



Owner's Manual

SunClad Casement & Awning Windows

Congratulations on your purchase of Sun Window Products!

Sun window and door products are designed to provide years of beauty, comfort, and energy saving performance for your home. The information in this Owner's Manual is provided to assist you in using and maintaining your Sun products. Please read all the information so that you can gain the maximum benefit from your Sun windows and doors.

Safety Information and Warnings!

Fall Prevention (Open Windows)

Warning! An open window is a possible fall hazard. Closely monitor children, feeble or weak individuals, and pets around open windows.

Fall Prevention (Screens)

Warning! Window and Door screens are not designed to support weight and will not prevent falls. Do not lean against screens in an open window or door. Closely monitor children, feeble or weak individuals, and pets around open windows and doors.

Glass Breakage

If the glass in your window or door product becomes broken, you can obtain replacement glass from Sun. Contact your Sun dealer or representative, or contact Sun directly to order a replacement I.G. unit. You will need to know the product name, size, glass description, grille type, pattern and color if grille system is in the I.G. unit. All of this information is available from the original invoice. Supplying Sun with the invoice number will help in obtaining the correct replacement.

Glass Caution

Warning! This product contains glass components which, if broken, can cause serious injury. Use extreme caution and keep children away from broken glass.

Tempered Glass Characteristics

Tempered glass is called "safety glass." It is more resistant to breakage than normal float glass and if it is broken, breaks into relatively small, blunt particles, which are less likely to cause injury. Approximately five times stronger than annealed glass of equal thickness. Greater resistance to thermally induced stress than heat strengthened or annealed glass. Suitable for use as a safety glass. Tempered safety glass is mandated in many window applications and all door applications. Suitable where safety glazing is required, for fire knockout panels, all glass entrances and where extreme wind loads are a concern.

Casement Sash Warning

Do not allow children to pull, swing, or lean on sash of Sun Casement window. This could cause the sash to come loose from the window frame as well as damage the sash and operator mechanisms.

Product Performance Information and Warnings!

Chemicals and Cleaners

Do not allow any chemicals, chemical vapors, acids, cleaners, brick or masonry cleaners, abrasives, or other substrates to contact (directly or indirectly) any of the product surfaces, parts, and hardware. Deterioration or damage to the product may result. Protect all product surfaces, parts, and hardware during all phases of construction and finishing. Surface scratches as well as damage from any such chemical, chemical vapor, acid, cleaner, brick or masonry cleaner, abrasive, or other substrate is not covered by this warranty. Proper cleaning information is available in the Sun product Owner's Manual. See your Sun Window Dealer or Representative for more information.

Hardware Finish

The locks, keepers, operators, tilt latches, handles and hinges have either a painted or metal finish. Do not allow harsh abrasives, chemical solutions, or chemical vapors to contact the product hardware. These can damage the hardware finish, hardware material or hardware function. Scratches and chemical damage to product hardware are not covered under the warranty.

Glass Films or Coatings

Do not use any type of glass film or coating on insulated glass units. These films and coatings can create adverse conditions upon the insulated glass unit, which may result in glass breakage or failure of the insulated glass unit. The use of any glass film or coating will void the warranty.

Identifying Seal Failure

An Insulated Glass unit consists of two or more pieces of glass that are joined together with a sealed air space separating them. The sealed air space increases the thermal properties of the window. A seal failure is when a leak occurs in the seal that separates the glass. The main identifying characteristics of a seal failure is when a film of vapor or dirt becomes visible between the pieces of glass (inside the seal). See the Sun Warranty for more information on the Insulated Glass Warranty and seal failures.

Water/Moisture Management

Proper management of water and moisture is an essential part of any structure. All structures must have a functional, engineered drainage system as part of its exterior finished wall system. Sun Windows, Inc. cannot control or be responsible for water/moisture management beyond the product itself. All products manufactured by Sun Windows must be properly installed as described in Sun's installation instructions. All products manufactured by Sun Windows must be properly flashed and a complete vapor barrier applied to seal the product opening. Proper installation of drainage systems, flashing, water and vapor barriers are the sole responsibility of the owner or their agents.

Mold Prevention

Household mold and mildew can create an unpleasant living environment. It can be unhealthy. It can also be damaging to the building structure. Mold and mildew are the results of environmental conditions in the building, mostly high humidity. Prevention of mold and mildew can be achieved by properly managing water and moisture. See the section Water/Moisture Management for additional information.



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Proper Installation

Improper installation will void the warranty. Please be sure to read and follow the Sun Installation Instructions provided with the product. If you did not receive Sun Installation Instructions with the product contact Sun Windows to request a copy before you install the product. Be sure to specify what products you are installing.

Condensation

Condensation (moisture or ice forming on the surface of the glass or frame) is the result high humidity within the house and cool air temperatures outside. Windows and doors do not cause condensation and, therefore, the occurrence of condensation is not covered by the warranty. Environmental conditions, humidity, water or ice on any product related surface, are not covered by the warranty. If condensation occurs, it is an indication that humidity levels within the house are improper and that measures should be taken to correct the environmental conditions within the home. See Sun's Condensation Information sheet for more information.

Product Application and Installation

Special Requirements

It is the responsibility of the customer to notify Sun Windows of any special requirements for product applications, including (but not limited to) egress size requirements, tempered glass or safety glass requirements. Sun Windows is not responsible for verifying building codes and requirements for the applications of its products. Always check your building codes for special requirements before you order.

Installation

All products manufactured by Sun Windows must be installed in accordance with Sun Installation Instructions. Compliance with these instructions is mandatory for proper performance of the product. Failure to comply with these instructions will void the warranty. If you do not have a copy of the installation instructions, you can obtain one from your Sun Window Dealer or Representative, or by contacting Sun Windows Customer Service, Sun Windows, Inc. / 1515 East 18th Street / Owensboro, KY 42303 / phone (270) 684-0691 / fax (270) 926-6452 / info@sunwindows.com / www.sunwindows.com.

Product Operation Instructions

Awning Windows

SunClad Awning Windows are designed similar to the SunClad Casement, only that the Awning window is hinged near the top of the window. Awnings offer a smart solution for ventilation in a smaller wall area. Awnings are popular in combination with Fixed Lite windows.

To open the sash:

1. Unlock the sash by raising the latch levers on the side jambs.
2. Fold out the handle and turn clockwise to open the sash.
3. Reverse to close.

Casement Windows

SunClad Casement Windows are available as single, double, triple and quad units. The casement window may be an operating unit (sash opens) or it may be a fixed lite (non-opening). Operating units may be specified as Left Hinged or Right Hinged as viewed from the outside.

To open the sash:

1. Unlock the sash by raising the latch lever located on the side jamb.
2. Fold out the handle and turn clockwise to open the sash. The sash will open to 90° maximum opening.
3. Reverse to close.

Casement Hinge Adjustment Instructions

1. The amount of sash drag that this hinge will correct for is dependent on the ratio of the sash width verses sash height. To calculate this, take the ratio of the Width to Height multiplied by 1/16.
Example: 24" w / 36" h = .667 Multiply by 1/16 = .042 or approximately 3/64"
2. To adjust the sash, first fully open the window. Next, slip the adjustment wrench (Truth part #31887) onto the base of the stud, found between the support arm and the track of the lower hinge. Swinging the wrench toward lock side of the window will decrease the amount of sash drag. The maximum sash drag adjustment is reached when the stud flats are 45° to the track. Note: do not turn past 45° or the arm will bind on the track.
3. For severe sash drag, a similar procedure can be used on the upper hinge. Upper hinge adjustment is made by swinging the wrench away from the lock side of the window. Maximum adjustment is obtained when the stud flats are 45° to the track.

Note: Maximum adjustment may cause binding as the window is closed. Please use caution.

4. Stud may be adjusted with 7/16" if support arm is removed.

Cleaning Instructions

Removal of Sun Label

The Sun label can be easily removed by simply peeling it from the glass.

Cleaning the Glass

Use typical household glass cleaner and a soft cloth to clean the glass.



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Cleaning the Metal Surfaces

The SunClad exterior aluminum should be washed occasionally with a mild soap and water solution and rinsed with a gentle spray of water. Metal hardware surfaces can be cleaned with a cloth dampened with a mild household cleaner, then polished dry with a clean soft cloth.

Cleaning the Vinyl Surfaces

Clean with a mild soap and water solution and a soft cloth.

Cleaning the Wood Surfaces

Painted and stained wood surfaces should be cleaned according to the finish manufacturer's instructions.

Cleaning the Screens

Remove from the window and wash with a mild soap and water solution. Rinse with a gentle spray of water.

Maintenance Instructions

Grille Removal and Installation Instructions

Removable wood grilles are attached to the window using sliding push-pin clip that fits into a notch at the end of each grille bar. To remove the grille simply slide the push-pin clip in the notch to disengage it from the wood stop on the sash or panel. Do this for every push-pin clip on the grille. Once all of the push-pin clips are disengaged the wood grille can be lifted out of the sash or panel. Be careful when handling wood grilles, they can break. Do not use excessive force to remove or installing the grille.

Screen Removal

Casement and Awning screens fit into a screen track with tension springs at one end and a finger lift tab at the other end.

To remove a screen from an Awning or Casement window:

1. Locate the finger lift tab and pull that edge of out of the wood screen track. This will compress the tension springs at the opposite end of the screen and provide clearance to pull that edge free from the track.
2. Pull the opposite end of the screen free from its screen track.

Note: Awning and Casement screens remove to the interior.

Sash Removal

Casement and Awning windows use a hinged operator system. The sash is connected to the operator arms. The sash can be removed by releasing the sash from the pivot points on the operator arms.

To remove the sash:

1. Open the window.
2. Locate the pivot points where the sash operator/hinge arms meet their mounting bracket.
3. Using a large flat blade screwdriver or a prying tool, carefully separate the pivot point from the operator arm on each end. Do this for both the top and bottom hinge assemblies.
4. Slide the sash off the operator guide tracks.

To install the sash, reverse the process.



Painting Instructions

Painting Instructions for Wood Surfaces

All wood surfaces must be properly finished (painted or stained and sealed). Do not paint vinyl surfaces or weather seals. See installation instructions for further painting information. To comply with the limited warranty, the consumer must protect and properly care for all wood items against moisture, high humidity, or excessive dryness.

Painting Instructions for Exterior Aluminum

The factory finish on SunClad window and door products does not require additional painting. If you want to paint the exterior aluminum surfaces of your SunClad products, the factory finish will serve as a good base for painting. Use only high quality exterior paint and follow the paint manufacturers instructions for applying the new finish. Do not paint any vinyl surfaces, weather stripping or hardware.

Painting Instructions for Vinyl Surfaces

Do Not paint any vinyl product or vinyl surface. Doing so will adversely affect the product and void the warranty.

Paint-matching instructions

Due to the many variables involved in painted products and matching paint colors, it is recommended that you take a sash or sample of the product to your local paint supplier for color matching.



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Certifications

Sun products are certified in accordance to the following programs and standards.

- WDMA Hallmark Certification Program
- Energy Star for windows
- NFRC (National Fenestration Ratings Counsel)
- ASTM

Warranty Service Information

Sun Product Warranty

All Sun products are covered by a Sun Limited Warranty. Complete Warranty and Warranty Service details are available online at www.sunwindows.com or from your Sun Window Dealer.

Contact Information Sun Windows, Inc. / 1515 East 18th Street / Owensboro, KY 42303 / office: (270) 684-0691 / fax: (270) 926-6452 /email: info@sunwindows.com / web: www.sunwindows.com