 6' (1829), 10' (3048) and 12'–7 ½" (3848) lengths, and in any of our 11 exterior trim colors.

EXTENSION JAMBS



Available for most Andersen products. See product sections for details.

VINYL CHANNELS



Rigid vinyl "J" and "h" channels are available in white, Sandtone and Terratone. "J" and "h" channels are 1/2" (13) deep and come in 150" (3810) lengths. "J" channels are 3/4" (19) wide and "h" channels are 1" (25) wide. "H" channels are 3/4" (19) deep and come in 84" (2134) and 150" (3810) lengths. White "H" channels are 3/4" (19) wide. Sandtone and Terratone "H" channels are 1" (25) wide.

COLOR-MATCHED SEALANT

Color-matched sealant is available in Andersen exterior colors. This high-quality sealant can be used during the installation of all Andersen products.

INSTALLATION INFORMATION

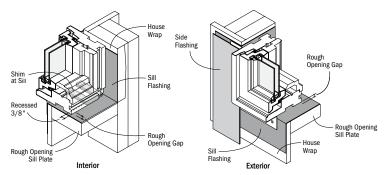
ROUGH OPENINGS

The purpose of a rough opening is to allow for proper spacing between the window or patio door unit and the building structure. The space is required for locating, leveling and squaring the unit during installation and to provide an area for insulation. A rough opening that is incorrectly sized may affect unit operation and may not allow for adequate fastening of the unit to the building structure. Andersen rough opening dimensions are provided as a guideline to help determine the minimum amount of space needed between the window or patio door and the building structure. See appropriate product sections for rough opening guidelines for each product.

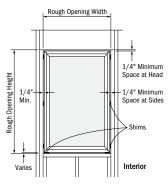
Keep in mind that rough opening dimensions may need to be altered from published guidelines, depending on installation methods, joining methods, replacement methods, etc. For example, flashing systems can reduce the amount of available rough opening space and should be factored in when calculating rough opening dimensions. The use of support or joining materials will encroach on the rough opening and may require additional rough opening space between the unit and the building structure, depending on the thickness of the flashing system and joining materials used. To facilitate drainage, the rough opening sill plate should never slope toward the interior. For challenging environments and other information, refer to EEBA's (Energy and Environmental Building Association) Water Management Guide (www.eeba.org).

IMPORTANCE OF PROPER INSTALLATION

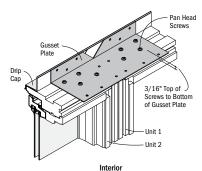
Proper installation and maintenance of Andersen products is essential to attain optimum performance and operation. Installation instructions that provide guidelines for proper installation are typically provided with Andersen products. They are also available by visiting andersenwindows.com. Remember that every installation is different, and Andersen strongly recommends consultation with the local supplier or an experienced contractor, architect or structural engineer prior to the installation of any Andersen product. The method of attachment for Andersen products, fastener selection and code compliance is the responsibility of the architect, building owner, contractor, installer and/or consumer. For more complete installation details, visit andersenwindows.com or see your Andersen supplier.



Example of window sill flashing in a membrane drainage system.



Example of window unit installed using Andersen published minimum rough opening dimensions.



Example of two units joined together with the use of gusset plates and pan head screws that will require additional rough opening space.

GENERAL NOTES

When ordering, make certain you specify, then verify, the exact product, unit dimensions, configuration requirements, color and options you desire on each window or patio door. Before installing the product, we suggest you verify that it includes the features and options you ordered. Visit andersenwindows.com for product installation and joining guides. Printing limitations prohibit exact color duplication of products. View actual samples for building specifications. Andersen Corporation reserves the right to change details, specifications or sizes without notice. The customer assumes all risk of alterations made to Andersen products.

Dimensions in parentheses are in millimeters

CODES

Appropriate selection of Andersen products that conform to all applicable laws, ordinances, building codes and safety requirements is the sole responsibility of the architect, designer, building owner and/or contractor. Check with your local building code officials for specific information. Unit wind load, performance grade and energy performance information is provided on pages 181-209. For up-to-date product performance information, visit andersenwindows.com. The performance of any building system depends on the design and construction of the building system in its entirety, which should meet building code requirements, as well as address product and material limitations, and local environment and climate.

DRIP CAPS

Drip caps are a specific type of flashing or trim used at the head of a window or door to direct water from the drainage plane out beyond the face of the unit.

FLASHING

Flashing is an important element in a building's water management system. It is used to shed and direct water to the building exterior or to the drainage plane. Flashing materials are typically applied starting from the bottom and working upward, with each successive layer overlapping the previous one in shingle fashion. Water infiltration problems in any type of building can be reduced by properly flashing and/or sealing around all building openings, including windows and doors.

USE OF SHIMS

Shims are used along the side jambs of windows and doors to center the unit in the rough opening and to position it plumb, level and square. In addition, shims are always required for windows under the sill at the side jambs to lift it off the rough opening sill plate. Shims also enable a straight frame for proper weatherstrip contact and unit operation. If not placed properly, unit performance and operation can be affected. Use waterproof shims capable of supporting the weight of the product. When using tapered shims, use them in pairs with the tapers opposing each other to avoid tilling the unit or twisting (rotating) of the jambs.

SEALANTS

Sealants are elastic materials used to block the passage of water and/or air while allowing movement between the two sides of the joint. A sealant should bond tightly, and be able to expand and contract to accommodate joint movement without cracking or tearing away from the substrate. Surfaces must be clean, dry and sound for adequate sealant adhesion. Choose a sealant that is compatible with, and that will adhere adequately to, all building materials used in the window and patio door area. Proper sealant joint design is based upon the expected movement of adjacent materials and the movement capability of the sealant. A general rule of thumb is that the depth of the sealant joint should be equal to half the width (D = W/2), but generally not less than 1/4" (6) or more than 1/2" (13). Foam-plastic backer rod can be used to limit the depth of the sealant joint, to provide a backstop for tooling the sealant without damage to the bond. It also acts as a bond breaker to help minimize stress in the sealant. Sealants should be maintained seasonally, and repaired and/or replaced as needed.

GENERAL INSTALLATION GUIDELINES

- 1. Read and follow the installation guide in its entirety.
- Decide whether you are integrating to a surface barrier or a membrane drainage system before installing the product. The appropriate method for your installation may vary based on building design, application and industry practices.
- Make certain the drainage plane is continuous (proper overlaps to shed water, taped seams, etc.).
- 4. Andersen products should be installed only in the vertical position.
- 5. Check the rough opening to make sure it is sized properly, is square and is level.
- 6. Install the window or door plumb.
- 7. Install the window or door level.
- 8. Install the window or door square. Diagonal measurements should be within ½" (3).
- Follow installation instructions to properly locate shims and to make sure that units are plumb, level and square. Shims are always required under the window jambs at the sill and along the jambs on the sides for windows and doors.
- Check for squareness of unit before final anchoring of the product into the wall.
- 11. Anchor unit as directed with appropriate fasteners.
- 12. Integrate the window and door into the drainage plane of the wall using quality flashing and sealing materials. All flashing materials should be properly overlapped to shed water.
- Allow ¼" (6) minimum space for a sealant joint around perimeter of unit between exterior finish materials and unit.
- 14. Insulate and seal the interior cavity between the window or door frame and the rough opening.
- 15. Check operation before application of interior trim.
- Stain and/or seal all unfinished wood surfaces promptly to minimize moisture absorption.

EXTERIOR PAINTING/SEALING OF ANDERSEN® PRODUCTS

The exterior of some Andersen products may be painted or stained. However, improper painting and staining may cause damage to vinyl, aluminum and other exterior materials. Please refer to the individual product sections for details on painting Andersen product exteriors.

CAUTIONS

- Do not apply any type of film to insulating glass.
 Thermal stress and glass damage can result.
 Andersen Corporation is not responsible for product performance when films are applied to Andersen products.
- 2. The use of removable insulating materials such as insulated window coverings, shutters and other shading devices may also cause thermal stress conditions and/or deformation of protective vinyl. In addition, excessive condensation may result, which can have a deteriorating effect on the window or door unit(s) involved. Andersen Corporation is not responsible for product performance when these kinds of materials or devices are applied to or used in conjunction with Andersen products.

- In wall construction utilizing brick facades, leave adequate clearance between sill, jambs and brick for sealing and dimensional change of framework.
- 4. Acid solutions commonly used to wash brick and other masonry materials will damage glass, fasteners, hardware and metal flashing. Protect unit and follow cleaning product instructions carefully. Damage caused by acid solution is not covered under the Andersen limited warranty.
- Andersen windows may be combined in almost unlimited ribbons or stacks if each unit is positively secured to structural elements on opposing sides and if the proper joining system is used. See page 181 for more information.

SAFETY GLASS

Unless specifically ordered, Andersen windows are not made with safety glass and, if broken, the glass could fragment, causing injury. Andersen windows may be ordered with tempered glass which may reduce the likelihood of injury when broken. All Andersen patio doors are made with tempered glass. Differences in appearance between tempered and non-tempered glass can be expected. Slight visual distortions may be noticeable and occur normally as a result of the tempering process. Building codes require safety glass in locations adjacent to or near doors and other locations.

WINDOW AND PATIO DOOR SAFETY

Windows may provide a secondary avenue of escape or rescue in an emergency, such as a fire. Every family should develop an escape plan and make sure family members know how to escape from the home in an emergency. In your plan, include two ways to escape from every room in case one way is blocked by fire or smoke, and make sure you have a designated meeting place outside. A window or a patio door is an alternate means of escape or rescue. Practice your plan until each member of the family understands it and is able to escape without assistance. Remember, you may not be able to reach children during a fire emergency. Teach children – even very young children – that they must escape from a fire in the home and never hide from the fire or from emergency personnel.

LOOKOUT FOR KIDS® PROGRAM

The Consumer Product Safety Commission has said: "Keep children away from open windows to prevent falls. Don't depend on insect screens to keep the child from falling out of the window. They are designed to keep insects out, not children in. Avoid placing furniture near windows to keep children from climbing to a window seat or sill." In an effort to educate consumers about the potential for child falls from windows, Andersen Corporation created the LookOut For Kids Program. It combines a window and door safety brochure and specific product instructions to help make window and door safety an important priority for consumers. For more information on child safety, write:

Andersen Corporation
LookOut For Kids Program
100 Fourth Avenue North
Bayport, MN 55003
Call 800-313-8889 or email
lofk@andersencorp.com



Andersen® windows and patio doors can make significant contributions to the success of sustainable design strategies

As a charter member of the U.S. Green Building Council, we're active supporters of certified green buildings. Our products can help customers in pursuing green building programs, such as Leadership in Energy and Environmental Design (LEED®), the National Green Building Standard, Green Globes, GreenStar and more. Below is an overview of how our products may assist project teams with pursuing LEED v4 or the NAHB National Green Building Standard rating systems. More detailed credit summaries, as well as information about how Andersen products can support earlier versions of LEED certification (e.g., LEED v3 or LEED 2008), are available at andersenwindows.com.

LEED V4 FOR BUILDING DESIGN AND CONSTRUCTION: NEW CONSTRUCTION AND MAJOR RENOVATIONS

Integrative Process Credit:

Energy & Atmosphere

- Minimum energy performance prerequisite
- Optimize energy performance credit
- Renewable energy production credit
- Green power and carbon offsets credit

Materials & Resources

- Construction and demolition waste management planning credit
- Building product disclosure and optimization sourcing of raw materials credit
- Construction and demolition waste management credit

Indoor Environmental Quality

- Minimum indoor air quality performance prerequisite
- Minimum acoustic performance prerequisite – schools
- Enhanced indoor air quality strategies credit
- Low-emitting materials credit
- Thermal comfort credit
- Daylight credit
- Quality views credit
- Acoustic performance credit (option 2)

LEED V4 FOR BUILDING DESIGN AND CONSTRUCTION: HOMES AND MULTI-FAMILY MIDRISES

Energy & Atmosphere

- Minimum energy performance prerequisite
- Education of the homeowner, tenant or building prerequisite
- Annual energy use credit
- Building orientation for passive solar credit
- Air infiltration credit
- Windows credit

Materials & Resources

- Durability management prerequisite
- Environmentally preferable products credit
- Construction waste management credit

Indoor Environmental Quality

- Ventilation prerequisite
- Low-emitting products credit

ANSI ICC/ASHRAE 700-2015 NATIONAL GREEN BUILDING STANDARD

NGBS section numbers are referenced in parentheses.

Resource Efficiency

- Prefinished materials (601.7)
- Flashing (602.12)
- Exterior doors, including storm doors (602.1.10)
- Recycled construction materials (605.3)
- Bio-based products (606.1)
- Wood-based products (606.2)
- Manufacturer's environmental management system concepts (611.1)

Energy Efficiency

- Mandatory requirements (701.1)
- Building thermal envelope air sealing (701.4.3.1)
- Multi-family air leakage alternative (701.4.3.3)
- Fenestration air leakage (701.4.3.4)
- ICC IECC analysis (702.2.1)
- Energy performance analysis (702.2.2)
- UA improvement (703.2.1)
- Fenestration (703.2.5)
- Sun-tempered design (703.7.1)
- Passive cooling design (703.7.3)
- Passive solar heating design (703.7.4)

Indoor Environmental Quality

- Wood materials (901.4)
- Interior architectural coatings (901.9)
- Interior adhesives & sealants (901.9)
- Operable windows & sliding glass doors (902.1.5)

Energy Efficient

- Homeowner's manual (1001.1)
- Building construction manual (1002.1)



THE ENVIRONMENT HAS A BUSINESS PARTNER

Respect for the environment is nothing new at Andersen. For more than a century, it has been part of who we are. Our commitment to recycle and reclaim materials began simply because it was good business. Now it's part of our broader commitment to sustainability and responsible stewardship of all of our resources. Andersen is committed to providing you with long-lasting,* energy-efficient windows and patio doors. Visit andersenwindows.com/sustainability for more information.



Andersen® products are certified under the National Fenestration Rating Council (NFRC) voluntary third-party certification program designed to ensure accurate energy performance ratings and labeling.



Andersen was one of the first U.S. window manufacturers to receive the Forest Stewardship Council® (FSC®) Chain-of-Custody certification (FSC CO16636). This certification is awarded to companies that meet FSC standards for traceability in their wood supply chain. Ask your sales representative about the availability of FSC certified products.



The Window & Door Manufacturers
Association (WDMA) Hallmark
Certification program includes product
testing and quality-control process audits
to verify that Andersen windows and
doors are produced in conformance
with the industry standards for air, water
resistance and structural performance.



Andersen was the first window manufacturer to certify our products for indoor air quality, beginning in 2008. Our Indoor Advantage™ Gold certification by SCS Global Services (SCS) meets the rigorous high standards for healthier indoor air quality set by California Specification 01350.



Under U.S. Green Building Council (USGBC) guidelines, Andersen is able to claim a percentage of material in its Fibrex® product as pre-consumer recycled content. SCS Global Services (SCS) has certified this amount for Andersen.



Andersen Corporation is proud to be an ENERGY STAR® partner. For over 115 years, Andersen has built a reputation for environmental stewardship and energy-efficient products. In fact, Andersen has been part of the ENERGY STAR program since it started and was the first window manufacturer to be named an ENERGY STAR National Window Partner of the Year in 1999.

^{*}Visit andersenwindows.com/warranty for details.

All logos and marks are trademarks of their respective owners.

19	97
400 Series Casement	400 Series Bay & Bow
& Awning Windows	Windows
37 400 Series Replacement Casement & Awning Windows	111 400 Series Gliding Windows
41 400 Series Complementary Casement Windows	117 400 Series Specialty Windows
47	137
400 Series Woodwright®	400 Series
Double-Hung Full-Frame	Complementary
Windows	Specialty Windows
67 400 Series Woodwright Double-Hung Insert Windows	141 400 Series Frenchwood [®] Gliding Patio Doors
75	149
400 Series Tilt-Wash	400 Series Frenchwood
Double-Hung Full-Frame	Hinged Inswing
Windows	Patio Doors
87	159
400 Series Narroline [®]	400 Series Frenchwood
Double-Hung Window	Patio Door Sidelights
Conversion Kit	& Transoms
89	163
400 Series Tilt-Wash	400 Series
Double-Hung Insert	Complementary
Windows	Curved Top Patio Doors







PDF NAVIGATION TIPS

Welcome to an overview of the enhanced navigation tools available in this PDF. Here are some simple tips on PDF navigation. Before you begin be sure you are using the latest version of **Adobe Acrobat Reader DC**, available at - https://get.adobe.com/reader/

To watch a 3-minute tutorial on navigating catalog PDFs, go to: https://youtu.be/sWWnYn60N3Y

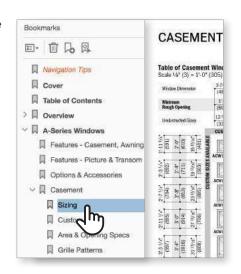




Acrobat will display the bookmarks panel when you open the PDF.

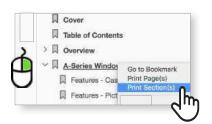
Bookmarks are the easiest way to find specific product information.

Select a topic and that page will be displayed.





If you need to print a specific section, **right click on that section** within in the bookmarks panel and choose "**Print Section**."







You can also use the **embedded links** to navigate between sections. All links are underlined in blue.





Website links automatically open in your web browser.



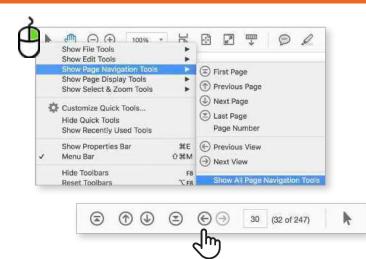
Add additional navigation tools by adjusting the default settings in Acrobat.





To add a "Jump Back" Button to your tool bar. Right click on tool bar, select Show Page Navigation Tools and choose Show All Page Navigation Tools.

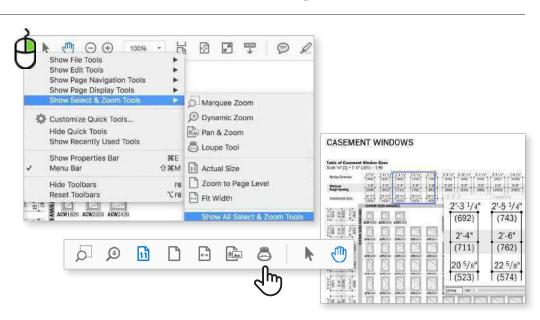
Right and left facing arrows are added to the tool bar allowing you to go back or forward to the last page you viewed.





Another helpful tool is the **Loupe Tool**. It allows you to zoom in on the page without having to increase the page size.

To add a Loupe Tool to your tool bar, right click on tool bar, select Show Select & Zoom Tools and then choose Show All Select & Zoom Tools.





You can also use the **commenting tools.** Add a post-it-note with your comments or highlight important information.



Be sure to save the file.

To watch a 3-minute tutorial on navigating catalog PDFs, go to: https://youtu.be/sWWnYn60N3Y

100%

We are always looking for ways to improve.

Please send feedback to webmarketing@andersencorp.com.