



from **MARVIN**
Windows and Doors

Built to perform.®

Owner's Manual

Care and Maintenance



Introduction

Integrity Windows and Doors thanks you for choosing our high performance Ultrex® products for your home. Whether you selected the rich wood interiors of the Wood-Ultrex Series, or the clean lines of the All Ultrex Series, the energy efficient LoE insulated glass and durable Ultrex construction will provide you windows and doors you'll appreciate for years.



This owner's manual was created to help keep your Integrity windows and doors looking beautiful and performing well for years to come. Take a few minutes to carefully read through this manual. You'll find photos that will help identify your Integrity products, general information on cleaning, and answers to common questions. Included is an annual checklist with recommended maintenance ideas that can keep your Integrity products performing perfectly for years to come.

For questions on service or maintenance not covered in this manual please contact your local Integrity dealer or visit our website at www.integritywindows.com.

NOTE: Wood-Ultrex series shown in images unless noted otherwise.

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Annual Window and Door Checklist





Use this checklist as a maintenance reminder for your windows and doors to help keep your product operating properly and prevent future problems. Once a year should be sufficient.

- Safety first: use caution on ladders, and wear protective eyewear and clothing. When working with primers, paints, stains, cleaning solutions, etc., make sure that you use and dispose of these materials according to local codes or manufacturer's instructions.
- Inspect weather strip for damage or loss of performance. Contact the local Integrity retailer if your weather strip requires replacement. Take care when using paints, stains or varnishes. These products contain solvents which, when coming in even momentary contact with weather strip, can cause it to become brittle and require replacement.
- Examine window or door's interior and exterior finish. Periodic cleaning and touchup can extend the life of your finish.
- Inspect exterior caulking around the outer edges of the window or door frame. Trim off any loose caulking and reseal any gaps with a good quality caulk.
- Check all hardware (locks, opening mechanisms, etc.) for smooth operation.
- Inspect exposed hardware screws; tighten if loose.
- Clean sand, dirt or dust from door and window hinges, sills and tracks.
- When soiled, wash the exterior of your doors and windows with warm soapy water; rinse with clean water and dry.



Hazard Notations

Please familiarize yourself with the following hazard notations used throughout this manual.

	CAUTION	Mistake or misuse could cause damage to the window or result in faulty installation and unit performance
	WARNING	Mistake or misuse could result in personal injury and/or severe damage to unit, equipment, and/or structure.
	SEEK ASSISTANCE	Help from another individual is necessary to perform the task safely and correctly.
	TIPS / HINTS	Information on alternative procedure, definitions, helpful hints.

Window Products



Casement



Awning



Double Hung



Glider



Polygon



Round Top

Door Products



Sliding Patio Door



Sliding French Door



Inswing French Door



Outswing French Door

Condensation

Before reading this section, pour yourself a nice tall glass of ice water.

During cold winters there is a large temperature difference between the interior and exterior of your home. When the temperature drops outdoors, the glass on your windows tends to have a lower surface temperature than other surfaces in your home and is the first place that you'll notice condensation in your home. This is not due to any defect in your window or door; it's simply a sign of needing to reduce the humidity in your home.



Warm air is capable of holding more moisture than cool air. As warm vapor filled air comes in contact with a cool surface it loses its ability to hold moisture. When moisture laden air reaches its dew point, moisture condenses on the nearest cool surface. Generally the most obvious surfaces in your home where you'll notice condensation are on your windows or the glass of ice water sitting in front of you.

Condensation on your windows is an unsightly problem. The last thing you want is a fog blocking the view. But the problem goes deeper than that - if condensation is a chronic occurrence in your home, chances are that you have excessive humidity. If water is accumulating on glass, chances are it is accumulating on other harder to see surfaces such as wall and roof cavities. If left uncontrolled, excess moisture can have serious consequences, including:

- Mold or mildew
- Wood rot and warping
- Roof ice build-up
- Damp, ineffective insulation
- Discolored, blistered or bubbling paint
- Damaging moisture inside walls and attic

Excessive interior humidity is more likely to occur in newer or recently remodeled homes with tight, energy efficient construction, causing a build up of moisture to the interior. Information on excessive humidity and how to reduce condensation on your windows can be found on the Internet by searching for "*window condensation*".

Mildew Detection and Removal

The presence of mildew can be confirmed by placing a drop of household bleach on the suspected mildew area. If small gas bubbles develop in the droplet of bleach, mildew does exist.

To prevent personal injury during mildew removal, always wear protective eyewear, skin protection, and keep the area well ventilated.

Exterior Mildew

Mildew thrives in warm, moist environments and will grow best under these conditions. However mildew can grow to some degree under most climatic conditions. Mildew growth is usually brown or black in color and, for this reason, may be mistaken for dirt on the exterior of your window or door.

Exterior mildew may be removed with the following solution applied with a soft bristle brush using medium pressure. Rinse the finish well with clear water after cleaning. Make sure the area is clean and reapply if the discoloration persists.

- 1/3 cup (79 ml) powder laundry detergent
- 2/3 cup (158 ml) trisodium phosphate (TSP)
- 1 quart (946 ml) household bleach
- 3 quarts (2839 ml) of water

NOTE: Stronger concentrations of cleaner may damage the exterior surface or finish.

Interior Mildew

If your home has excessive interior moisture, you may experience some discoloration on building materials in various parts of your home, including the lower portions of your windows or doors. This discoloration may be the result of mildew growth.

Interior mildew may be removed using a mixture of one cup household bleach with one gallon water. Apply with a sponge and let dry, if condition persists make sure the area is clean and reapply.

NOTE: In some cases where the interior finish has been damaged it may be necessary to refinish the damaged area.

Glass

Cleaning the Glass

The best method to clean the glass on your Integrity product is to first soak the glass surface with a clean water and soap solution to loosen dirt or debris. Use a mild, non-abrasive window washing solution and apply with a non-abrasive applicator. Immediately after washing the glass, remove all of the cleaning solution with a squeegee, taking care not to allow any metal surface of the cleaning equipment to touch the glass surface. Make sure that no abrasive particles are trapped between the glass and the cleaning material. Window and door gaskets, sealants and frames are susceptible to deterioration if cleaning solutions are not rinsed and dried immediately after cleaning.



CAUTION:
Do not use razor blades, knives or scrapers for cleaning glass surfaces.



Tempered Glass

Certain Integrity windows use tempered glass for safety reasons. Tempered glass is heated and cooled at an accelerated rate, adding strength and shatter resistance. You may notice a slight amount of distortion, this is normal and due to the tempered glass fabrication process. The logo in the corner of each piece of tempered glass is required by code and safety regulations.

Glass Breakage



Should the glass in your window or door happen to break, make sure you use the appropriate personal protection equipment to remove the broken glass: eyeglasses or goggles, sturdy gloves, and heavy protective clothing. Dispose of broken glass in a secure container. Failure to properly handle and dispose of glass could result in injury. Contact your Integrity retailer for information on sash or panel replacement.

Glass Care Do's and Don'ts

Do...

- Clean glass when dirt and residue appear
- Avoid cleaning glass surfaces in direct sunlight
- Start cleaning at the top of the building and continue to lower levels
- Soak the glass surface with a clean water and soap solution to loosen dirt and debris
- Use a mild, non-abrasive commercial window cleaning solution
- Wipe all cleaning solution from window gaskets, sealants and frames

Don't...

- Use scrapers of any size or type for cleaning glass
- Allow dirt and residue to remain on glass for an extended period of time
- Clean glass in direct sunlight
- Allow water or cleaning residue to remain on the glass or adjacent materials
- Begin cleaning without rinsing excessive dirt and debris
- Use abrasive cleaning solutions or materials
- Allow metal parts of cleaning equipment to contact the glass
- Trap abrasive particles between the cleaning materials and the glass surface
- Allow splashed materials to dry on the glass surface

Finishing the Interior on Wood-Ultrex® Products

If you have a brand new, bare wood Integrity Wood-Ultrex window or door, you must finish it immediately to prevent possible damage to the wood. Make sure bare wood door interior surface is clean and dry. Remove any handling marks, debris, or effects of exposure to moisture by sanding lightly with fine sandpaper and wiping clean before applying your choice of finish. Integrity uses a rubber-like material between glass panes and wood sash frames to ensure a weather tight seal. Occasionally, an excess of this silicone sealant, called “squeeze out,” appears around the edge of the glass. You can safely scrape off squeeze out with a plastic putty knife without damaging the weather tightness of your unit. It is extremely important that you do not paint locks, hardware, weather strip or jamb liners. Also, use paints, stains and varnishes with care; they contain solvents which, when coming in contact with plastics and vinyl weather strip, cause these materials to lose their flexible qualities.



CAUTION: Do not apply paint to the Integrity factory pre-finish without first contacting your Integrity dealer for proper instructions.

Painting

When painting Wood-Ultrex series interiors, use only a high quality oil base or latex paint. To provide a good adhesion of paint, a compatible prime coat should be applied. Paint with panels open (or removed) and do not close until thoroughly dry. Apply one coat of primer and two coats of top quality paint according to the paint manufacturer’s instructions.

Staining



Prior to staining it may be desirable to apply a wood conditioner to obtain a more even finish. Follow the manufacturer’s recommended instructions.

When painting Wood-Ultrex series interiors, apply stain according to the manufacturer’s instructions. Apply as many coats of stain as necessary to achieve the desired color. After the stain is thoroughly dry, apply at least two coats of sealer (i.e. varnish or polyurethane).

Ultrex[®] Care and Maintenance

Integrity products feature Ultrex[®], an advanced glass fiber reinforced material, with a finish coat applied during the fabrication process. This factory applied durable finish allows Integrity's exterior to withstand extreme temperatures, atmospheric pollutants while retaining its color and gloss. This translates into a beautiful, low maintenance exterior. Surface dirt can be removed by washing with a mild detergent and rinsing with clear water. Use a soft brush, such as a long-handled car washing brush, to remove any bugs, grime, dirt or dust. Before using more aggressive cleaners on stubborn stains, test the solution on an inconspicuous area before washing. A thorough clear water rinse should follow.

Cleaning Ultrex

For regular cleaning and maintenance of Ultrex use a non-abrasive household cleaner as listed below:

Ultrex Compatible Cleaners

The following household chemicals are recommended for Ultrex cleaning:

- Fantastik[®] cleaning detergent
- Lysol[®]
- Murphy's[®] Oil Soap
- Ivory[®] dish soap (1% water)
- Spic and Span[®]
- Tide[®] liquid detergent (standard household strength)
- Windex (standard household strength, 5% isopropyl alcohol content or less)

The above chemicals are not recommended for use with any abrasive materials or applicators, and are only suitable if used by placing the chemical on a non-abrasive applicator and wiping the Ultrex surface in a gentle fashion. Extreme pressure or scrubbing action is not recommended. In addition, the above materials may leave a residue on the Ultrex surface following their use.

As recommended previously, a mild detergent solution (water-based) is recommended for cleaning by applying the solution to a soft cloth and wiping the Ultrex surface.

No solvents, paint thinner or other chemicals of any type are recommended for use with Ultrex, as they may affect the integrity, functionality and appearance of the coating.

Repairing Ultrex®

You Will Need to Supply:

Utility knife
Putty knife
Epoxy putty
120 - 150 grit sandpaper
320 - 400 grit sandpaper
Quality exterior grade primer

NOTE: Consult your Integrity representative for information on locally available epoxy putty.

1. Using a utility knife carefully cut around the damaged Ultrex area to remove any jagged edges or loose fibers.
2. Follow manufacturer's instructions for mixing/blending of epoxy. Fill the damaged area thoroughly by pressing epoxy in with a putty knife and remove excess.
3. Once the epoxy has set and cured, sand the repaired area with 120 - 150 grit sandpaper until the desired profile/depth has been achieved. Finish sanding with 320 - 400 grit sandpaper.
4. Lightly sand the surrounding area to remove the factory finish with 320 - 400 grit sandpaper. Coat the repaired and surrounding area with a quality primer per epoxy manufacturer's instructions. When primer has dried and cured cover with a quality exterior grade acrylic latex coating (See Painting Ultrex).

Painting Ultrex®

You Will Need to Supply:

Foam paint brush
Masking tape
320 - 400 Grit sandpaper
Quality exterior grade acrylic latex paint



Spot test a small area using the following procedures. After the seven to ten day Acrylic latex paint cure time check to see if the paint has adhered to the unit. If the paint has not adhered to the surface, recheck the surface preparation procedures.

1. Thoroughly sand the factory finish with 320 - 400 grit sandpaper.
2. Wash the surface with water and detergent to remove contaminants, rinse with clear water and dry thoroughly.
3. Mask any window components that will not be painted.
4. Coat the Ultrex with a quality exterior grade acrylic latex paint.
5. Acrylic latex products gain full adhesion after seven to ten days cure.

NOTE: If the finish is scratched, peeled or otherwise compromised down to the Ultrex substrate see "Repairing Ultrex" section.

Screens

Cleaning and Safety

The most effective method of cleaning the screens on your windows and doors is to remove the screens, lay them on a flat clean area (such as a sidewalk), and spray off any dust or debris with water from your garden hose. Allow the screens to completely air dry before replacing in the window or door. If you live in a cold climate, it is recommended that in the winter you remove the screen from your doors. The mesh may collect snow and ice, causing it to sag. Please see individual sections for instructions on screen removal. Contact your Integrity retailer if you require assistance with screen replacement.

NOTE: Certain size screens have a factory bow in the frame; this is to ensure a snug fit and is NOT a defect.



CAUTION: Integrity screens are designed to stand up to everyday use. However, these screens were not intended to act as a safety device. Do not allow children to sit or play on window sills, or to push or fall against window screens, as this could result in a fall through the window or door opening.

Every screen installed on an Integrity product has a non-removable label affixed to it that states:



WARNING: Screen will not stop child from falling out window. Keep child away from open window.



Maintenance, Operation and General Service

In the following pages you'll find maintenance information on individual Integrity products. Refer to the product illustrations for the names of your particular windows or doors.

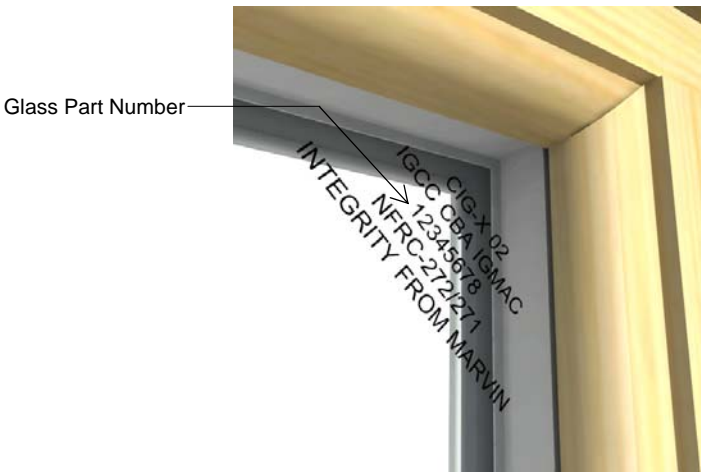
Information in this section includes maintenance tips and operational tips, such as removing the window sash. Read completely through the instructions before beginning to work on your windows or doors to make sure you have the necessary tools and parts.

Exterior finishes on doors can be cared for in the same manner as Integrity windows. See interior and exterior maintenance information. Take care with your door's sill - make sure you prevent damage by not getting any paint, solvent or chemicals on sills. See individual door sections for any specialized sill care.

If you have concerns not explained in this manual, or if the solution seems inappropriate for your problem, contact your local Integrity retailer.



*When contacting your Integrity Retailer it may be helpful to provide them with the **"Glass Part Number"** etched on the upper right corner of the glass*



Casement

Operation and Maintenance

The roto-gear is the operating mechanism that you crank to open and close your casement and awning windows. Your casement lock seals the window tightly closed. Excessive cranking when closing your window does not improve the seal and may damage your roto-gear.

Roto-gears should be lubricated once a year with white lithium grease (available at any hardware store) to keep operation smooth. The hinge joints and locking mechanism should be lubricated on occasion with a silicone based spray. Be sure to clean off all dirt, debris or sand before lubricating.



Excessive lubrication may cause damage to the window's finish. Make sure that any excess is immediately removed.

The sash tracks should be occasionally cleaned out with a soft bristle brush. If your casement is less than 24 1/4" (622 mm) in width, your roto-gear arms and assembly may differ from those shown.

Removing and Installing the Screen

To remove casement/awning screen, grasp screen plungers. Pull plungers to release. Tilt screen toward you, and lift screen from channel. To install casement/awning screen, reverse above procedure.



Awning

Operation and Maintenance

Awning hinges, roto-gear operator arms and sash guides can be oiled with a few drops of light household oil or silicone spray. Operating hardware should be lubricated during your annual inspection. Simply crank open the window and lubricate hardware with white lithium grease. Interior and exterior finishes can be cared for in the same manner as any other Integrity window or door.



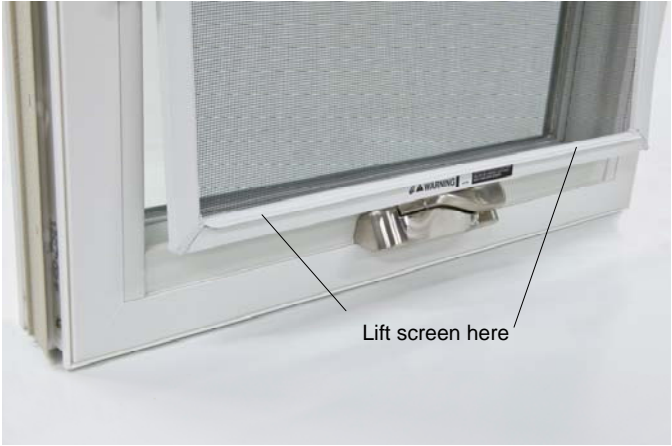
Excessive lubrication may cause damage to the window's finish. Make sure that any excess is immediately removed.



All Ultrex® Casement and Awning Screen Removal

To remove All-Ultrex casement/awning screen, lift the screen at the bottom to compress the springs at the top. Pull the bottom of the screen out and remove from frame.

NOTE: All Ultrex product shown.



Top screen springs
released



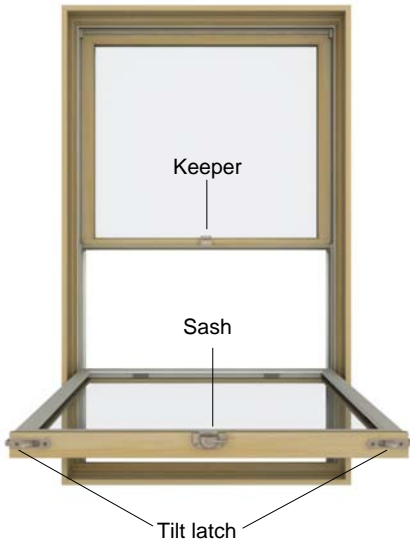
Double Hung

Operation and Maintenance

Periodically clean the jamb liners where the sash slides. Keep them dirt and grease free by washing with a gentle dish detergent. Check the exterior caulking on your double hung windows annually.

How to Tilt a Double Hung Sash (for ease of cleaning)

1. To tilt the bottom sash inward, unlock and raise the sash about 3" (76 mm). Grasp both tilt latches (found on the check rail), slide inward and tilt the sash toward you to a horizontal position. See illustrations below.
2. To tilt the top sash inward, lower the sash about 6" (152 mm). Grasp both tilt latches (found on the top rail), slide inward and tilt the sash toward you to a horizontal position. See illustrations below.



How to Remove a Double Hung Sash

1. To completely remove the sash from the frame, hold the sash at 90° to the frame as shown. Release the sash pivot pins from the clutch assemblies by first raising the entire sash 1"- 2" (25-51 mm). Then raise just one side of the sash further until the sash pivot pins clear the jambs, remove to interior.

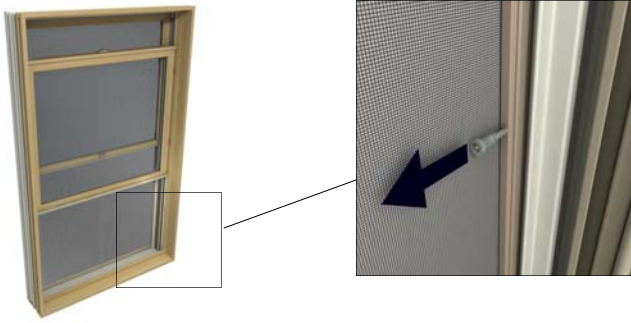


Installing a Double Hung Sash

1. To install the top sash, hold the sash horizontally at 90 degrees to the frame. Guide the sash pivot pins into the exterior sash track on the jambs above the clutch assemblies, lower both sash pins onto the clutch cams making sure the bottom of the sash is level when pins are completely engaged. Slide each tilt latch release toward the center of the unit and gently ease the sash into position. Release each latch into the exterior sash track, lower the sash slightly then raise to the fully closed position. Check operation of sash.
2. To install the bottom sash repeat the installation procedure used for installing the top sash. Utilize the interior sash track and lower sash into the closed position, check operation of sash and lock.

Removing the Double Hung Screen

To remove the screen to the interior, grasp the lower screen plungers and pull to release as shown in illustration. Push screen outward and pull down slightly. Turn the screen sideways and bring into dwelling.



Resetting a Slipped Clutch Assembly



CAUTION: Clutches are under extreme spring tension

Measure the clutch dimension from sill on the opposing balance assembly for the same sash and temporarily mark that dimension on the jamb carrier that contains the released clutch (must be within 1/8" (3 mm)). Using a flat screwdriver, rotate the balance clutch cam in the clutch assembly to the released position. Hold the screwdriver firmly and slide the clutch assembly down the jamb carrier to the mark. Rotate the balance clutch cam to the open locked position (cam opening up). Release the screwdriver carefully from the clutch assembly (it must lock in place or damage will occur). Compare clutch heights from the sill for the sash affected. They **MUST** be within 1/8" (3 mm) of each other or damage may occur when sash are reinstalled, adjust height as needed.



Glider

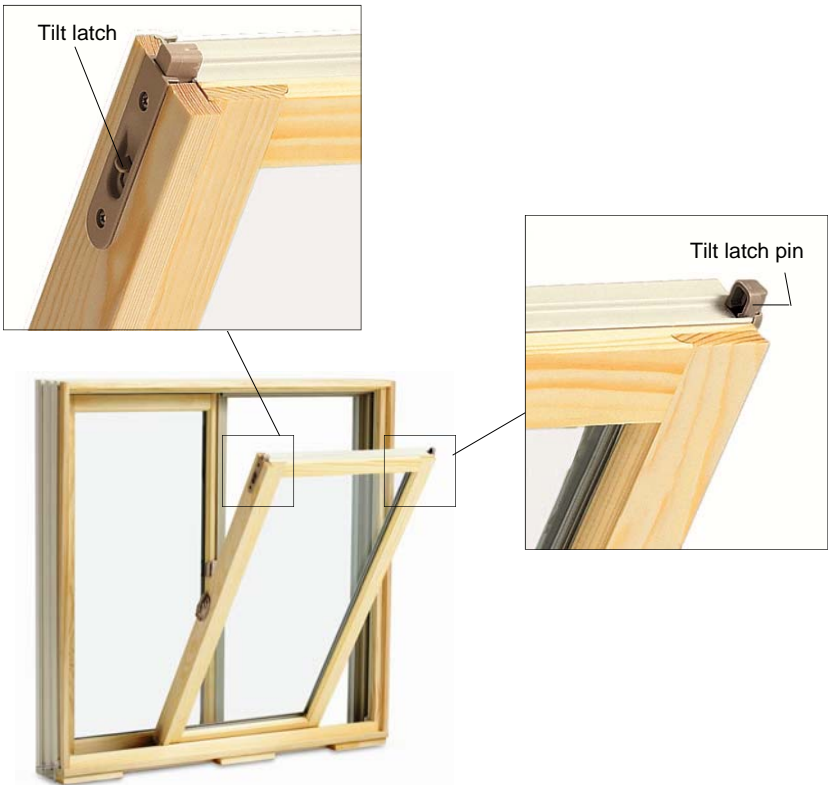
Operation and Maintenance

Periodically clean the tracks where the sash must slide. Keep them dirt and grease free, and spray them lightly with furniture wax to prevent sticking. Be sure to wipe off any excess wax.

Sash Removal

Slide the operating sash to stationary side of the unit (approximately 2"-3" (51—76 mm) from stationary jamb). With latches depressed, located at the top of the sash, tilt the sash inward until it clears the unit frame; lift the sash off the sill track. To replace the sash, reverse the above procedures.

NOTE: Only the operating sash of a Glider can be removed from the frame.



Removing and Installing the Screen

To remove the screen open the operator sash completely. Grasp the screen pin located on the jamb stile side of the screen. Pull the pin toward the center of the unit until the screen frame can clear the screen channel. Push the screen out to the exterior and turn diagonally to bring into the dwelling.

Replace the screen with the operator sash completely open and position the screen on the exterior of the window with the springs toward the meeting stile of the unit. Making sure the springs are seated in the screen channel, pull on side tabs until the screen clears the frame. Pull screen in toward the interior until the jamb stile of the screen aligns with screen channel; release pin.



NOTE: Pull pin away from frame, then push out.



Patio and Sliding French Doors

Operation and Maintenance

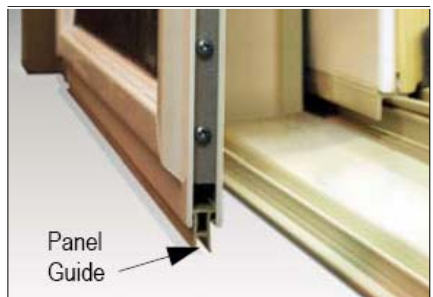
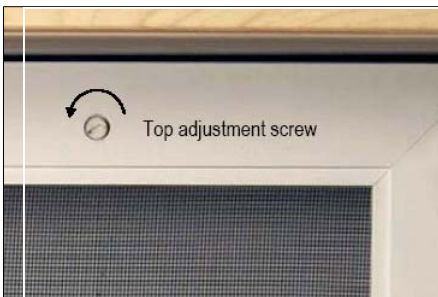
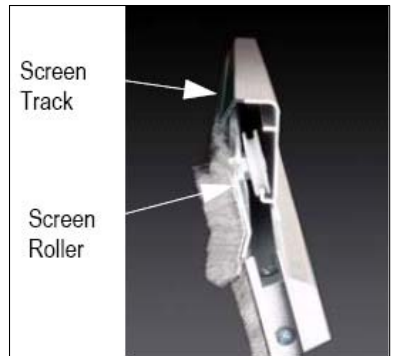
The Patio and Sliding French Doors require very little maintenance to keep them functioning efficiently. Most problems can be eliminated by keeping the sill clean, ensuring smooth door operation. Chemicals, solvents, paints and other harsh substances should never come in contact with the sill. Remove any paint, grease or caulk with 50% isopropyl alcohol. Door handles can be wiped down with a damp cloth to remove fingerprints and smudges.

It is very seldom that door rollers, lock and hinges require lubrication. Occasionally use spray lubricant to keep operation smooth (rollers are visible underneath the operator panel). If you live in a cold climate, it is recommended that you remove the screen door in the winter. The screen mesh may collect snow and ice, causing it to sag.

Removing the Screen

To remove the screen panel, unlock and partially open the screen door. From the exterior, pry the screen panel guide up with a putty knife starting at one corner. Pull the guide off the track working your way toward the other end. Once the bottom of the screen panel is completely released from the sill track, pivot the bottom of the screen out and push the top of panel approximately 5 degrees toward the head jamb.

This will release the screen panel rollers from the head jamb screen track. Remove the panel from the door.



Installing the Screen

To reinstall the screen, hold the screen panel with the top rollers facing you. While tilting the bottom of the screen panel away from the door, lift the rollers into the screen track and pull the panel toward your body to engage the rollers in the track. Make sure the rollers are seated in the track by moving the screen panel back and forth. Once you are sure the rollers are fully seated, pivot the screen panel into position toward the sill and place the bottom screen panel guide into the sill track by lifting it with your fingers or by lifting with a stiff putty knife.

The screen can be adjusted from the interior by loosening or tightening the top roller screw nearest the locking jamb. Adjust the screen so that it is parallel to the locking jamb or casing. An even reveal should be achieved along the entire height of the jamb.



Removing Sliding Door Panels

Removing door panels is a relatively complicated procedure. If you need them removed, please contact your retailer for a service person to remove the panel for you, or reference our detailed installation or panel removal instructions online at www.integritywindows.com.

Swinging French Door

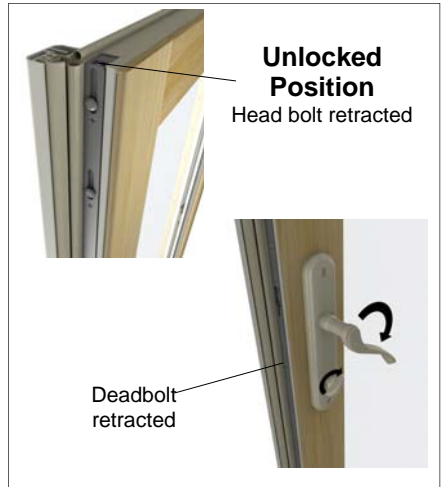
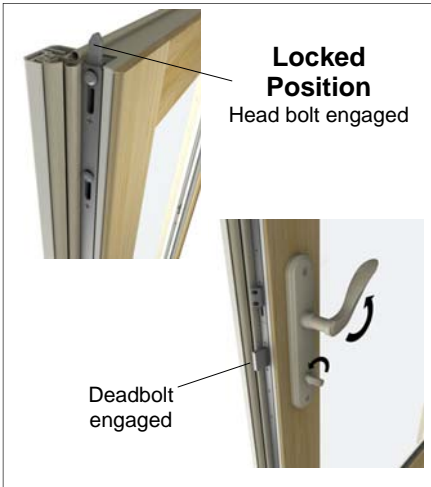
Operation and Maintenance

Your French Door requires very little maintenance. To maintain sill appearance, wash with a mild soap and water solution.

Remove fresh paint splashes, grease or caulk with 50% isopropyl alcohol. You may wish to remove door panels for moving or other reasons. If you need them removed, please contact your Integrity retailer for either detailed instructions or for a service person to remove the panel for you.

Handle Operation for Multi-Point Lock

Always close and lock your passive panel first and the operating panel (with thumb turn) second. Integrity's multi-point hardware has locking bolts at the head and base of the door. Lifting the handle 45 degrees upward will set the head and foot bolts in place for a secure seal. A 90 degree turn of the key from the outside or the thumb turn on the inside will lock the deadbolt in the handle assembly. When the deadbolt is unlocked, downward pressure on the handle will release the bolts and latch and the door will open. Securely lock by engaging the deadbolt, head and foot bolts; using only one or the other does not offer full security.



Hinge Adjustment Procedures

NOTE: (Inswing door shown) For Outswing door view panel clearance from exterior.

Should you find it necessary to make minor adjustments to your Integrity Inswing French door after it has been permanently installed, the adjustable hinge system will allow you to do this.

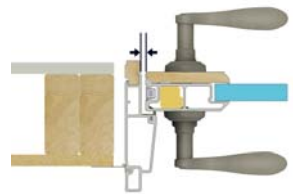
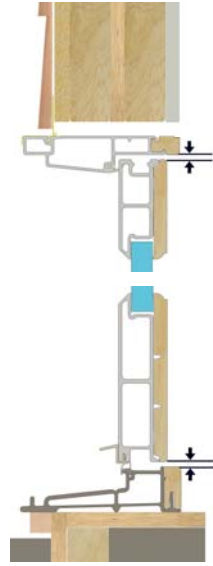
IMPORTANT: Adjustable hinges are not intended to compensate for an improperly installed unit.

Adjustments should only be made when panel misalignment is visible or causes poor operation of door/lock. Make any adjustments in small increments, check results, readjust or proceed as required. The vertical adjustment screw located on center hinge(s) has a range of 32 turns. Horizontal adjustment screws located on top and bottom hinges have a 7 turn range.

Check panel clearance at sill and head jamb. The panel should have an even clearance at head jamb and at bottom. Align panel vertically as needed by rotating center hinge vertical "V" Phillips head adjustment screw. The arrow on hinge indicates direction the stationary or jamb leaf/pin will travel in relation to operator panel/adjustment leaf. Check index mark on hinge leaf (near patent number) and adjustment leaf edge to determine amount and direction of panel movement. See illustration.

Check panel alignment with locking jamb; panel should have an even clearance along the jamb. Rotate horizontal adjustment screw clockwise to increase, counterclockwise to decrease jamb/panel clearance at the appropriate hinge i.e. if increasing clearance at top, bottom hinge may have to be adjusted to decrease clearance to avoid hinge binding. See illustration.

After panel alignment is corrected, recheck latch and deadbolt operation.



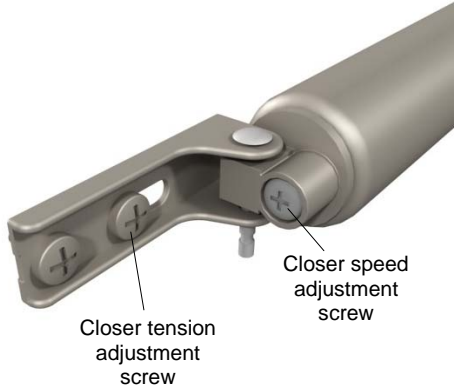
Inswing Door Screen Removal

If you live in a cold climate, it is recommended that during the winter months you remove the screen door to avoid snow and ice from collecting, causing the mesh to sag. To remove the swinging screen door, first open the active screen panel and disconnect the auto closer. Then remove the hinge screws from the active screen panel hinges, remove the panel from the hinges and store. On XX configurations, open the passive screen panel and remove the hinge screws in the same manner as the active.



Adjust Closer Tension

Adjust the closer tension on your swinging screen door by loosening the two screws attaching the door bracket to the screen panel. Slide the bracket and closer left or right as needed and tighten screws. Adjust the closing speed by tightening or loosening the adjusting screw located at the rear of the cylinder assembly.



PVD Finish (Inswing and Outswing French Doors)

PVD is the generic acronym for Physical Vapor Deposition. The PVD finish is regarded as the highest grade finish available in the window and door industry and is suitable for coastal applications. The PVD finish is available in the Brass, Satin Nickel, and Oil Rubbed Bronze hardware options.

Swinging Door Handles



PVD Brass



PVD Satin Nickel



PVD Oil Rubbed Bronze

Integrity Windows and Doors Limited Warranty

This Limited Warranty applies to Integrity® windows and doors purchased from an authorized Integrity dealer, and extends to the owner of the structure in which the products are originally installed. This Limited Warranty is fully transferable. This Limited Warranty is applicable only to product installed in the U.S.A. and Canada. For information on warranties available in other countries, please contact Integrity at the address or phone number below.

• GLASS COMPONENTS

Glass warranties apply to factory-installed glass or Integrity-supplied glass installed by Integrity-authorized service personnel. Clear insulating glass with stainless steel spacers is warranted against seal failure resulting in visible obstruction through the glass for twenty (20) years from the original date of purchase. Glass is warranted against stress cracks caused by manufacturing defects for ten (10) years from the original date of purchase. All other glass and glass features are provided with the same warranties, limitations, and exclusions Integrity receives from its supplier; contact Integrity for further details.

• NON-GLASS COMPONENTS

Non-glass components are warranted to be free from manufacturing defects for ten (10) years from the original date of purchase. Non-stainless steel hardware, hardware without physical vapor deposition ("PVD"), and hardware not otherwise specifically-designated as having a "coastal" finish, when installed within one (1) mile of a sea coast or other salt water source, are not warranted.

• INTERIOR PRE-FINISH

Factory-applied interior pre-finish is warranted to be free from Finish Defects for a period of five (5) years from the original date of purchase. Finish Defects include cracking, peeling, checking, delamination, blistering, flaking, excessive chalking, fading or change in color in excess of 5 Delta-E Hunter units (per ASTM D2244), under normal interior environmental conditions. The appearance of a raised grain or other natural variation in the wood grain may be enhanced by the pre-finish and is not a defect. Pre-finish is applied prior to assembly and is not intended to cover joinery seams.

• EXCLUSIVE REMEDY

If a covered defect appears during the term of the applicable warranty, Integrity will, at its option, repair or replace the product or component, or refund the price paid for the defective product or component. Removal, installation, finishing, refinishing, and disposal costs and services are not included. Integrity will endeavor to supply original replacement parts; however, replacement parts may differ from the original parts. Replacement parts, including upgrades, are warranted for the remainder of the original product warranty.

• EXCLUSIONS

Damage, defects, or problems resulting from causes outside Integrity's control are excluded from coverage under the Limited Warranty. Such causes include, without limitation:

• Installation, Maintenance, and Acts of God

- installation not in conformance with Integrity's installation instructions and applicable building codes
- non-standard installation, such as non-vertical or sloped glazing, upside down, or out-of-square
- installation or use in applications exceeding design standards
- field mulls; field finishes
- insulating glass installed more than 5000 feet above sea level without capillary tubes (except as specifically provided in the Integrity Limited Warranty High Altitude Supplement)

- installation or use of Wood-Ultrex® product near pools, saunas, hot tubs, or other high-humidity environments
- failure to follow Integrity's care and maintenance instructions
- failure to properly treat, seal, and maintain exposed wood
- use of brick wash, razor blades or other inappropriate cleaners or chemicals
- misuse, abuse, modification, alteration, accident, negligence
- shifting or settling of the structure in which the product is installed
- extreme weather events, extreme or unusual atmospheric conditions
- normal wear and tear; normal discoloration or fading of finishes
- variation in wood color, texture, and grain
- glass imperfections consistent with ASTM or other industry standards which do not affect structural integrity
- war, insurrection, civil unrest, terrorism, or Acts of God

• Warp

Bow, twist, and warp shall not be considered defects unless in excess of ¼" in the plane of the door.

• Water Management

Products installed in wall systems that do not allow for proper moisture management, such as exterior insulation and finish systems (EIFS) or "synthetic stucco" without effective engineered drainage systems, are not covered under the Limited Warranty.

• Thermal Efficiency

Integrity does not warrant the amount or percentage of argon or other inert gas present in insulating glass at any time after manufacture. Inert gas dissipates over time, and may be ineffective in products manufactured with capillary tubes. Thermal efficiencies vary with the application of the product. Integrity does not warrant a specific level of thermal efficiency will be maintained by inert gas, low emissivity coatings, or other product features.

• Condensation

Condensation is not a product defect, but the result of excess humidity. Condensation, frost, or mold, mildew, or fungus on product surfaces is not covered by the Limited Warranty.

• Finish Degradation

Degradation or failure of the Ultrex® finish, hardware, or other components due to environmental conditions such as air pollutants, acid rain, salt accumulation, chemicals, or exposure to other corrosive or abrasive substances is not covered by the Limited Warranty.

• Screens

Screens are not designed to, and will not prevent falls.

• DISCLAIMERS, LIMITATIONS, AND ADDITIONAL TERMS AND CONDITIONS

• Disclaimers

This Limited Warranty is the only warranty, written or oral, express or implied, provided by Integrity. No dealer, employee, or agent of Integrity, nor any third party, may create or assume any other liability, obligation, or responsibility on behalf of Integrity. ALL IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. Any implied warranty which cannot be disclaimed under applicable law will be limited in duration to the shortest permissible term and, in any event, will not exceed the term of the applicable express limited warranty; the requirements for presenting any claim so affected will be as provided in this Limited Warranty. Any product or component not specifically subject to this Limited Warranty or another written Integrity product warranty is

provided AS IS and without warranty. This Limited Warranty gives you specific legal rights and you may also have other rights, which may vary from state to state. THIS WARRANTY IS NOT A WARRANTY OF FUTURE PERFORMANCE OR A STATEMENT OF THE USEFUL LIFE OF ANY INTEGRITY PRODUCT, BUT ONLY A WARRANTY TO REPAIR, REPLACE, OR REFUND.

• **Limitations**

IN NO EVENT WILL INTEGRITY BE LIABLE FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES. IN NO EVENT WILL INTEGRITY'S LIABILITY EXCEED THE PRICE PAID FOR THE AFFECTED PRODUCT OR COMPONENT.

The limitations of warranty and liability set forth herein shall survive and apply, even if the exclusive remedy set forth in this Limited Warranty is found to have failed of its essential purpose.

• **Certifications and Ratings**

Many standard Integrity products are labeled with the Window & Door Manufacturers Association (WDMA) Hallmark Certification. WDMA Certification is based on the performance of a single sample of the product at the time of manufacture. Many standard Integrity products are labeled with National Fenestration Rating Council (NFRC) ratings. NFRC ratings are based on a combination of computer simulations and physical testing of product samples. Certifications and ratings typically apply to single products only; however certain factory-mulled or combined product configurations may also be certified. Performance of individual products may vary and will change over time, depending upon the conditions of use. WDMA certifications and NFRC ratings are not performance warranties. For details on Hallmark Certification, go to www.WDMA.com. For details on NFRC Energy Performance ratings, go to www.NFRC.org.

• **Suitability**

Determining the suitability and compliance with local or other applicable building codes or standards, of all building components, including the use of any Integrity product, and the design and installation of any flashing or sealing system, is the responsibility of the buyer, user, architect, contractor, installer, and/or other construction professional. Integrity will not be liable for any problem or damage relating to inappropriate or faulty building design or construction, maintenance, installation, or selection of products. Windows and doors are only one element of a structure; Integrity does not warrant that third party certification of a building or project to any specific standard will be achieved through the use of any Integrity product.

• **No Waiver**

Integrity may, in its discretion, extend benefits beyond what is covered under this Limited Warranty. Any such extension shall apply only to the specific instance in which it is granted, and shall not constitute a waiver of Integrity's right to strictly enforce the exclusions, disclaimers, and limitations set forth in this Limited Warranty in any or all other circumstances.

• **WARRANTY CLAIMS**

All warranty claims must be made within sixty (60) days of the appearance of the defect. To make a warranty claim, contact your local Integrity dealer or distributor. If you do not know the name of your local dealer or distributor, use the "Where to Buy" feature at www.integritywindows.com, or call 800-533-6898 to locate the one nearest you. If, after five days, your dealer or distributor has not responded, send a written request to Integrity Windows & Doors, PO Box 100, Warroad, MN 56763, Attn: Warranty Department. Include the following information: your name, address, and telephone number, the date you purchased your product, the name of the dealer or distributor from whom you purchased your product, a description of product, order number, specific definition of problem or defect, actions you have taken and contacts you have made with your local dealer or distributor. Once we've received your letter, we will respond to your claim promptly.

Effective Date: April 25, 2011

High Altitude Limited Warranty Supplement

This Limited Warranty Supplement, in conjunction with the Integrity® Limited Warranty, applies to Integrity products purchased from an authorized Integrity dealer, and installed in the United States or Canada. THIS LIMITED WARRANTY SUPPLEMENT IS SUBJECT TO AND INCORPORATES THE TERMS, CONDITIONS, LIMITATIONS, AND EXCLUSIVE REMEDY SET FORTH IN THE INTEGRITY LIMITED WARRANTY (available from your Integrity dealer, at <http://www.integritywindows.com>, or by calling (888) 419-0076.)

The terms and conditions of the Integrity Limited Warranty will apply to glass without capillary tubes in the specific products identified in Integrity's published Capillary Tube Usage Guidelines ("Guidelines") and installed at or below the altitude identified in the Guidelines for such product. Glass without capillary tubes installed above the altitudes identified in the Guidelines is not warranted. Glass without capillary tubes in products not identified in the Guidelines is not warranted above 5000 feet. Integrity may amend the Guidelines at any time in its sole discretion.

Product style, size, shape, and configuration all affect glass installed in high altitude environments. For certain products, aesthetic effects may be observed at altitudes above 5000 feet. Integrity products are made to order in a wide variety of styles, sizes, shapes, and configurations. For best results, please consult your authorized Integrity dealer when installing product above 5000 feet.

• LIMITATIONS

In addition to all terms, conditions, limitations, and exclusive remedy set forth in the Integrity Windows and Doors Limited Warranty, coverage under this Limited Warranty Supplement does not extend to the aesthetic quality of the glass. Bowing, curvature, and other distortions of glass will naturally occur with increased altitude, and are not considered defects. Glass bowing or deflection may also result in check-rail interference in sliding windows or audible sounds caused by sash or panels during operation.

IN NO EVENT WILL INTEGRITY BE LIABLE FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES. IN NO EVENT WILL INTEGRITY'S LIABILITY EXCEED THE PRICE PAID FOR THE AFFECTED PRODUCT OR COMPONENT.

The limitations of liability and disclaimers of warranty set forth herein shall survive and apply, even if the exclusive remedy is found to have failed of its essential purpose.

• DISCLAIMER

This Limited Warranty supplement, together with the Integrity Limited Warranty, is the only warranty, written or oral, express or implied, provided by Integrity. No dealer, employee, or agent of Integrity, nor any third party, may create or assume any other liability, obligation, or responsibility on behalf of Integrity. ALL IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. Any implied warranty which cannot be disclaimed under applicable law will be limited in duration to the shortest permissible term and, in any event, will not exceed the term of the applicable express limited warranty; the requirements for presenting any claim so affected will be as provided in the Integrity Limited Warranty. This Limited Warranty supplement gives you specific legal rights and you may also have other rights, which may vary from state to state. THIS LIMITED WARRANTY SUPPLEMENT IS NOT A WARRANTY OF FUTURE PERFORMANCE OR A STATEMENT OF THE USEFUL LIFE OF ANY INTEGRITY PRODUCT, BUT ONLY A WARRANTY TO REPAIR, REPLACE, OR REFUND.

Effective Date: January 1, 2011

Call 1-888-419-0076 for the Integrity® dealer nearest you.
In Canada, call 1-800-263-6161 or visit www.integritywindows.com

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