Owner's Manual - SunClad Double Hung 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 week 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 week 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 fore 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.

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.

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.

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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 / www.sunwindows.com.

Product Operation Instructions

Double Hung Windows
SunClad Double Hung windows feature top and bottom sashes that slide vertically for ventilation. Both sashes also tilt inward for easy cleaning of exterior glass surfaces. Tilt-in operation is by finger release tilt latches for the bottom sashes. The top sash does not have finger release latches. The top sash tilts by compressing the jamb liner with your hand while pulling the top of the sash toward you.

To open the sash:
1. Unlock the sash locks located on the sash check rail (the top of the bottom sash).
2. Raise the bottom sash by gripping it at the finger lift rail (located on the front face of the bottom member of the bottom sash) and lift or slide up.
3. Lower the top sash by gripping it at the finger lift rail (located on the front face of the top member of the top sash) and pull or slide down. Note: the top sash of a single hung window does not open.

To tilt your window sashes:
1. Unlock the window and raise the bottom sash approximately 4" to 6".
2. Release the finger latches while pulling the top sash toward you.
3. Once the top of the sash is disengaged from the side jambs you can tilt the sash to its fully tilted position of 90°. Caution! Do not tilt the sash more than 90°. Doing so can damage the locking balance/pivot shoe assembly.
4. Repeat the process for the top sash. Note: the top sash of a single hung window does not tilt.

Release finger latches. Tilt inward.

Product Adjustment Instructions

Double Hung Sash Balance Adjustment
Double Hung windows use adjustable balance shoes to help adjust the tension between the sash and the jambs. If your sash is too loose (slips up or down when released), or if it is too tight (hard to move up or down), you may need to adjust the tension on the balance shoes. The balance shoes are located at the bottom end of each balance spring in the jamb track. Each balance shoe has a slot that holds the tilt-sash pivot pin and a tension adjustment screw.

To adjust the balance tension:
1. Tilt the sash according to instructions (see Sash Tilting Instructions).
2. Using a screw driver, turn the adjustment screw clockwise to increase the tension, counter-clockwise to decre the tension.
3. Return the sash to the normal operating position (engage the sash in the vinyl jamb liners) and test the opera
4. Repeat the process until the desired amount of tension is achieved.

Tip: Only slight adjustment should be necessary. If you are unable to adjust the tension with the adjustment screw the window may not be shimmed properly. The installation instructions give specific instructions on properly shimming the window. You may need to contact your builder if your windows do not operate properly.

Cleaning Instructions

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

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

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

Screen Removal
Screens fit into a screen track with sliding screen latches holding the sides of the screen in place.

To remove a screen from a Double Hung window:
1. Open the bottom sash of the window.
2. Using the screen lift tabs, pull the bottom of the screen upward (approximately 1/4").
3. Push the bottom of the screen outward.
4. Let the top of the screen slip free of the top screen track and remove the screen. Note: Double hung screens remove to the exterior.

Double Hung Sash Removal
SunClad Double Hung windows have removable sashes. Sashes can be removed without the use of tools. Sash removal may be necessary for painting, cleaning or servicing the window.

To remove the sash:
1. Tilt the sash according to instructions (see Sash Tilting Instructions).
2. With the sash in the 90° tilted position, lift both bottom corners straight up until the sash pivot pins disengage from the balance shoes (in the jamb track). Note: The balance/pivot shoes have a locking feature that prevents them from moving when the sash is tilted to 90°.
3. Angle the sash sideways so that it clears both jambs and remove.
4. Repeat the process for the top sash.

To install the sash, reverse the process.

Note: It is very important that the sash pivot pins properly and full engage the balances shoes. The balance shoes will not work correctly if the sash pivot is not fully seated in the balance shoe. An improperly installed sash can damage the balance shoe, pivot pin and jamb liner.

Lift up, then angle.

Remove sash.

Removing & Installing Comfort-Tilt Double Hung Jamb liners (floating style jamb liners)
The vinyl jamb liners on our Comfort-Tilt windows are of "floating" design. They have spring tension that provides constant contact between the sashes and the sash guide tracks on the jamb liners.
They are set within a recess in the window jambs (sides of the frame).

Balance Shoe

Sash Pivot Pin

To remove the vinyl jamb liners:
1. Remove the sashes. See the instructs above.
2. Using your hands, squeeze in on the edges of the jamb liner while pulling it out of the frame. Start toward the top of one of the vinyl jamb liners and work your way down, freeing the edges as you go.
3. Use this procedure to remove both jamb liners.

To install the vinyl jamb liners:
1. Fit the top end of one jamb liner into the head of the jamb on the appropriate side of the of the frame.
2. Carefully work the edges of the vinyl jamb liner into the recessed portion of the window jamb. The outer edges of the vinyl jamb liner have a retaining lip that holds it in the window frame.
3. Carefully work the bottom of the jamb liner into the notches at the bottom of the frame.
4. It is very important that the vinyl jamb liner be completely seated in the frame. Test the floating / spring action of the vinyl jamb liner the entire length of the jamb. It should push in and freely return when let loose. If there is any binding, the vinyl jamb liner is not completely seated in the frame. The retaining lip may not be set all the way into position. The sash will not function properly if the jambs are not fully seated. If necessary,
remove the jamb liner and re-install it.

Painting Instructions

Painting Instructions for Wood Surfaces
All wood surfaces (with the exception of double hung sash sides) must be properly finished (painted or stained and sealed). Do not paint the sides of double hung window sashes. 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.

Certifications

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

- WDMA Hallmark Certification Program
- 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 / web: www.sunwindows.com