



## activPILOT CONCEPT (WINKHAUS) OPERATING AND MAINTENANCE MANUAL

### General Notes and Safety Advice

These instructions are intended for the window company. They describe essential adjustment and maintenance work. Please observe the following notices: Installation parts are to be tested regularly to ensure they are seated firmly and checked for wear. Fastening screws are to be re-tightened and parts replaced as necessary. Their functionality is to be retested afterwards. Installations may only be cleaned with mild, ph-neutral cleaning agents in diluted form. Use only cleaning agents which do not degrade the corrosion protection on installation parts. Never use aggressive, acidic or caustic cleaners, scouring agents or sharp objects to clean installation parts.

#### Operating the Tilt-Turn Window

See figure: Tilt-Turn Window

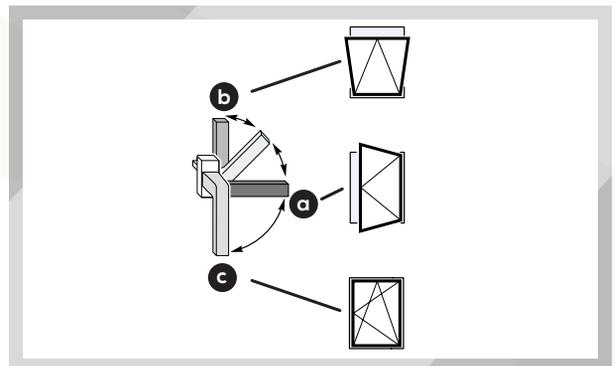
- Push the handle down (c). The window is closed.
- Move the handle to the central position (a). The window is unlocked; the sash can now be opened fully.
- Close sash. Push the handle up (b). The window is unlocked; the sash can now be tilted.

**NOTE:** Optionally tilt-turn windows can be equipped with a mini ventilation function. By turning the handle in between the shown positions (a) and (b), the “variable tilt device” is addressed. Different tilt angles of the sash can be achieved by arresting the fitting components.

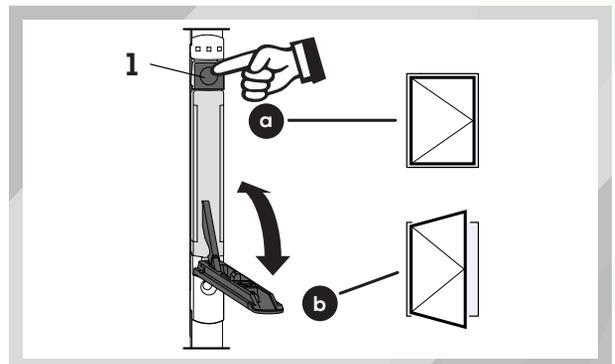
#### Operating the Double-Sash Window

See figure: Double-Sash Window

Press the unlocking button (1) and pull down the lever so it's in the end position (b); opening angle approximately 135°. The window is unlocked; the sash can be fully opened. Close sash. Return lever to original position (a). The window is closed.



Tilt-Turn Window



Double-Sash Window



# INTUS

W I N D O W S

2720 PROSPERITY AVE, SUITE 400-1  
FAIRFAX, VA 22031  
OFFICE: 1.888.380.9940  
EMAIL: INFO@INTUSWINDOWS.COM  
WEB: WWW.INTUSWINDOWS.COM

## Sash Installation and Removal

### activPilot Concept

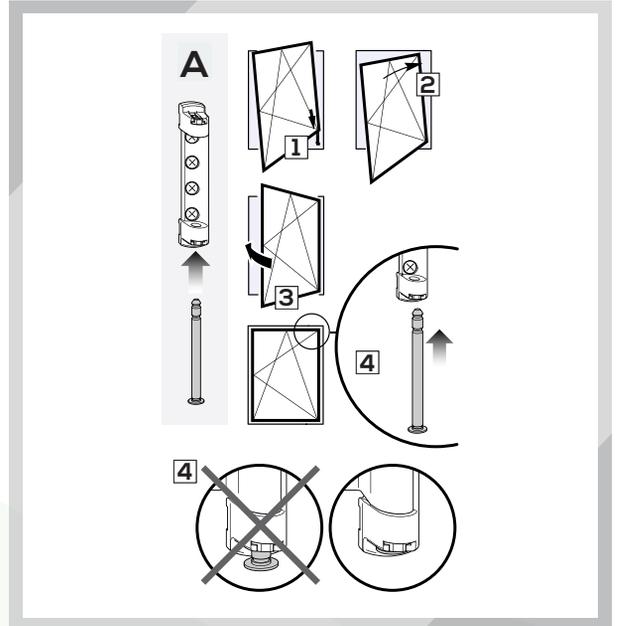
#### Tilt-Turn and Turn Double Sash Type

**ATTENTION:** Secure the window sash from falling. Take the heavy sash weight into account! Two people should carry the sash if necessary.

#### Installing the Sash (A)

- Mount the sash, adjust for a good seal and insert the pin to secure against the hinge.
- Push all end caps and sealing caps onto the corner hinges.

**NOTE:** Insert the pin from the underside (see 4).

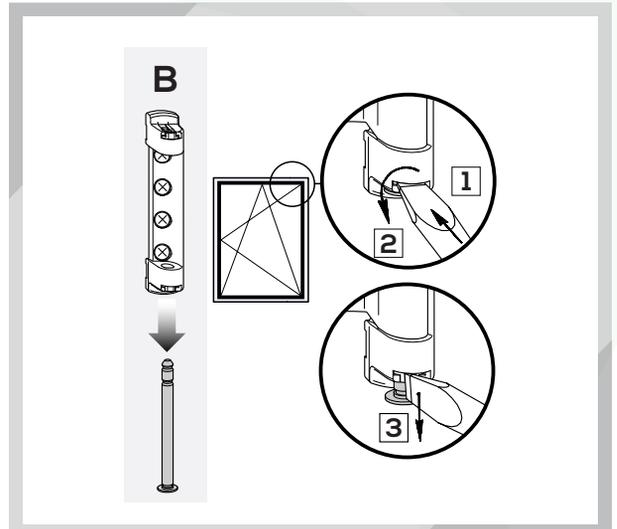


Installing the Sash

#### Removal of the Sash (B)

- Move the sash to the sealing plane.
- Release the pin from the hinge.
- Remove the sash.

**ATTENTION:** Damage to the hinge. In case of improper use and if you attempt to drive out the pin forcibly, the hinge will be damaged. Use only a screwdriver to release the pin as shown in Fig. B.



Removal of the Sash

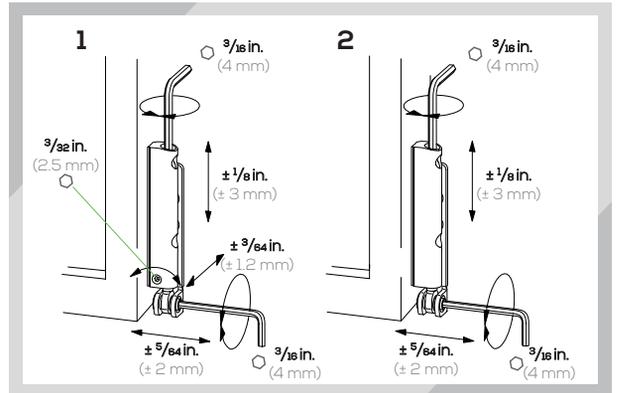


## Adjustment Options

### Corner Hinge/Sash Hinge

Sash hinge height adjustment ( $\pm 3$  mm or  $1/8$ " ) and corner hinge side adjustment ( $\pm 2$  mm or  $5/64$ " ).

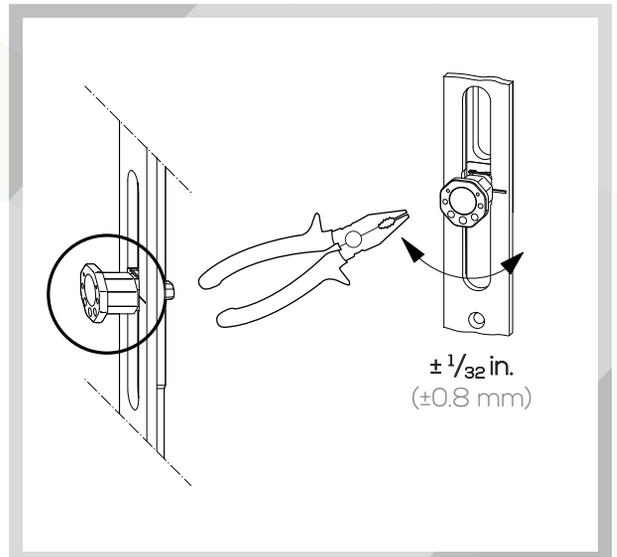
For sash hinge adjustment of the contact pressure between sash and frame ( $\pm 1.2$  mm or  $3/64$ " ) using a 2.5 mm ( $3/32$ " ) Allen key.



1. With contact pressure adjustment
2. Without contact pressure adjustment

### Octagonal Bolt

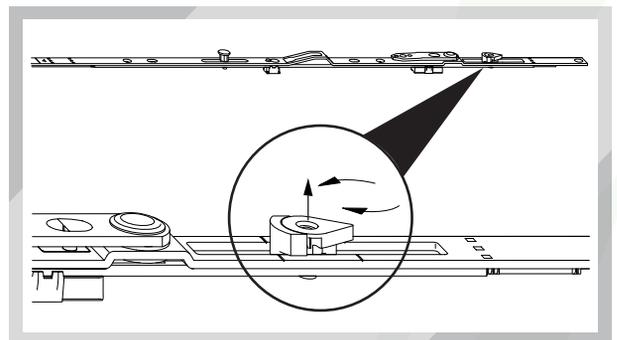
Regulate the contact pressure between the sash and the frame ( $\pm 0.8$  mm or  $1/32$ " ) by turning the octagonal bolt. The adjustment can be made by pliers.



Octagonal Bolt

### Scissor Hinge Retraction

The progressive pull-in is adjustable from 18 to 28 mm ( $45/64$ " to  $1 7/64$ " ). Release the catch by pulling up on the adjustment latch then pivot the adjustment latch away from the overlap. A variable tilt device, MSL.OS, can be used as an alternative to the progressive scissor hinge pull-in.

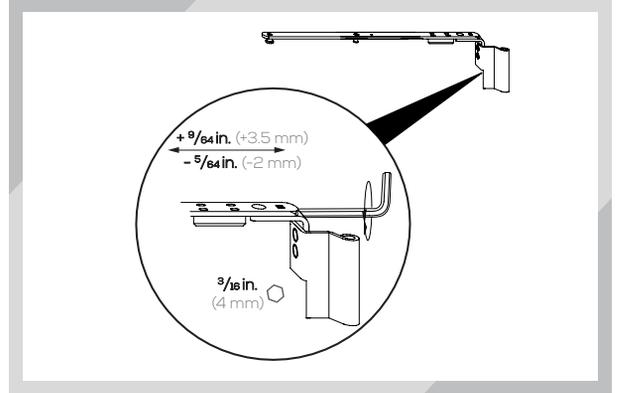


Retraction



## Scissor Hinge - Rectangular Window

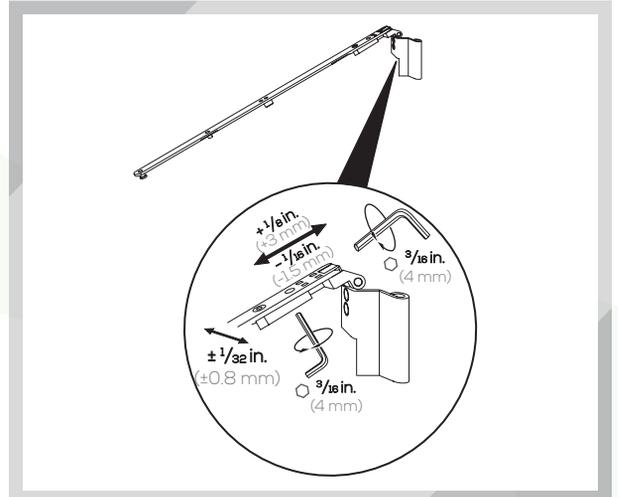
Lifting and lowering the sash (from -2 to +3.5 mm; -5/64" to +9/64") by means of a 4 mm (3/16") Allen key.



Rectangular View

## Scissor Hinge - Studio Window

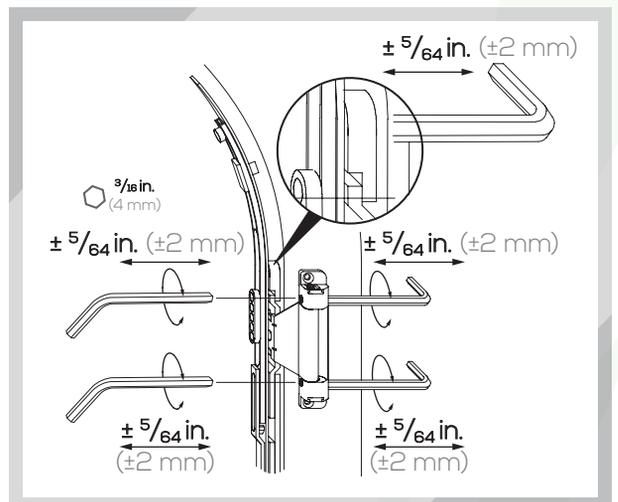
Lifting and lowering the sash and adjustment of contact pressure by means of a 4 mm (3/16") Allen key.



Studio Window

## Scissor Hinge - Round-Arch Window

Lifting and lowering the sash and adjustment of contact pressure by means of a 4 mm (3/16") Allen key.



Round-Arch Window



# INTUS

W I N D O W S

2720 PROSPERITY AVE, SUITE 400-1  
FAIRFAX, VA 22031  
OFFICE: 1.888.380.9940  
EMAIL: INFO@INTUSWINDOWS.COM  
WEB: WWW.INTUSWINDOWS.COM

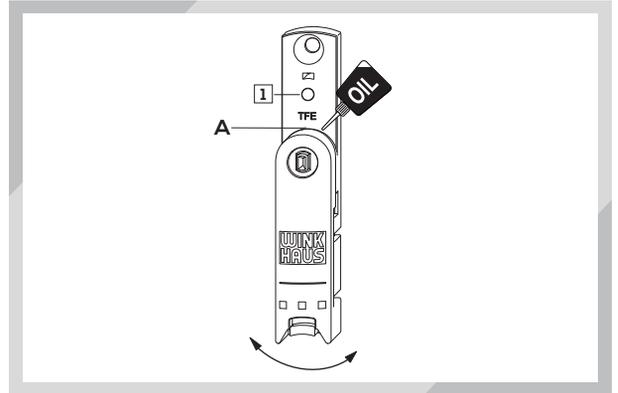
## Adjustment and Maintenance

### Dual/Triple Function Element

#### DFE/TFE Activation

The DFE/TFE element is supplied in the neutral position. Please proceed as follows:

Drive in the protruding pin to fix in place (1).  
Non-handed by swiveling out the lever once only.  
Dribble a few drops of oil (free of resin and acid)  
onto lubrication points.

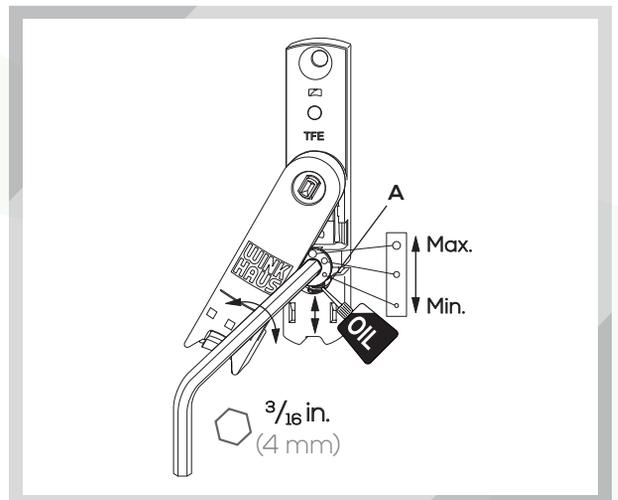


DFE/TFE Activation

#### TFE – Retaining Force of Balcony Door Catch

Adjusting the holding force by re-setting the eccentric cam with a 4 mm ( $\frac{3}{16}$ " ) Allen key.

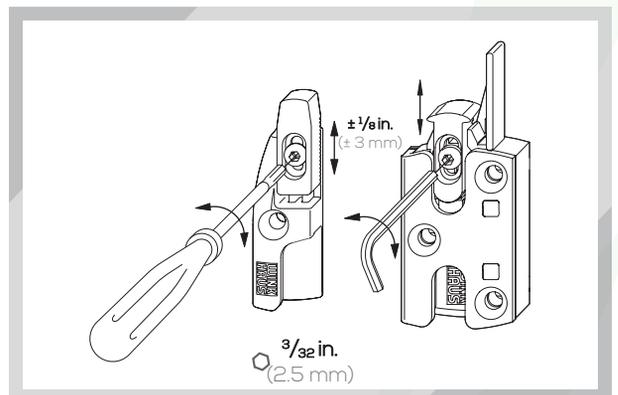
Dribble a few drops of oil (free of resin and acid)  
onto lubrication points.



TFE - Retaining Force of Balcony Door Catch

#### Frame Part DFE/TFE

Height adjustment ( $\pm 3$  mm or  $\frac{1}{8}$ " ) for sash support plate. Each time installations are adjusted, the DFE/TFE height setting should also be checked using a 2.5 mm ( $\frac{3}{32}$ " ) Allen key.



Frame Part DFE/TFE



## Maintenance

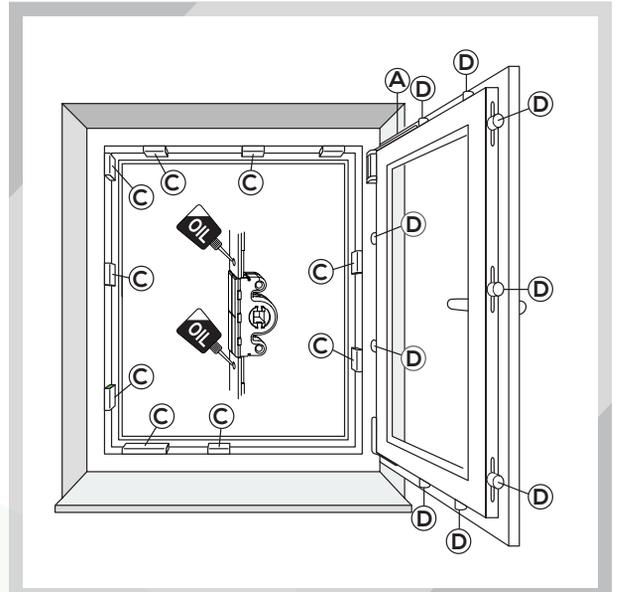
### Lubrication Points

See figure: Overview of Lubrication Points

The figure shows the location of possible lubrication points which should be lubricated at least once a year. Positions A, C, D = lubrication points relevant to function.

**NOTE:** The installation schematic shown adjacent does not necessarily match the existing installation. The number of locking positions will vary depending on size and type of the window sash.

**ATTENTION:** Risk of injury. The window could fall on removal and thus injure persons. Do not remove the window for maintenance.



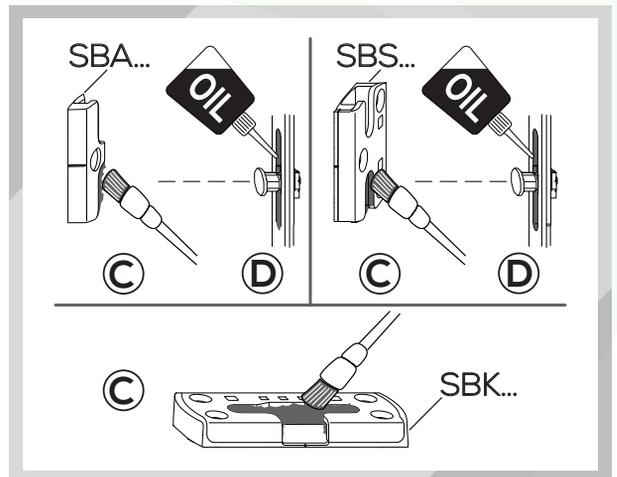
Overview of Lubrication Points

### Keeps

See figure: Lubrication Points

To keep installations running smoothly, you must lubricate the keeps once a year.

- Lubricate the keeps (C) at the run-in side with technical Vaseline or any other suitable grease.
- Coat the running surfaces of the locking bolts (D) with an oil that is free of resins and acids.



Lubrication Points



# INTUS

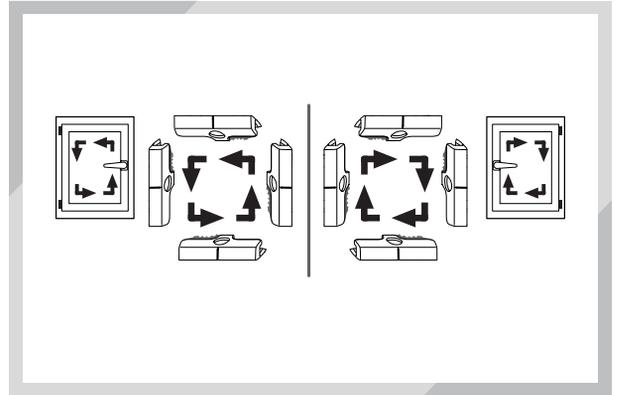
W I N D O W S

2720 PROSPERITY AVE, SUITE 400-1  
FAIRFAX, VA 22031  
OFFICE: 1.888.380.9940  
EMAIL: INFO@INTUSWINDOWS.COM  
WEB: WWW.INTUSWINDOWS.COM

## Ascertaining the Run-in Sides

See figure: Run-in Sides

- Left-handed window; handle right
- Right-handed window; handle left



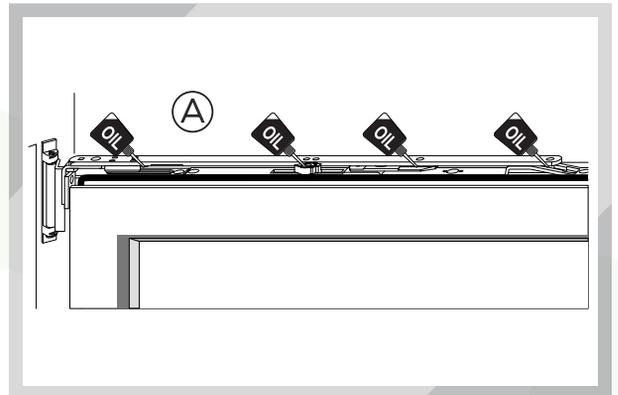
Run-in Sides

## Scissor Hinge

See figure: Scissor Hinge

All of the scissor hinge's contact points with the top rod should be oiled once annually.

**NOTE:** The scissor hinge should not be oiled or greased.



Scissor Hinge

Always also observe the guideline for product specifications/notices and liability (VHBH) when making adjustments or performing maintenance. This information can be obtained at the following Internet address:  
<http://www.beschlagindustrie.de/ggsb/richtlinien.asp>



# INTUS

W I N D O W S

2720 PROSPERITY AVE, SUITE 400-1  
FAIRFAX, VA 22031  
OFFICE: 1.888.380.9940  
EMAIL: INFO@INTUSWINDOWS.COM  
WEB: WWW.INTUSWINDOWS.COM

## General Cleaning Guidelines

Intus casement windows can be washed from the inside. Simply open the window fully and reach between the frame and sash (Fig. 1). Wash the sash from the inside, using caution to avoid accidental falls or mishaps.

To remove dust, dirt, smoke, film, soot and salt spray use mild detergent water solution and a soft cloth or brush. To remove heavy dirt or grime from glass, first wipe loose debris from the glass surface with a soft, dry cloth. Then apply a cleaning solution, such as mild soapy water or a liquid window cleaner, and wipe in a circular motion. Remove cleaning solution with a squeegee or a clean, lint-free cloth. Do not use abrasive cleaners on the exterior of High-Performance™ Low-E4™ glass. As a general practice, you should never clean glass in direct sunlight. To avoid damage to the glass, never use razor blades or sharp objects on glass surface.

To clean vinyl exteriors, use a mild detergent and water solution and a soft cloth or brush. Abrasive cleaners or solutions containing corrosive solvents should not be used. For persistent dirt or grime, PVC cleaners can be used.

Hinges need to be cleaned and lubricated occasionally to eliminate squeaking and binding. Hardware screws, especially hinge screws, should be periodically inspected and tightened if necessary. Wind buffeting the sash over time can loosen hardware fasteners. Remove grease or debris with a soft, dry cloth, then lubricate hinges and all other moving parts with a dry silicone spray. Lubricants or harsh abrasive cleaners are not recommended. Dry silicone spray may be purchased from your local hardware store.



Fig. 1

## Cleaning Grilles and Insect Screens

To remove dust, dirt, smoke, film, soot and salt spray from grilles, use a mild detergent water solution and a soft cloth or brush. To remove grease, oil or industrial solids, you may need to use stronger solutions such as rubbing alcohol. Glass surface should not come in contact with any abrasive materials. Conventional insect screens are best cleaned with a soft cloth, sponge, or special cleaners (can be purchased locally in any hardware store).



# INTUS

W I N D O W S

2720 PROSPERITY AVE, SUITE 400-1  
FAIRFAX, VA 22031  
OFFICE: 1.888.380.9940  
EMAIL: [INFO@INTUSWINDOWS.COM](mailto:INFO@INTUSWINDOWS.COM)  
WEB: [WWW.INTUSWINDOWS.COM](http://WWW.INTUSWINDOWS.COM)

In addition to all terms, conditions, and limitations set forth in the Intus Windows Limited Warranty, the following limitations apply:

- Salt and other corrosive or abrasive materials must not be allowed to build up on the exterior surfaces or other exposed components of the product. Unless product-specific care instructions require more frequent cleaning, exterior surfaces and exposed components must be cleaned with a mild detergent soap and water at least every three (3) months (more frequently if necessary) to prevent this build-up. Lift and slide operational hardware must be cleaned and maintained in strict accordance with the written care instructions.
- Any breaches in the exterior finish, such as scratches, chips or abrasions can result in corrosion and must be repaired immediately.