

Sun Windows & Doors Product Guide



Introduction

Windows and doors connect you and your home to the outdoors. They allow sunlight to fill your rooms while they give you views of the scenes around you. Open a window and feel a fresh breeze. Open a door and step outside.

Sun clad wood windows and doors are designed to highlight your home by giving you the views and access you want while protecting it from the elements. Our products guard against the seasonal assault of heat and cold, wind and rain, snow and ice, sealing away the harsh elements while allowing in light from the sun and a gentle breeze when you choose to open your home to them.

This guide will give you insight into the products and options that we build and the benefits that they can provide you and your home. Explore these pages and discover some of the advantages of Sun windows and doors. Whether you are getting ready to build a new home or remodel an existing one, Sun would be honored to be part of your project.

Go ahead, enjoy the view!



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Sun USA & Patriot Product Lines

Sun USA Windows and Doors feature wood interiors with extruded aluminum clad exteriors. The wood interior provides a beautiful surface that can be stained, painted, or even clear-coated to achieve the visual accent desired for your home's décor. The heavy-gauge aluminum extrusions used to clad the exterior serve as a protective barrier against the elements of nature while lending additional strength and rigidity to the product. Sun's Powder Coated Finish provides outstanding weatherability, film toughness, low environmental impact, and a wide selection of colors to complete the visual appeal.

All USA Products Feature:

- Wood Interior
- Extruded Aluminum Exteriors
- Integral Nail Fin
- Built In Water Management System
- Powder Coat Exterior Finish
- Low-E Insulated Glass with Argon
- Duralite™ Glass Spacer System



Sun Patriot Windows feature vinyl interiors with extruded aluminum-clad exteriors. The same exterior used on our USA Windows and Doors is paired with an all-vinyl window to offer thermal efficiency and low maintenance.

All Patriot Products Feature:

- Vinyl Interior
- Extruded Aluminum Exteriors
- Integral Nail Fin
- Built In Water Management System
- Powder Coat Exterior Finish
- Low-E Insulated Glass with Argon
- Duralite™ Glass Spacer System



About Sun

Sun Windows, Incorporated is a manufacturer of clad-wood windows and doors, as well as vinyl windows. We build our products in the U.S.A. at our Owensboro, Kentucky factory.

Sun's heritage begins in 1930, when V.E. Anderson, Senior, developed a self-storing wood storm window and began selling it door-to-door. Over the years, the company has evolved through changes in location, name, and product offerings to become a leading regional manufacturer focused on innovation and quality.

Sun has chosen to limit our area-of-service to a geographic region within 500 miles of our factory, increasing Sun's flexibility in providing the best possible products, in a timely fashion, at a competitive price. Our regional focus also means that many of our suppliers are close to our location, which can have a positive economic and environmental impact, helping to achieve additional credit for LEED-certified projects.

The Sun brand may not be as well known as many of our big-name competitors. That is because we don't spend a lot of money on name-recognition advertising campaigns. Alternately, we have chosen to invest those dollars in designing and building our products.

When you choose to buy a Sun product, you are primarily paying for the expense of product development and production, not advertising. Yes, we spend some money advertising, like this product guide, but the bulk of the product price is in the product itself.

Our competitors, whose names you know well, have to pay for that name recognition. That's not necessarily a bad thing, but it means they charge substantially more for a comparable product or reduce the product cost, which often means they reduce the quality of the product. The advantage for us is that we can offer a superior product at an excellent price.





Caseament



With their full-view sash and crank-out operation, casement windows offer a broad view when closed and maximum ventilation when fully opened. A single lever handle raises to release the multi-point sash latches while a folding operator handle accesses the crank-out mechanism to open and close the sash.

Our hinge system sets pivot points at the top and bottom of the sash to achieve left or right hinging, depending on your choice. Hinging is specified as viewed from the exterior. An optional egress hardware hinge system is available for specific applications.

Configurations of Left hinged, Right hinged, or Fixed are available for any single unit. Two, three, and four-panel units are available.

The standard jamb depth is 4-9/16". A jamb depth of 6-9/16" is achieved with 2" extensions.

Several grille systems are available to add lite division to the glass area. See the Grille Options section later in this guide for more information.

An interior mounted screen is available to help keep out insects when the sash is open.

Other options include exterior colors, exterior trim, interior finishes, and additional jamb options. More information is detailed later in this guide.

Hardware Styles: Standard or Contemporary

Hardware Finishes

- Standard Finishes: White, Tan, Dark Bronze, Black
 - Upgrade Finishes: Brushed Chrome, Brushed Nickel, Antique Brass, Polished Brass
- Upgrade styles and finishes available at additional cost.

Sizes

- Widths: 16", 20", 24", 28", 30", 32", 36"
- Heights: 32", 36", 40", 48", 52", 59", 64", 72", 78"

See website for additional details and information.





Arch Top Casement



Arch Top Casements are similar to our standard Casements with the addition of an arched top.

A single lever handle raises to release the multi-point sash latches while a folding operator handle accesses the crank-out mechanism to open and close the sash.

Arch Top Casements are jamb hinged with Left or Right hinged options. Hinging is specified as viewed from the exterior.

Configurations of Left hinged, Right hinged, or Fixed are available for any single unit. Double units are Left + Right Hinged or Double Fixed Sash.

The standard jamb depth is 4-9/16". A jamb depth of 6-9/16" is achieved with 2" extensions.

Several grille systems are available to add lite division to the glass area. See the Grille Options section later in this guide for more information.

An interior mounted screen is available to help keep out insects when the sash is open.

Other options include exterior colors, exterior trim, interior finishes, and additional jamb options. More information is detailed later in this guide.

Standard



Contemporary



Hardware Finishes

- Standard Finishes: White, Tan, Dark Bronze, Black
 - Upgrade Finishes: Brushed Chrome, Brushed Nickel, Antique Brass, Polished Brass
- Upgrade finishes available at additional cost.

Sizes

- Widths: 24", 28", 30", 32"
- Widths - Doubles: 40", 48", 56", 64"
- Shoulder Heights: 24", 40", 48", 52", 59", 64"

See website for additional details and information.





Sun USA
Awning



Awning windows are similar to Casements with the exception of their sashes opening outward from the bottom of the window with pivot points near the top.

A dual lever latching system releases the left and right side sash latches. A folding operator handle accesses the crank-out mechanism to open and close the sash.

Common configurations include an Awning with a Fixed Lite above it or up to four Awnings mulled on top of each other. Other combinations are possible.

The standard jamb depth is 4-9/16". A jamb depth of 6-9/16" is achieved with 2" extensions.

Several grille systems are available to add lite division to the glass area. See the Grille Options section later in this guide for more information.

An interior mounted screen is available to help keep out insects when the sash is open.

Other options include exterior colors, exterior trim, interior finishes, and additional jamb options. More information is detailed later in this guide.

Standard



Contemporary



Hardware Finishes

- Standard Finishes: White, Tan, Dark Bronze, Black
- Upgrade Finishes: Brushed Chrome, Brushed Nickel, Antique Brass, Polished Brass

Upgrade finishes available at additional cost.

Sizes

- Widths: 32", 36", 40", 48", 52", 59", 64", 72"
- Heights: 16", 20", 24", 28", 30", 32", 36"

See website for additional details and information.





Clad Architectural Double Hung



The Clad Architectural Double Hung is our premier double hung window. It is designed with historically accurate details, making it ideal for restoration and new construction projects alike.

A Double Hung is the traditional sash-over-sash, raise and lower window. The two sashes overlap to form a check rail where they lock together. One or two cam-action locks, depending on the size of the window, secure the sashes. A pair of finger-release tilt latches provide for tilting in the sash for cleaning or other access. Locking-when-tilted balance shoes help hold the sash in place when tilted.

Traditional Block and Tackle balances assist in raising, lowering, and holding the sashes in place when operating. A Hybrid balance system is available on oversized units. Vinyl Jamb Tracks that house the balance system are concealed within each side jamb.

Configurations include standard 50/50 sash split as well 40/60 Cottage and 60/40 Oriel proportions. Double Hung windows can be mullered together for multi-wide units or with compatible sized Fixed Lites.

The standard jamb depth is 4-9/16". A jamb depth of 6-9/16" is achieved with 2" extensions.

Several grille systems are available to add lite division to the glass area. See the Grille Options section later in this guide for more information.

Exterior mounted screens are available to help keep out insects when the sash is open.

Other options include exterior colors, exterior trim, interior finishes, and additional jamb options. More information is detailed later in this guide.

Hardware Finishes

- Standard Finishes: White, Tan, Brown, Dark Bronze, Black

- Upgrade Finishes: Brushed Chrome, Brushed Nickel, Antique Brass, Polished Brass

Upgrade finishes available at additional cost.

Sizes

- Widths: 20", 24", 28", 32", 36", 40", 44", 48"

- Heights: 35-1/2", 39-1/2", 47-1/2", 51-1/2", 55-1/2", 61-1/2", 63-1/2", 71-1/2", 75-1/2", 77-1/2"

- Monumental sizing is available.



White Tan Brown Dark Bronze Black



Brushed Nickel, Brushed Chrome, Antique Brass, Polished Brass

See website for additional details and information.



Comfort-Tilt Double Hung



The Comfort-Tilt is our performance double hung window. It features uniform sash rails and stiles and a floating jamb liner with spring balances.

This window features a traditional sash over sash design. The sashes raise and lower to ventilate and can be tilted inward for exterior surface access. Depending on the size of the window, one or two cam-action locks secure both sashes in the closed position. A pair of finger-release tilt latches activate the tilting function. Locking-when-tilted balance shoes help hold the sash in place when tilted.

Spring balances with locking-when-tilted balance shoes are housed within the floating vinyl jamb liners. These jamb liners are located within each side jamb.

Configurations include standard 50/50 sash split as well as 40/60 Cottage and 60/40 Oriel proportions. Double Hung windows can be mullered together for multi-wide units or with compatible sized Fixed Lites.

The standard jamb depth is 4-9/16". A jamb depth of 6-9/16" is achieved with 2" extensions.

Several grille systems are available to add lite division to the glass area. See the Grille Options section later in this guide for more information.

Exterior mounted screens are available to help keep out insects when the sash is open.

Other options include exterior colors, exterior trim, interior finishes, and additional jamb options. More information is detailed later in this guide.

Hardware Finishes

- Standard Finishes: White, Tan, Brown, Dark Bronze, Black
- Upgrade Finishes: Brushed Chrome, Brushed Nickel, Antique Brass, Polished Brass

Upgrade finishes available at additional cost.

Sizes

- Widths: 20", 24", 28", 32", 36", 40"
- Heights: 34-3/16", 38-3/16", 46-3/16", 50-3/16", 54-3/16", 62-3/16", 66-3/16", 70-3/16", 74-3/16"

See website for additional details and information.



White Tan Brown Dark Bronze Black



Brushed Nickel, Brushed Chrome, Antique Brass, Polished Brass





Fixed Lites: Sash Set & Direct Set



Sun makes two Fixed Lite windows to go with our products. The two styles have different profiles to match other products for interior trim applications and visual sight lines.

Our Sash Set Fixed Lite has the same frame and sash as our Casement without opening. The daylight opening and sight lines match the Casement.

Our Direct Set Fixed Lite uses only a frame in which the insulated glass set. This frame allows it to have a more narrow profile to maximize the view opening of the window.

Fixed Lites are available in a variety of shapes from Rectangles, to Radius, to Geometric shapes.

The standard jamb depth is 4-9/16". A jamb depth of 6-9/16" is achieved with 2" extensions.

Several grille systems are available to add lite division to select shapes. See the Grille Options section later in this guide for more information.

Other options include exterior colors, exterior trim, interior finishes, and additional jamb options. More information is detailed later in this guide.



Sizes

- Widths: 16", 20", 24", 28", 30", 32", 36", 40", 48", 56", 64", 72"
- Heights: 16", 20", 24", 28", 32", 36", 40", 48", 52", 59", 64", 72", 78"
- DH Heights: 34-3/16", 38-3/16", 46-3/16", 50-3/16", 54-3/16", 62-3/16", 66-3/16", 70-3/16", 74-3/16"

See website for additional details and information.





Specialty Fixed Lites



Contemporary Direct Set

Sun's Contemporary Direct Set Fixed Lite is a specially configured window that uses our regular Direct Set paired with a minimal interior jamb depth and our Contemporary glass stop. The result is a Fixed Lite that maximizes the open view of the window and minimizes the presence of the frame within the opening.

The standard jamb depth is 2-1/16" for drywall return wall integration.

Several grille systems are available to add lite division to select shapes. See the Grille Options section later in this guide for more information.

Other options include exterior colors, exterior trim, and interior finishes. More information is detailed later in this guide.



Thoroughbred Direct Set

Thoroughbred is Sun's Direct Set Fixed Lite window with a rustic wood interior. It features "Kentucky Racehorse Oak" by Old World Timber, which is wood that is milled from reclaimed oak horse fencing sourced from farms throughout central Kentucky. This wood provides a rustic appearance on the interior of our modern, energy-efficient window.



Sizes

- Widths: 16", 20", 24", 28", 30", 32", 36", 40", 48", 56", 64", 72"
- Heights: 16", 20", 24", 28", 32", 36", 40", 48", 52", 59", 64", 72", 78"
- DH Heights: 34-3/16", 38-3/16", 46-3/16", 50-3/16", 54-3/16", 62-3/16", 66-3/16", 70-3/16", 74-3/16"

See website for additional details and information.



In-Swing & Out-Swing Doors



Venice, Torino, Roma



Dark Bronze, Black, Pewter, Satin Nickel, Satin Chrome, Antique Brass

Full-View In-Swing and Out-Swing Doors are much more than patio doors. These premium doors, with their many options, can be used anywhere an exterior door is needed.

The standard door features a full view glass door panel with tempered insulated glass. Panel rails and stiles are 4-11/16". Optional solid insert panels are available in many configurations to achieve almost any balance between glass view and non-viewing areas.

Available in In-Swing or Out-Swing configurations, these doors can accommodate your opening needs.

Multi-point latching systems are standard on all doors. Adjustable hinges help fine-tune the door operation. Our latching hardware automatically engages with no extra activation required before locking the door.

Door panels incorporate no-warp materials and construction with LVL lock side stiles. The frames use 5/4 lumber joined to our rigid extruded aluminum cladding.

The standard jamb depth is 4-9/16". Jamb options are available for 6-9/16" jamb depth.

Configurations include single units hinge left, hinge right or fixed panel, as viewed from the exterior. Available in 1, 2, and, 3-panel units, in various hinged/fixed combinations. We also offer a True-French 2-panel configuration.

Handle Set Styles are Venice (standard), Torino and Roma.

Hardware Finishes

- Standard Finishes: White, Dark Bronze, Black
- Upgrade Finishes: Satin Chrome, Satin Nickel, Pewter, Antique Brass

Upgrade styles and finishes available at additional cost

Hinge Finishes are Stainless Steel, Dark Bronze, Black, Antique Brass .

Sizes

- Widths:
 - 1-panel - 2-6, 2-8, 3-0, 3-3
 - 2-panel - 4-0, 5-0, 5-4, 6-0, 6-6
 - 3-panel - 7-6, 8-0, 9-0
- Heights: 6-8 retro, 6-11, 8-0

See website for additional details and information.





Arch Top Door



Arch Top Doors are similar to our regular In-Swing or Out-Swing Doors but they feature an Arched Top. These are available as single panel units or as True-French two-panel units.

The standard door features a full view glass door panel with tempered insulated glass. Panel rails and stiles are 4-11/16". Optional solid insert panels are available in many configurations to achieve almost any balance between glass view and non-viewing areas.

Multi-point latching systems are standard on all doors. Adjustable hinges help fine-tune the door operation. Our latching hardware automatically engages with no extra activation required before locking the door.

Door panels incorporate no-warp materials and construction with LVL lock side stiles. The frames use 5/4 lumber joined to our rigid extruded aluminum cladding.

The standard jamb depth is 4-9/16". Jamb options are available for 6-9/16" jamb depth.

Configurations include single units hinge left, hinge right or fixed panel, as viewed from the exterior. We also offer a True-French 2-panel configuration.



Venice, Torino, Roma

Handle Set Styles are Venice (standard), Torino and Roma.

Hardware Finishes

- Standard Finishes: White, Dark Bronze, Black
- Upgrade Finishes: Satin Chrome, Satin Nickel, Pewter, Antique Brass

Upgrade styles and finishes available at additional cost



Dark Bronze, Black, Pewter, Satin Nickel, Satin Chrome, Antique Brass

Hinge Finishes are Stainless Steel, Dark Bronze, Black, Antique Brass

Sizes

- Widths:
 - 1-panel - 2-6, 2-8, 3-0, 3-3
 - 2-panel - 4-0, 5-0, 5-4, 6-0, 6-6
- Heights: 6-8 retro, 6-11, 8-0

See website for additional details and information.

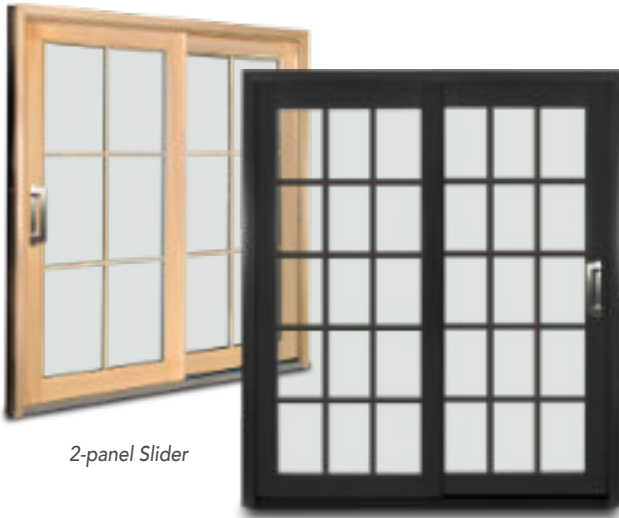




Sliding Door



4-panel Quad Slider



2-panel Slider



Contemporary



Signature



White, Tan, Dark Bronze, Black, Brushed Nickel, Brushed Chrome, Antique Brass, Polished Brass

Sliding Doors offer many of the same features and options as our in-swing and out-swing doors but in a sliding door configuration. Sliding door operation can be selected as Left or Right active panel, as viewed from the exterior. Available as two-panel units, three-panel units (a two-panel unit with a Fixed single unit mullered to one side), or four-panel units with two operating center panels.

Configurations include a two-panel unit with either right or left sliding panel as viewed from the exterior. The three-panel unit consists of a two-panel unit with a single fixed unit mullered to one of the sides. Four-panel units, called Quad Sliders, have two fixed panels, one on each end and two middle panels that slide open.

The standard door features a full view glass door panel with tempered insulated glass. Panel rails and stiles are 4-11/16". Optional solid insert panels are available in many configurations to achieve almost any balance between glass view and non-viewing areas.

Door panels incorporate no-warp materials and construction with LVL lock side stiles. The frames use 5/4 lumber joined to our rigid extruded aluminum cladding. The sill is pultruded fiberglass with a stainless steel guide track.

A dual-latch handle set secures the operating panel when closed while providing an interior and exterior handle to grasp when sliding the panel. The operating panel glides on heavy-duty, stainless steel, ball-bearing loaded, tandem rollers. These rollers are adjustable.

The standard jamb depth is 4-9/16". Jamb options are available for 6-9/16" jamb depth.

Handle Set Styles include our Contemporary and Signature sets.

Hardware Finishes

- Standard Finishes: White, Tan, Dark Bronze, Black
- Upgrade Finishes: Brushed Nickel, Brushed Chrome, Antique Brass, Polished Brass

Upgrade styles and finishes available at additional cost

Sizes

- Widths:
 - 1-panel (fixed): 2-6, 3-0, 4-0
 - 2-panel: 5-0, 6-0, 8-0
 - 3-panel: 7-6, 9-0, 12-0
 - 4-panel: 10-0, 12-0, 16-0
- Heights: 6-8 retro, 6-11, 8-0

See website for additional details and information.





Bi-Fold Door



Bi-fold Doors are a combination of clad-wood door panels and innovative folding door hardware developed by Centor Architectural™. Bi-fold Doors literally open up design possibilities for spectacular views and unhindered access between the inside of the home and the beauty of the outdoors.

The door panels have all the same features and options as our In-Swing & Out-Swing doors. The difference is the Bi-folding track system. The door panels will open and accordion into a condensed stack to the exterior of the room.

Three sill options accommodate application requirements. The standard sits above the floor, similar to other exterior doors, which provides the best weather protection for units directly exposed to the elements. An ADA sill is available for applications requiring that level of accessibility. The third option calls for a floor channel, which provides the smoothest transition between the two sides but requires additional weather protection for the exterior space.

Centor's E3 bi-fold hardware is a hanging track system that requires engineered structural support. Among other specifications, this means that the wall must accommodate a 6-9/16" Jamb depth.

Hardware Finishes include: stainless steel, dark bronze and polished brass.

Additional Options include Magnetic Door Catches for keeping the panels together when opened and stacked.

Panels Sizes:

- Widths: 2-6, 2-8, 3-0, 3-3
- Heights: 6-8 retro, 6-11, 8-0

For typical configurations and additional details and information, see our website.





Bi-Fold Window



Bi-fold Windows are similar to Bi-fold Doors except they use a special window sash instead of a door panel. These sashes feature 2-1/4" rails and stiles for window sash appearance.

Bi-fold Windows are often used to separate an interior/exterior bar or counter space. Many other applications may be explored.

Three sill options accommodate application requirements. The standard sits above the floor, similar to other exterior doors, which provides the best weather protection for units directly exposed to the elements. An ADA sill is available for applications requiring that level of accessibility. The third option calls for a floor channel, which provides the smoothest transition between the two sides but requires additional weather protection for the exterior space.

Centor's E3 bi-fold hardware is a hanging track system that requires engineered structural support. Among other specifications, this means that the wall must accommodate a 6-9/16" Jamb depth.

Hardware Finishes include: stainless steel, dark bronze and polished brass.

Additional Options include Magnetic Sash Catches for keeping the sash panels together when opened and stacked.

Sash Sizes:

- Widths: 1-8, 2-0, 2-4, 2-8, 3-0
- Heights: 2-0, 2-4, 2-8, 3-0, 3-4, 3-8, 4-0, 4-4, 5-0, 6-0

For typical configurations and additional details and information, see our website.





Casement, Fixed Lite, Awning



Casement



Wide Profile

Narrow Profile



The Patriot Series combines the benefits of Sun's extruded aluminum exterior with the thermal performance and maintenance-free convenience of a vinyl window. The plain profile of the sash exterior with its mitered corners and deep glazing stop provides a simple but classic appeal.

The Casement window has a full-view sash and crank-out operation. It offers a broad view when closed and maximum ventilation when fully opened. A single lever handle raises to release the multi-point sash latches while a folding operator handle accesses the crank-out mechanism to open and close the sash.

Our hinge system sets pivot points at the top and bottom of the sash to achieve left or right hinging, depending on your choice. Hinging is specified as viewed from the exterior.

An Awning window is similar to a Casement window, except the sash opens outward from the bottom of the window with pivot points near the top.

The Patriot Series offers two Fixed Lite window models. The Wide profile matches the Casement window, while the Narrow profile maximizes the glass view area.

The standard jamb depth is 2-9/16". Jamb extensions increase the jamb depth to 4-9/16" or 6-9/16".

SDL or GBG grille systems are available to add lite division to the glass area. See the Grille Options section later in this guide for more information.

An interior mounted screen is available for operating units to help keep insects out when the sash is open.

Other options include exterior colors, exterior trim, interior window colors. Interior color choices are white or sand vinyl or black film over white vinyl.

Hardware Finishes

- Standard Finishes: White, Tan, Dark Bronze, Black
- Upgrade Finishes: Brushed Chrome, Brushed Nickel, Antique Brass, Polished Brass

Upgrade finishes available at additional cost.

Sizes

- Widths: 16", 20", 24", 28", 30", 32", 36"
- Heights: 32", 36", 40", 48", 52", 59", 64", 72", 78"

See website for additional details and information.



Exterior Finish Colors

Standard Colors, Upgrade Feature Colors

Standard Colors



Upgrade Feature Colors



Ask your Dealer for a Color Sample Swatch to see exact color.

See website for additional details and information.
Printed colors are not accurate for color selection.



Exterior Trim & Accessories

Brick Mold, Flat Casing, Exterior Mull Covers, SDL Bars

Exterior Trim

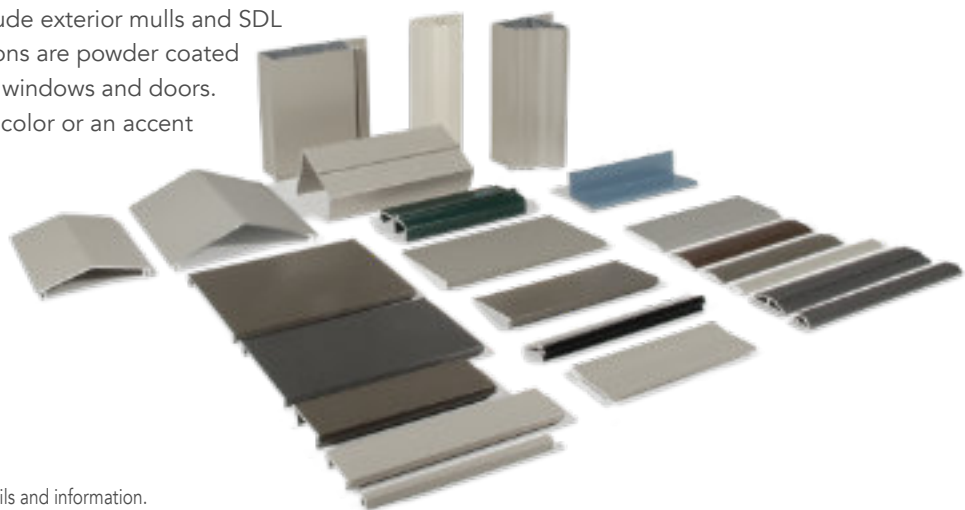
An extruded aluminum exterior trim system is available on Sun Clad products to enhance the visual appeal of the windows and doors and increase the accent they contribute to the home's exterior. All of the extrusions are powder-coated to coordinate with the windows and doors. They can be the same color or an alternate accent color.

- Traditional Brick Mold
- Georgian Brick Mold
- 3-1/2" Flat Casing
- 5/8" Sill Nose
- 1-1/8" Sill Nose



Accessories

Other accessories include exterior mulls and SDL bars. All of the extrusions are powder coated to coordinate with the windows and doors. They can be the same color or an accent color of your choice.



See website for additional details and information.

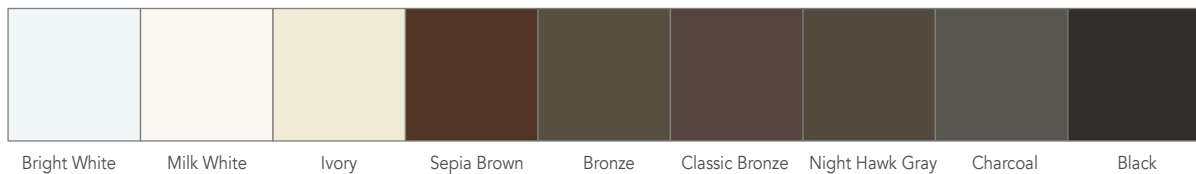
Wood Interior

Ponderosa Pine and Wood Finish Options



Interior Finish Options

You can choose to have your windows and doors delivered without any interior finish so that you can stain or paint them after installation. We offer the option factory painted interiors in one of our Standard Interior Finish Colors: Bright White, Milk White, Ivory, Bronze, Classic Bronze, Charcoal, Night Hawk Gray, Sepia Brown, and Black. We also offer a Primed Finish option.



See website for additional details and information. Note: Printed colors are not accurate for color matching.



Jamb Depth & Options

Jamb Depth, Jamb Extensions, Drywall Return Jamb, Step Jamb, more

Sun USA Jamb = 4-9/16"



Patriot Jamb = 2-9/16"

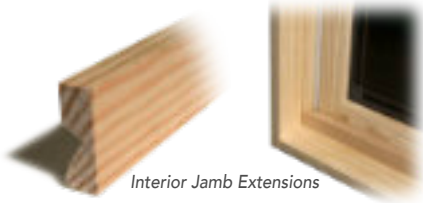


All Sun USA Clad-Wood Products have a Standard Jamb Depth of 4-9/16".

Patriot Clad-Vinyl Products have a Standard Jamb Depth of 2-9/16".

Contemporary Direct Sets have a Jamb Depth of 2-1/16". Jamb Extensions are not available on this product.

Interior Jamb Extensions, in the form of wood extensions, are available for most products to increase the jamb depth to 6-9/16".



Interior Jamb Extensions

No-Jamb

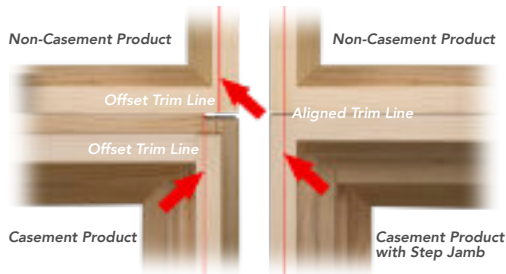
USA Casement & Sash Set Fixed Lites have a No-Jamb Option that creates a jamb depth of 3-1/8".



Drywall Return Jamb

Drywall Return Jamb

USA Casement and Sash Set Windows have a Drywall Return Jamb option that creates a depth of 3-3/4". A Full Perimeter Wood Surround provides a backing surface for drywall return applications. This option is also helpful for custom extensions applied on the job site.



Step Jamb

Step Jamb

USA Casement and Sash Set Windows have an offset interior wood jamb. When mulling to non-casement family products, this creates alignment issues with interior trim. Step Jamb moves the standard Jamb Wood Surround to the outer edge to accommodate the alignment of interior trim work with non-casement products.



In-Swing Jamb

Out-Swing Jamb

Door Jamb Extensions

In-Swing Doors have an optional Exterior Frame Extension for 6-9/16" Jamb Depth. The exterior metal extrusion extends further to accommodate the additional depth, leaving the interior flush with the wall for the proper in-swing function of the door panel.

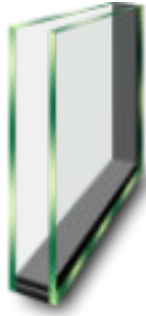
Out-Swing Doors have a 6-9/16" jamb depth option that features interior wood extensions. The wood ends to the interior to keep the door flush with the exterior wall for the proper out-swing function of the door panel.

See website for additional details and information.



Insulated Glass

Low Emissivity Glass and Solar Passive Glass



Dual Glazed Insulated Glass

- Two Pieces of Glass
- 1/2" Hermetically Sealed Airspace
- Argon Filled
- Duralite™ Glass Spacer



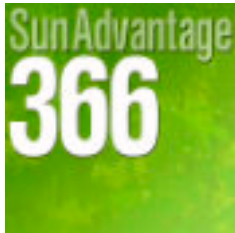
Triple Glazed Insulated Glass

- Three Pieces of Glass
- Two - 1/2" Hermetically Sealed Airspaces
- Argon Filled
- Duralite™ Glass Spacer



Sun Advantage 270 Low-E² Glass

- Second generation Low-E²
- Two layers of silver block reflective heat transfer for year round comfort
- Most Effective in combination hot and cold climates
- Blocks 86% UV
- Permits 70% Visible Light



Sun Advantage 366 Low-E³ Glass

- Third generation Low-E³
- Three layers of silver block reflective heat transfer for year round comfort
- All Climates
- Blocks 95% UV
- Permits 65% Visible Light



Solar Passive 180

- Specialty Applications
- Reduces through-glass heat loss to the outside
- Allows Solar Heat to enter
- For Northern Climates



Obscure Glass

- P516 Typical Obscure
- Niagara Patterned Obscure Glass



Tempered Glass

- Available for applications that require Tempered Glass
- Standard on all Sun Doors

*Add I-89 to 270 or 336 IG Unit
Adds a layer of low emissivity coating to the 4th surface of the insulated glass unit to increase thermal performance. Primarily used to help meet thermal performance requirements in northern climates.*



See website for additional details and information.

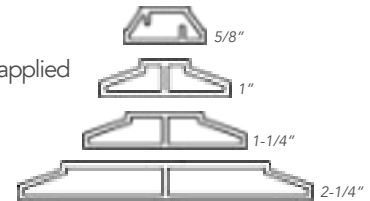
Grille Systems

Simulated Divided Lite, Interior Wood Grilles, Grilles Between the Glass



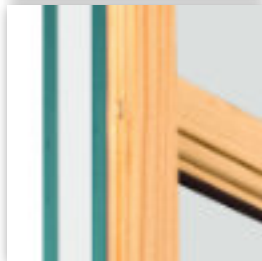
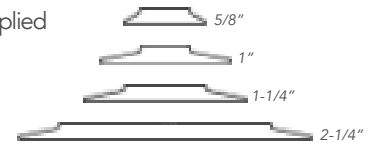
SDL (Simulated Divided Lite) - Raised Profile

Exterior: raised profile, aluminum grille bar, permanently applied
 Interior: wood grille, permanently applied
 Between: black shadow bar sealed between glass
 Bar Profile widths: 5/8", 1", 1-1/4", 2-1/4"
 Exterior Bar Colors: any Sun Exterior Color
 Interior Wood Grille finish: matches interior wood finish choice



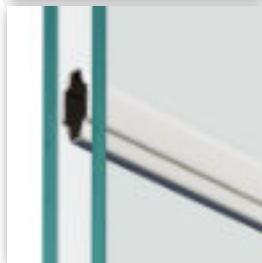
SDL (Simulated Divided Lite) - Low Profile

Exterior: low profile, aluminum grille bar, permanently applied
 Interior: wood grille, permanently applied
 Between: black shadow bar sealed between glass
 Bar Profile widths: 5/8", 1", 1-1/4", 2-1/4"
 Exterior Bar Colors: any Sun Exterior Color
 Interior Wood Grille finish: matches interior wood finish choice



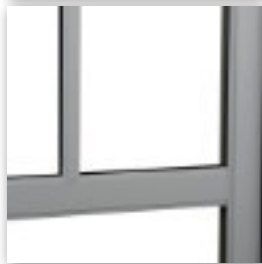
WSG (Wood Surround Grille)

Exterior: not applicable
 Interior: wood grille with wood surround frame, removable
 Between: not applicable
 Bar Profile widths: 5/8", 1", 1-1/4"
 Exterior Bar Colors: not applicable
 Interior Wood Grille finish: matches interior wood finish choice



GBG (Grilles Between Glass)

Exterior: not applicable
 Interior: not applicable
 Between: contoured aluminum grille
 Bar Profile widths: 3/4"
 Bar Colors: white, vanilla, beige, sand, bronze, black, green
 Optional: Two color combinations* = sand/white, bronze/white
 *exterior/interior facing, reverse facing also available



SCR (Simulated Check Rail)

This is a variation of our SDL using a 2-1/4" profile bar horizontally across a Casement or Sash Set Fixed Lite window to simulate the look of a double hung window check rail. It can be used by itself or combined with our 5/8", 1" or 1-1/4" SDLs.



SM (Simulated Mull)

Variation of our SDL using a 2-1/4" profile bar vertically on a Casement or Sash Set Fixed Lite window to simulate the look of a vertical mull. Can be a single or double bar depending on the look that is desired. Can be combined with our 5/8", 1" or 1-1/4" SDLs.

See website for additional details and information.



Grille Patterns

Available in Standard and Custom Configurations

	Casement	Double Hung	Door	Round Top	Arch Top	Gothic
Colonial						
Prairie						
Prairie Ladder						
Craftsman						
Diamond Lattice						
Simulated Mull 1						
Simulated Mull 2						
Simulated Check Rail						
Spoke						
Sunburst						
Renaissance						
Gothic						



Door Panel Options

Bottom Rail Height, Solid Panel Inserts, Color Options

Bottom Rail Height

All standard Sun doors use a common glass door panel with equal stiles and rails. An optional Tall bottom rail is available for applications requiring a tall profile.

- Standard Rail = 4-11/16"
- Tall Bottom Rail = 10"



Full View



Standard



1/4



1/3



1/2



3/4



Two Half Panels

Solid Panel Insert/Kick Panel

Our standard door panel is a full-view glass door panel. However, you can add Solid Panel Inserts to create a panel with a mixture of glass and solid surfaces to suit your project designs.

- Panel Configurations:
Full View (no inserts), Standard Insert, 1/4, 1/3, 1/2, 3/4, Two Half Panels
 - Interior Panel - beveled wood panel
 - Exterior Panel - heavy aluminum flat panel
 - Optional Exterior Shadowbox - SDL bars applied to flat panel
- Low-profile bars: 5/8", 1", 1-1/4", 2-1/4"



Color Options

In addition to the the configuration options, the exterior flat panel, the shadowbox, the door panel and the door frame can all be treated with your choice of any Sun colors. This opens up a lot of design possibilities. See Exterior Colors page for more information about our color selections.

See website for additional details and information.



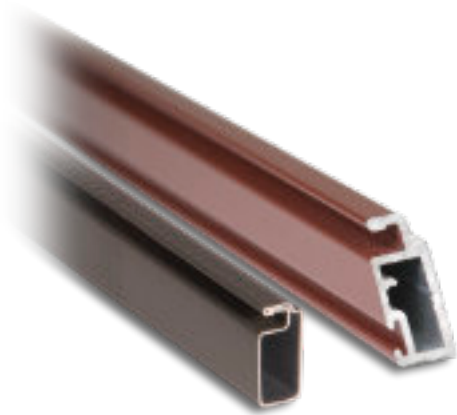
Screens

Roll-Form Frame, Extruded Frame, Retractable Screen, Flex Screen™, BetterVue™, UltraVue™



Screen Mesh with Water Shed Technology™

Our standard screen mesh is BetterVue™ Insect Screen. BetterVue™ mesh is woven from finer strands which helps provide 10% clearer view than typical screen mesh. UltraVue™ is available as an upgrade. It provides 15% clearer view. Both types now include Water Shed Technology™ which provides a clearer view for the life of the product by repelling water and resisting dirt and grime, making them much less likely to accumulate on the screen.



Roll-Form Screen Frame

Roll-Form Screen Frame is our standard screen frame for most products. It is available in the following colors: White, Sand, Dark Bronze

Extruded Window Screen Frame

Our Heavy-Duty, Extruded Screen Frame is available for most window products. It is available in any of our Exterior Colors.

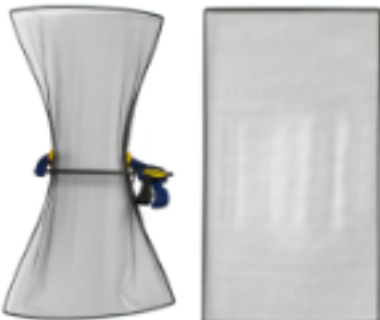


Sliding Screen for Doors

Available for 2-panel In-Swing & Sliding Doors, it is a Heavy-Duty Extruded Aluminum Frame larger in profile than our Extruded Window Screen Frame. It is available in any of our Exterior Colors.

Retractable Roll-Up Screen

Available on Casement Windows only, it features a retractable head compartment. The screen pulls down to cover the opening when needed and retracts upward when not needed. This add-on system mounts to the window interior and has a wood veneer that coordinates with the window interior.



Flex Screen™

Flex Screen™ is a flexible black spring steel frame bonded to screen mesh. It is easy to install and remove and avoids bowing issues that are typical on standard screens. It is available on the Clad Architectural Double Hung and the Patriot Casement.

See website for additional details and information.



Why Choose Sun

Here Are A Few Things That Set Us Apart From The Competition



Extruded Aluminum Exterior

Sun's heavy-gauge extruded aluminum exterior is highly resistant to the effects of weather, does not rust like other metals, and does not rot, decay, warp, or distort like wood. Heavy-gauge aluminum extrusions do not dent like thin roll-form aluminum wrapped over wood core. The extrusions provide exceptional strength and long life for the product. They protect the interior wood components of the product while protecting the building. Our extrusions feature Sun's High-Durability Powder Coat finish, available in a wide selection of exterior finish colors. Our extrusions also feature an integral nail fin as part of the frame.



Integral Nail Fin

Our extruded aluminum exterior features an integral nail fin that provides a rigid fastening method for the product. It is part of the exterior frame extrusion instead of being an add-on piece. Our nail fin makes it easy to integrate the product with weather-resistant barrier systems. Optionally, the nail fin is removable for replacement applications.



Water Management System

Our Water Management System provides two levels of protection to guard the product and home against water damage.

Exposure to the elements can be tough on the primary glazing of any window or door. Eventually, this can cause small gaps to open up in the seal, allowing water or moisture into the inner structure of the sash or panel, which leads to damage to the interior wood components and the insulated glass seal.

Sun uses silicone glazing to seal between the glass and the edge of the glazing channel. However, over time, this seal will likely fail due to the harsh effects of the weather. When this occurs, water or moisture will begin to enter the inner structure of the sash or panel, as well as the glazing channel. This failure will happen to any brand window or door. Once this happens, it can become trapped and cause deterioration of the wood components and the insulated glass seal.

The design of Sun's window sashes and door panels includes a pathway that allows water or moisture to drain or vent to the exterior. This weep system also allows the inner structure to dry out, preventing damage to the interior wood components and the insulated glass seal.



Why Choose Sun

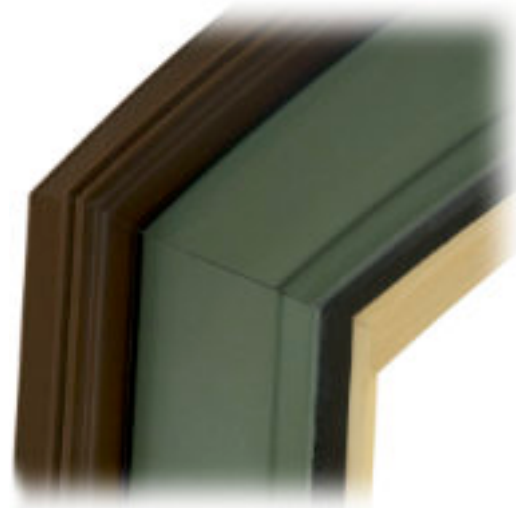
Here Are A Few Things That Set Us Apart From Our Competition

Powder Coat Exterior Finish

Sun selected Powder Coating as our exterior finish of choice for our aluminum-clad windows and doors because of its outstanding weather resistance, film toughness, extensive range of colors, and its low environmental impact.

Our powder-coated aluminum extrusions have a thick, hard finish which is more durable than conventional painted finishes. The finish has a long life with excellent resistance to chipping, cracking, peeling, and fading.

Our standard finish meets AAMA 2604 requirements and allows us to provide a 20-year finish warranty. An optional AAMA 2605 finish is available for projects requiring more specialized coverage. This option qualifies for a 30-year finish warranty.



Sun Insulated Glass

Sun manufactures our insulated glass units in our state-of-the-art glass production facility. Dual glazed insulated glass is standard on all products, while Triple glazing is available on select products. Double Strength glass is standard on window IG units, with Tempered glass standard on all doors. All insulated glass units feature low-emissivity glass options, with Argon-filled sealed airspaces. Sun's insulated glass production is subject to ongoing glass testing and certification to assure top-level performance of our IG units.



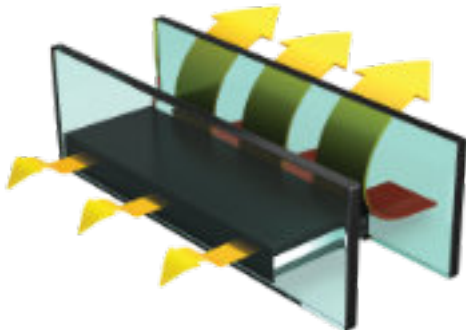
Duralite™ Glass Spacer System

Sun uses Duralite™ in all of our IG units. Duralite™ is an industry-leading spacer system that provides the best thermal performance in the industry. Its structure uses Composite laminating technology, while its flexible properties ensure a superior glass seal and the highest Argon gas retention in the industry. Duralite™ has a smooth visible surface appearance. It is impermeable to gas and water vapor and has proven adhesive technology to ensure a long-lasting glass seal. Duralite™ has the lowest conductivity of any warm-edge spacer. It provides a warmer edge-of-glass temperature which improves the condensation resistance of the IG unit.



Why Choose Sun

Here Are A Few Things That Set Us Apart From The Competition



The spacer is applied in a single, continuous path following the perimeter of the glass, which is important primarily because it results in a single corner seam. The other three corners are formed as bends in the spacer with no joint or seam. This single corner seam helps give our insulated glass units an excellent hermetic seal and superior Argon gas retention. Most other glass spacer systems require each corner to be mechanically joined and sealed.

Argon is an inert gas, heavier than air, used to fill the sealed air space of high-performance insulated glass units. It has no harmful effects. Filling the sealed air space with Argon improves thermal performance by slowing convection currents within the sealed insulated unit.



Black Glazing Channel

This protective black masking film behind the glass stops provides two valuable functions. One, it keeps paint and stain that might seep behind the glass stop during the finishing process from being exposed to view when looking at the product from the outside. All that is visible is the black film, which blends in with the black glass spacer of the insulated glass unit.

Secondly, this factory-applied film provides for quick masking of the glass for whoever is painting or staining the wood components of the product. Products ordered without an interior finish from the factory will have this film left on the interior side of the unit, making it easy to apply additional masking before finishing. Note: products ordered with a factory interior finish will have this film already trimmed away from the daylight opening.



Wood Interior

Nothing beats the warmth and appeal of wood for the interior of your windows and doors. Our clad-wood products feature clear pine interiors that are ideally suited for staining or painting. Pine is known for its straight uniform grain and excellent finishing characteristics. Choose to have your windows and doors delivered without any interior finish so that you can stain or paint them yourself or have them primed or painted at the factory with your choice of one of our standard interior finish colors.



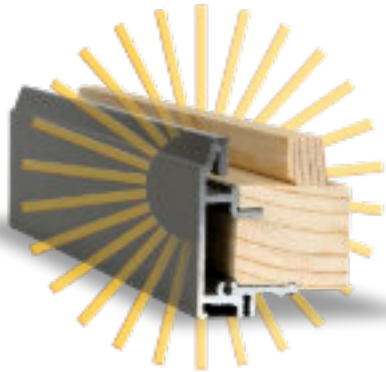
See website for additional details and information.



Clad Exterior Comparison

Compare Sun's Extruded Aluminum Exterior to Roll-Form Aluminum Cladding and Painted Wood

Sun Extruded Aluminum



National Competitor Roll-Form Aluminum



National Competitor Painted Wood



All Sun Clad Wood products use Extruded Aluminum Cladding on the sash and frame

Superior Strength

- .045 to .060 thickness *(depending on product)*
- Will not warp
- Enhances Structural Strength

More Durable

- Harder to dent
- Protects interior wood components from weather damage

Water Management

Built in water and moisture exit pathway prevents water from being trapped within the sash or panel, preventing damage to internal components and glass seal

Powder Coat Finish

Hard, durable commercial grade finish outperforms paint, environmentally friendly

True Match Factory Finish

Extruded Aluminum on frame, sash, panel provide true match of finish, equal weatherability

Competitor products using Roll-Form Aluminum Cladding over wood sash, extruded frame

Little Strength

- .024 thickness
- Adds little to no strength to the sash

Less Durable

- Easy to dent
- Corner seams have weak seal against water penetration
- Only moderate protection against weather damage

No Water Management

Wood sash, no exit path for water or moisture, trapped water damages components and insulated glass seal

Painted Finish

Not as durable, not friendly to the environment

Color Variations

Colors/Finishes on different cladding materials between sash and frame can vary and weather at different rates and lead to mis-match of the finish

Competitor products using Paint on Wood Sash with vinyl glazing

No Strength

- Paint provides no strength to the sash

Least Durable

- Least protection against weather damage
- Must be repainted regularly to maintain any protection

No Water Management

Wood sash, no exit path for water or moisture, trapped water damages components and insulated glass seal

Painted Finish

Not as durable, not friendly to the environment

Color Variations

Paint on wood sash will weather differently from other frame material and vinyl glazing and lead to mis-match of the finish(es)

Protection & Performance

Weather Seals, Energy Performance, Structural Performance

Protection from Air and Water Intrusion

A combination of our product designs, the materials we use, and our manufacturing processes produce windows and doors with outstanding air-infiltration performance. Complete weather stripping and secure sash and panel closure provide air-tight seals. Our window air-infiltration ratings out-pace the industry standards and many of our competitors.

Energy Performance

Energy Performance is reported as a group of values designated by the Nation Fenestration Ratings Council (NFRC) to provide meaningful, comparative data for windows, doors and skylights. The NFRC has determined that these values represent the key energy performance factors when measured and reported in a standardized method.



These values are:

- U-Value
- Solar Heat Gain Coefficient (SHGC)
- Visible Light Transmittance (VLT)
- Condensation Resistance (CR)
- Air Leakage or Air Infiltration

All performance values are determined through product testing following industry standard specifications. Actual product performance will depend on the specific details of the application in which the product is installed. This includes how well the product was installed, the physical environment and conditions of the location, as well as other factors. Our ratings are available on our website, in the Technical Section.

Design Pressure, Air, Water & Structural Performance

Physical Testing and Certification of the design performance of windows and doors is done to meet code and specification requirements. The products are tested and rated in accordance with 101/I. S.2/A440-08 Standard for Windows, Doors and Skylights.



They are tested and rated for the following:

- Design Pressure
- Air Leakage (Infiltration)
- Water Performance
- Structural Test Pressure

All performance values are determined through product testing following industry standard specifications. Actual product performance will depend on the specific details of the application in which the product is installed. This includes how well the product was installed, the physical environment and conditions of the location, as well as other factors. Our ratings are available on our website, in the Technical Section.

See website for additional details and information.

Warranty

Sun Clad Products Residential Warranty

SunClad™ Residential Window and Door Products Limited Warranty

Effective Date - Beginning August 15th, 2010

Sun Windows, Inc. provides this Limited Warranty to cover Sun Clad Residential window and door products sold and installed in the United States of America. This warranty extends to the owner of the structure in which the products are originally installed and is fully transferable.

Glass Components

- Insulated Glass Seal for Twenty Years
- Spontaneous Glass Breakage for One Year

Wood Components

- Wood components are warranted against cellular structural failure (wood cellular break down) for a period of Ten Years

Exterior Finish

- Sun's standard D2000 finish meets AAMA 2604 specifications
- Warranted for Twenty Years against peeling, flaking, blistering, cracking, checking and loss of adhesion
- Warranted for Ten Years against chalking, fading, and color change

- Sun's optional D3000 finish meets AAMA 2605 specifications
- Warranted for Thirty Years against peeling, flaking, blistering, cracking, checking and loss of adhesion
- Warranted for Fifteen Years against chalking, fading, and color change

Operating Hardware

- All non-electric operating hardware is warranted to operate properly for Ten Years
- Weather Stripping is warranted to function correctly for a period of Ten Years
- Electric operating hardware is warranted for a period of One Year

All Other Components

All other components not specified elsewhere are covered for a period of Ten Years

For full details, see our complete warranty in the Support Section of our website.



Customer Service

Contact Information, Quotes & Prices

Contact Us

Physical Address: Sun Windows, Inc. / 1515 E 18th St / Owensboro, KY 42303

Mailing Address: Sun Windows, Inc. / PO Box 1329 / Owensboro, KY 42302-1329

Hours: 7:30 AM to 4:30 PM Central Time - Monday through Friday

Phone: 1-270-684-0691

FAX-Customer Service: 1-270-926-6452

FAX-Sales: 1-270-684-0631

FAX-Shipping: 1-270-684-4594

info@sunwindows.com

What's The Price?

Sun Products are "Made-To-Order". This means that you get the windows you want with the features and options you want, not what is sitting on a shelf.

We do not publish standard prices because the price you really want to know is the one for the exact product and configuration that you select. Therefore, you will need to have your project quoted to see an accurate price.

Contact your Sun Dealer for a quote. A Dealer Locator is available on our website. If you do not have a Sun Dealer in your area, contact our Customer Service Department and they will be glad to assist you.

Dealer Locator





W W W . S U N W I N D O W S . C O M

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