# **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.

page 1

#### 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**

### **Double Hung and Single Hung Windows**

SunVinyl 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 top and bottom sashes. Single Hung top sash does not open or tilt.

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.

### **Ventilation Stop Latches**

Some vinyl double hung windows have Ventilation Stop Latches to restrict the amount a sash can be raised. The latch is recessed into the one of the side members of the top sash frame. The latch is spring loaded and pops out when the top of the latch is pressed and pushed upward.

To use the Ventilation Stop Latch:

- 1. Press in on the top portion of the ventilation stop latch.
- 2. While pressing in, push the latch upward. The bottom portion of the latch should pop out.
- 3. The latch is now active and will stop the bottom sash from being raised beyond it.

### To make the Ventilation Stop Latch inactive:

- 1. Push the bottom portion of the latch inward.
- 2. While pressing in, push the latch downward to lock it in the inactive position.

### **Slider Windows**

SunVinyl Slider Windows are windows with two or three sashes, side by side. Two sash units have one sash that opens and one that doesn't. On three sash units, the center sash is fixed while the two flanking sashes open. The operating sashes slide open horizontally.

### To open the sash:

- 1. Unlock the sash locks located on the sash check rail (the meeting rail between the operating and fixed sash).
- 2. Open the sash by gripping it at the finger lift rail (located on the sash frame member opposite the locks) and slide it sideways.

### **Product Adjustment Instructions**

### Double Hung Sash and Single Hung Sash Balance Adjustment

Double Hung and Single 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 decrease the tension.
- 3. Return the sash to the normal operating position (engage the sash in the vinyl jamb liners) and test the operation.
- 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 Vinyl Surfaces**

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

#### Cleaning the Screens

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

### **Cleaning Sliding Panel Tracks**

Keep bottom and top tracks clean on Sliding Doors. Periodically remove all dirt and debris from the tracks.

### **Maintenance Instructions**

#### Removal of Sun Label

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

### Screen Removal

Screens most screens fit into a screen track with tension springs at one end. On some products, screen tabs or plungers hold the sides of the screen in place.

To remove a screen from a Double Hung window:

- 1. Open the bottom sash of the window and locate the screen plungers, one on each side of the screen frame.
- 2. Pull both plungers free from the side screen tracks.
- 3. Lift the screen upward to compress the tension springs at the top and lift the bottom of the screen up enough to clear the screen retention lip on the sill of the frame.
- 4. Push the bottom of the screen outward.
- 5. 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.

To remove a screen from a SunVinyl Single Hung:

- 1. Open the sash.
- 2. Locate the screen tab on one side of the screen frame.
- 3. Using the screen tab, pull the screen to compress the tension springs at the opposite end enough to free the screen edge from screen track.
- 4. Push the free end of the screen toward the outside until the opposite end slips free from its screen track.

Note: Single Hung screens remove to the exterior.

To remove a screen from a SunVinyl Slider Window:

- 1. Open the sash and locate the screen tab on the bottom of the screen frame.
- 2. Lift the screen upward enough to free it from the bottom screen track.
- 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: Slider screens remove to the exterior.

### **Double Hung and Single Hung Sash Removal**

SunVinyl Double Hung and Single Hung windows have removable sashes. Sashes can be removed without the use of tools. Sash removal may be necessary for 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.

#### Slider Window Sash Removal

SunVinyl Slider window sashes operate on a roller-track system.

To remove the sash:

- 1. Unlock the sash and slide it part of the way open.
- 2. Gripping both sides of the sash, raise it straight up until the bottom of the sash clears the bottom frame track.
- 3. Pull the bottom of the sash toward you and lower the top out of the top frame track.

To install the sash, reverse the process.

### **Painting Instructions**

#### **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.

### **Certifications**

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

WDMA (Window and Door Manufacturers Association) Hallmark Certification Program.

SIGMA (Sealed Insulated Glass Manufacturers Association).

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. There is a warranty for SunClad Window and Door Products, one for SunVinyl New Construction Windows, and one for SunVinyl Replacement Windows. These warranties are detailed in other documents that should be part of your Owner's Information packet. If you did not receive these documents contact your Sun dealer or representative, or Sun Customer Service to request a copy.

### **Requesting Warranty Service**

If you have a problem with your products that you believe is covered under this warranty. Write a letter describing (in detail) the problem. If possible, include photographs of the problem.

### Specify:

- 1. The type of product(s) involved (Sun Clad; Window or Door; Casement, Double Hung, Inswing Door, etc.).
- 2. The product size.
- 3. State what you think will correct the problem.
- 4. The date the products were purchased.
- 5. The original invoice number.
- 6. Your name, address and phone number(s).
- 7. The best time to contact you.
- 8. Include a map with driving directions to your location from a major highway.
- 9. Send this information to: Sun Windows, Inc. / Warranty Services / PO Box 1329 / Owensboro, KY 42302-1329.

## **Warranty Registration**

All customers of Sun Windows are encouraged to register their products. Warranty registration insures that both the customer and Sun Windows, Inc. has the necessary information to validate the warranty for their Sun Window product or products. Fill out the Warranty Registration Card (included in the Sun Warranty brochure, see note above) with all the information completed and send the card to Sun Windows. Your products will be registered. Warranty Registration is mandatory for requesting warranty service, so registering your products enhances the process should you ever need to make a service request.

### **Registering Your Products**

The limited warranty shall not be effective unless the Warranty Registration Card is completed and returned to Sun. Please register your warranty within 30 days after completion of installation. Warranty Registration is the responsibility of the owner or their agent.

To Register Your Products:

- 1. Locate Warranty Registration card (included in the information packet).
- 2. Complete the owners information, sign and date the owner's acceptance.
- 3. Have the Dealer/Builder to complete their portion, sign and date the Dealer/ Builder acceptance.
- 4. Return the card to: Sun Windows, Inc. / Warranty Services / PO Box 1329 / Owensboro, KY 42302-1329

It is the responsibility of the registered owner(s) to fully and accurately complete the registration card. This includes Property owner's name, address, phone number, original invoice number and date. All fields are required for registration to be valid. Do not sign the Registration Card until the warranty is read and understood. By signing the registration card, you testify that you have read, understand, agree to, and accept all the terms, conditions, and remedies set forth in this warranty.

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