

EUROLINE

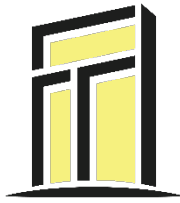
W I N D O W S

*The Art and Practice
of Fenestration*

**MAINTENANCE INSTRUCTION
MANUAL**

CONTENTS

	Page No.
Introduction	1
Important Instructions.....	1
Operating Tips	2
Handle Positions.....	2
Tilt & Turn Pairs	3
Hinged Doors.....	4
Euro Quick-Latch Hardware.....	5
Push-Out Casement and Awning Windows.....	5
Tilt & Glide Doors.....	6
Section 2 Caring For Your Windows and Doors	7
Lubrication of Hardware.....	8
Section 3 Ventilation and Condensation	11
Section 4 Adjustments	12
How to Adjust Tilt & Turn Window.....	12
How to Adjust Hinged Doors.....	17
How to Adjust Tilt & Glide Door.....	21
Section 5 Blind Installation	24
Section 6 Screen Installation and Removal	28



INTRODUCTION

IMPORTANT INSTRUCTIONS

PLEASE READ BEFORE USING THESE MAINTENANCE INSTRUCTIONS

IMPROPER MAINTENANCE

Improper maintenance may void your warranty. Please pay close attention to these instructions.

IMPROPER BLIND INSTALLATION

Improper blind or curtain installation may void our glass warranty. Please pay close attention to the Blinds– Section 5.

INSTALLATION INSTRUCTIONS

Should you require installation instructions, it is available on our website or refer to the contact information below.

WARRANTY INFORMATION

Warranty information is available. Refer to the contact information provided.

CONTACT INFORMATION

EuroLine Windows Inc.
7620 MacDonald Road,
Delta BC V4G 1N2

Telephone: 604-940-8485

Fax: 604-940-8486

Toll Free: 1-800-337-8604

Web Site: 1-800-337-8604

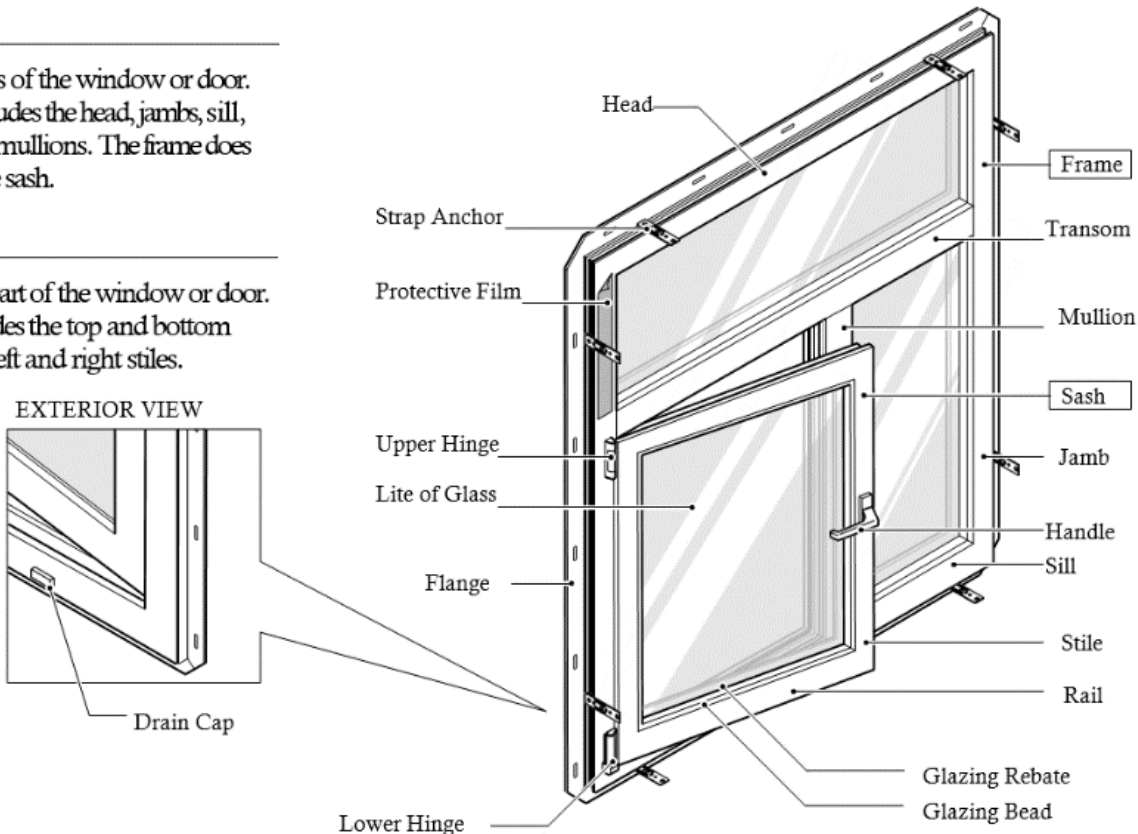
TERMINOLOGY

FRAME

The fixed parts of the window or door. The frame includes the head, jambs, sill, transoms, and mullions. The frame does not include the sash.

SASH

The movable part of the window or door. The sash includes the top and bottom rails, and the left and right stiles.



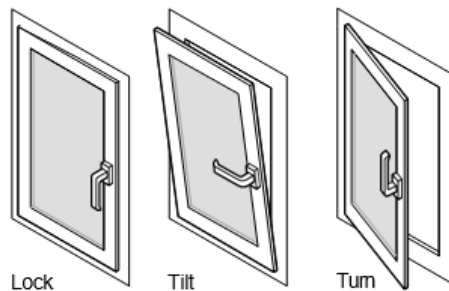
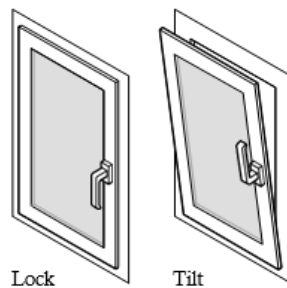
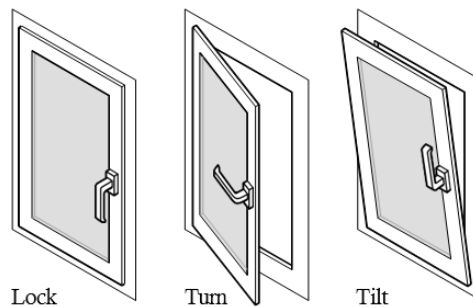
SECTION 1

OPERATING TIPS

Handle Positions

Position	Function
Lock	Closed and locked
Tilt	Ventilation
Turn	For cleaning emergency egress

Tilt & Turn Windows or Doors



Note:

The Tilt Before Turn windows may have a keyed handle to restrict the turn (swing open)

Figure 1-1.

TILT & TURN PAIRS

CAUTION

Shims placed on torch-on membrane, or similar waterproofing applications, may compress into the membrane, resulting in settlement of the window.

Some of your windows or doors may have two sashes, side-by-side. These are called pairs of sashes. Some pairs of sashes have a fixed center mullion. Some do not. Tilt and Turn windows and doors swing to the interior of the building.

Pair With Fixed Mullion

When a pair of sashes has a fixed center mullion between them, both sashes can tilt and both sashes can turn. Each sash operates independently of the other sash.

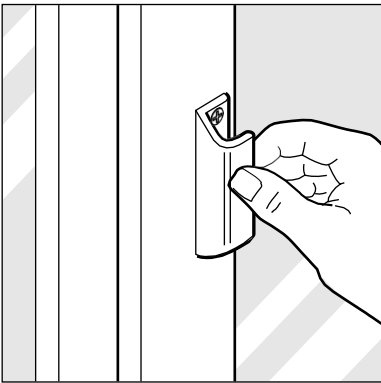
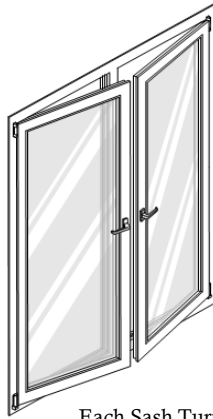


Figure 1-2. Pull handle- exterior view

Doors without a key-lock have an exterior pull handle and spring-loaded catch, that let you open and close the door from the outside.



Each Sash Turns



Each Sash Tilts

Figure 1-3.

Pair Without Fixed Mullion

When pairs of sashes have no fixed mullion, there is a wider unobstructed opening. Each sash can turn to open, but one must be opened before the other. The sash that can be opened first is called the active sash. Only the active sash can tilt.

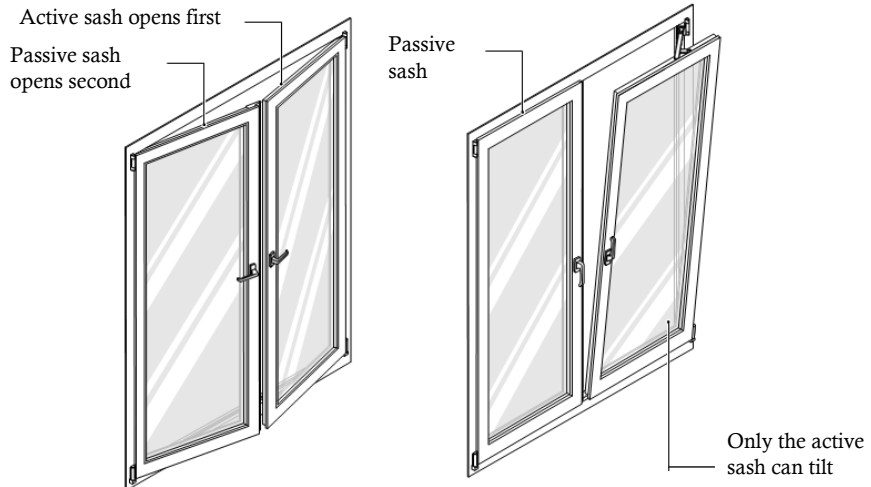


Figure 1-4.

NOTE

Euro Keylock hardware is available on Tilt and Turn doors.

HINGED DOORS

CAUTION

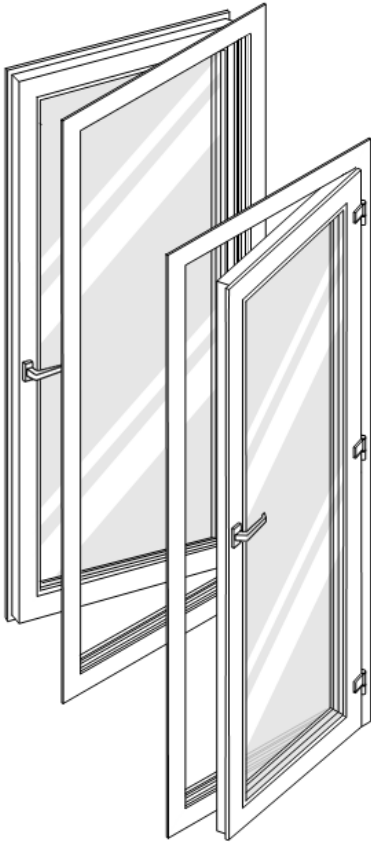
Do not allow a hinged door to swing with force against the door jamb return. The pressure caused by such an impact may damage the door hinges and/or the jamb return.

There are two kinds of EuroLine hinged doors: inswing doors that open into the building, and outswing doors that open to the outside. Hinged doors have one of three kinds of locking hardware: Euro-Lock hardware, Euro Key-Lock hardware, or Euro Quick-Latch hardware.

Note: Hinged doors do not tilt.

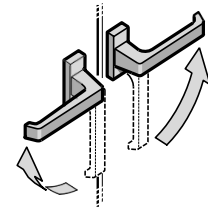
Euro-Lock Hardware

Euro-Lock hardware includes one Euro-Handle, located on the room side of the door, and an exterior pull handle. The Euro-Handle operates the concealed multi-point locking mechanism. The handle positions are shown below.



SIDE To Turn

Rotate the handle sideways to swing open



DOWN To Lock

Rotate the handle down to lock

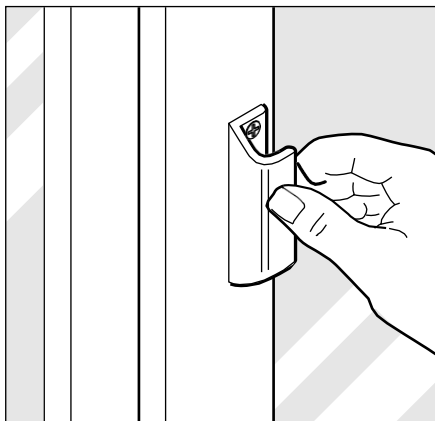
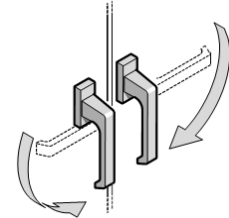


Figure 1-5. Pull handle- exterior view

Doors without a key-lock have an exterior pull handle and spring-loaded catch, that let you open and close the door from the outside.

Euro Key-Lock Hardware

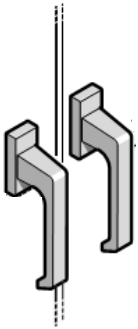
Euro Key-Lock hardware includes two Euro-Handles, located back-to-back, on the inside and on the outside of the door. It also includes an exterior key cylinder and an interior thumb turn. To lock the door, turn the handle to lock position, then turn the thumb turn to engage the lock.

Euro Quick-Latch Hardware

Euro Quick-Latch hardware includes a high-quality latching mechanism and a deadbolt lock, in addition to EuroLine's standard concealed multipoint locking mechanism. It also includes an exterior key cylinder and an interior thumb turn.

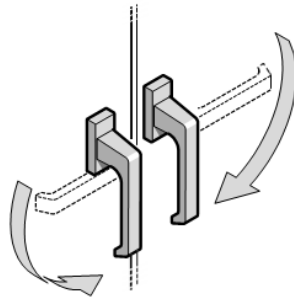
There are several different styles of Euro Quick-Latch handles. The handle positions are shown below.

Normal Position



DOWN to Open

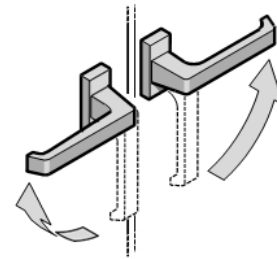
Push the handle downwards to open



UP To Lock

Throw the handle upwards as far as it will go to engage the multi-point locking mechanism. Then operate the thumb turn.

If you do not lift the handle all the way, the thumb turn will not operate.



Push-out Casement and Awning Windows

NOTE

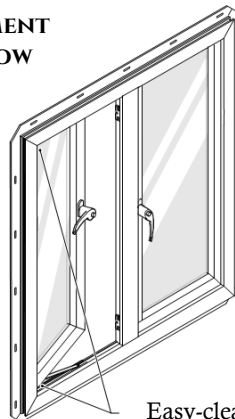
EuroLine does not make screens for push-out style windows. Contact your manufacturer, or EuroLine can refer you.

To open the window, push the button on the handle and rotate the handle 90 degrees. To close the window, turn the handle from the horizontal position 90 degrees to the vertical position. The window may be secured with a 1" (25mm) opening by closing the handle when the sash is open 1" (25mm).

NOTE

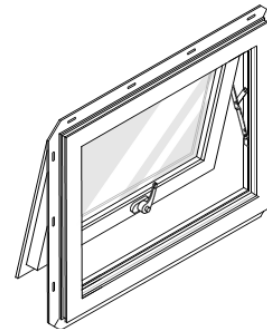
The casement window may have an easy-clean button on the hinges. Push the button while pulling the sash towards the middle. Both top and bottom hinges must be released and the sash can be removed sideways to allow cleaning of the exterior glass.

CASEMENT WINDOW



Easy-clean release

AWNING WINDOW

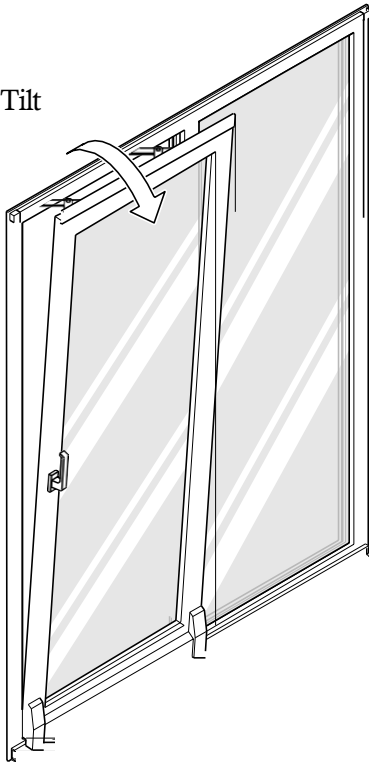


Tilt & Glide Doors

Tilt &Glide doors have Dual Action hardware. This hardware lets you open these doors in two different ways. You can: TILT them inwards for ventilation, and you can GLIDE them sideways on rollers.

Tilt & Glide doors have one of two kinds of locking hardware: Euro-Lock hardware, or Euro Key-Lock hardware.

Tilt



Euro-Lock Hardware

Euro-Lock hardware includes one Euro-Handle, located on the room side of the window or door, and an exterior pull handle. The Euro-Handle lets you choose the Tilt or the Glide operating function and operates the concealed multi-point locking mechanism.

Euro Key-Lock Hardware

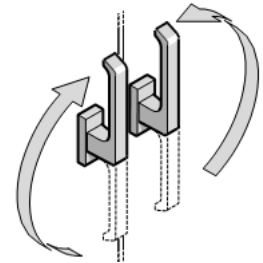
The Euro Key-Lock hardware package features two Euro-Handles, located back-to-back: one on the outside and one on the inside of the door. It also includes a key cylinder for the outside and a thumb turn for the inside.

Euro-Handle Operation

You can operate Tilt & Glide doors with the Euro-Handle. Here are the three handle positions:

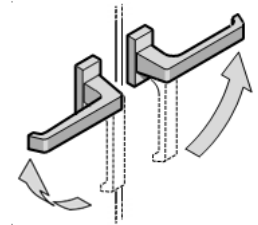
UP To Tilt

Rotate the handle up to tilt



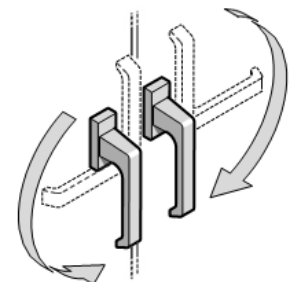
SIDE To Glide

Rotate the handle sideways, then pull the sash out and away from the frame. Gently pull the handle to one side to open the sash. To close, push the sash back into the opening against the frame

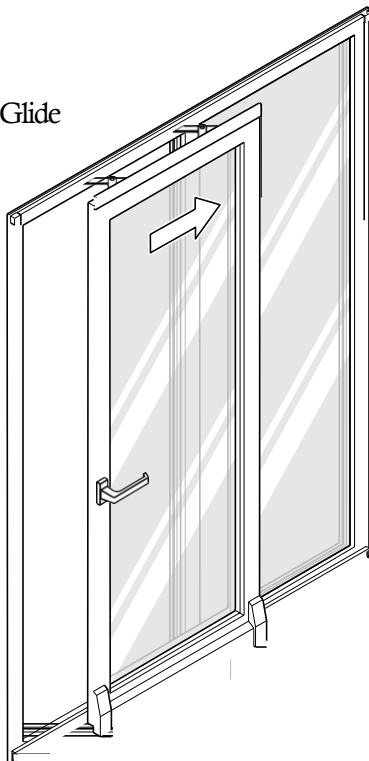


DOWN To Lock

Rotate the Euro-Handle down to lock



Glide



SECTION 2 CARING FOR YOUR WINDOWS AND DOORS

Congratulations! You have chosen quality windows and doors from EuroLine, manufactured with pride and care. Because these windows are made from high technology uPVC materials, they require very little maintenance. The care and maintenance tips that follow will help you care for your windows in the best way.

A Word About Protection

Always protect your EuroLine windows and doors from welding spatter, open flame, excessive heat, grinding, sparks, concrete, mortar, stucco, paint, and other harmful construction materials or processes. All of these can permanently damage both the frame finish and the glass surface. Such contaminants must be removed from the glass surface as soon as possible.

How To Clean The Glass

Use an approved window cleaning agent, following the instructions provided with the product. The cleaning agent must not be acidic or caustic since damage could result to the frame or hardware.

To remove glue, caulking or paint from the glass, contact a glass cleaning professional.

NOTE

Do not use a dry cloth to wipe the frame. This causes static electricity to build up, which attracts dust and dirt to the frame.

How To Clean The Frame and Sash Profiles

1. Vinyl (uPVC) Surfaces

For uPVC white or beige frames, remove light stains with a mild, non-abrasive household cleaner and a soft cloth. Apply the cleaning solution to a damp cloth, not to the frame. Wipe the soiled frame surfaces to remove dirt build up. For heavily soiled areas use light pressure on the damp cloth. Dry the interior surfaces of the frame with a damp cloth. Rinse the exterior surfaces of the frame with clean water.

For grease or oil stains, use 99% isopropyl alcohol, but only on the immediate area of the stain.

Avoid aggressive cleaning methods such as sandpaper or steel wool: these will damage the smooth surface. Do not use solvents such as acetone or paint thinner: these could affect the color of the frame.

Scratches and dents can only be removed by qualified trades people.

2. *Color or Wood-Grained Film (Laminated to the uPVC)*

Clean with standard cleansing agents excluding abrasive products. The film on the frame is resistant to ammonia water, aliphatic benzene and light alcoholic-water solutions.

The film is not resistant to organic solvents or mixtures of organic solvents (e.g., varnish thinners, varnish removers, polish, adhesives and the like). Do not use organic solvents of any kind, since damage will result to the film.

Scratches in the film that expose the underlying uPVC may be repaired with matching paint. Touch-up paint pencils are available from EuroLine windows.

A Word About Doors and Windows That Open

Keep the channel groove in the base of the frame free of dirt and debris. Make sure the drain holes are not blocked with dirt or debris. Blocked drain holes can affect the performance of the window.

Cleaning of Hardware

Clean hardware with clean water to remove grit and grime. Do not use acidic or caustic cleaning substances.

Lubrication of Hardware

Lubricate your hardware once a year or as conditions dictate, with a light, petroleum-based oil to maintain its factory-smooth operation. In coastal areas, rinse and relubricate every three months, or more frequently as conditions dictate

Tilt & Turn Windows and Doors

Lubricate the upper bar hinge and all the locking cams.

Hinged Doors

Lubricate all the locking cams

Tilt & Glide Doors

Lubricate all the locking cams

Push-Out Casement and Awning Windows

Lubricate all the pivot points on the hinges (top and bottom).

How to Lubricate the Upper Bar Hinge (Tilting Sashes Only)

NOTE

In coastal (salt-water) locations, rinse the hardware every three months (or as conditions dictate) with fresh water, and relubricate.

In beach areas, rinse sand and grit from hardware as required.

1. Open the sash to the Tilt position.
2. Apply oil to the moving parts of the bar hinge assembly.
3. Close the sash. Rotate the handle between the Lock, Tilt and Turn positions several times.

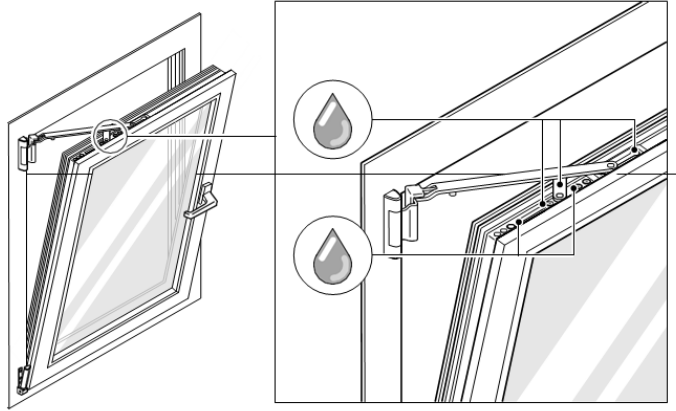


Figure 2-1.


How to Lubricate the Locking Cams (All Sashes)

All 4700 sashes with multipoint locks have several locking cams around the perimeter of each sash. Locking cams may be located on the top, sides, or bottom of a sash.


1. Open the sash to the appropriate position (Tilt, Turn or Glide) and find the location of each locking cam
2. Apply oil to the slots on both sides of the locking cam heads
3. Close the sash. Rotate the handle between the Lock and Open positions several times


**TILT & TURN HARDWARE
PARTS DESCRIPTION**

Part	Mounted On
1. Top corner (VSO)	sash
2. Shear	sash
3. Shear hinge	sash
4. Cover cap for #3	sash
5. Top frame hinge	frame
6. Cover cap for #5	frame
7. Top hinge pin	frame
8. Back lock	sash
9. Bottom frame hinge	frame
10. Cap for #9	frame
11. Cap for #9	frame
12. Sash hinge	sash
13. Cap for #12	sash
14. Bottom extension	sash
15. Tilt plate	frame
16. Bottom corner	sash
17. Mushroom cam	sash
18. Tilt & Turn handle	sash
19. Strike plate	frame
20. Eccentric locking cam	frame

 = Lubricate here



 = Mushroom locking cam

 = Important areas for safety.
Visually inspect hinges for tightness of fasteners or damage to hinges after installation and every six months.

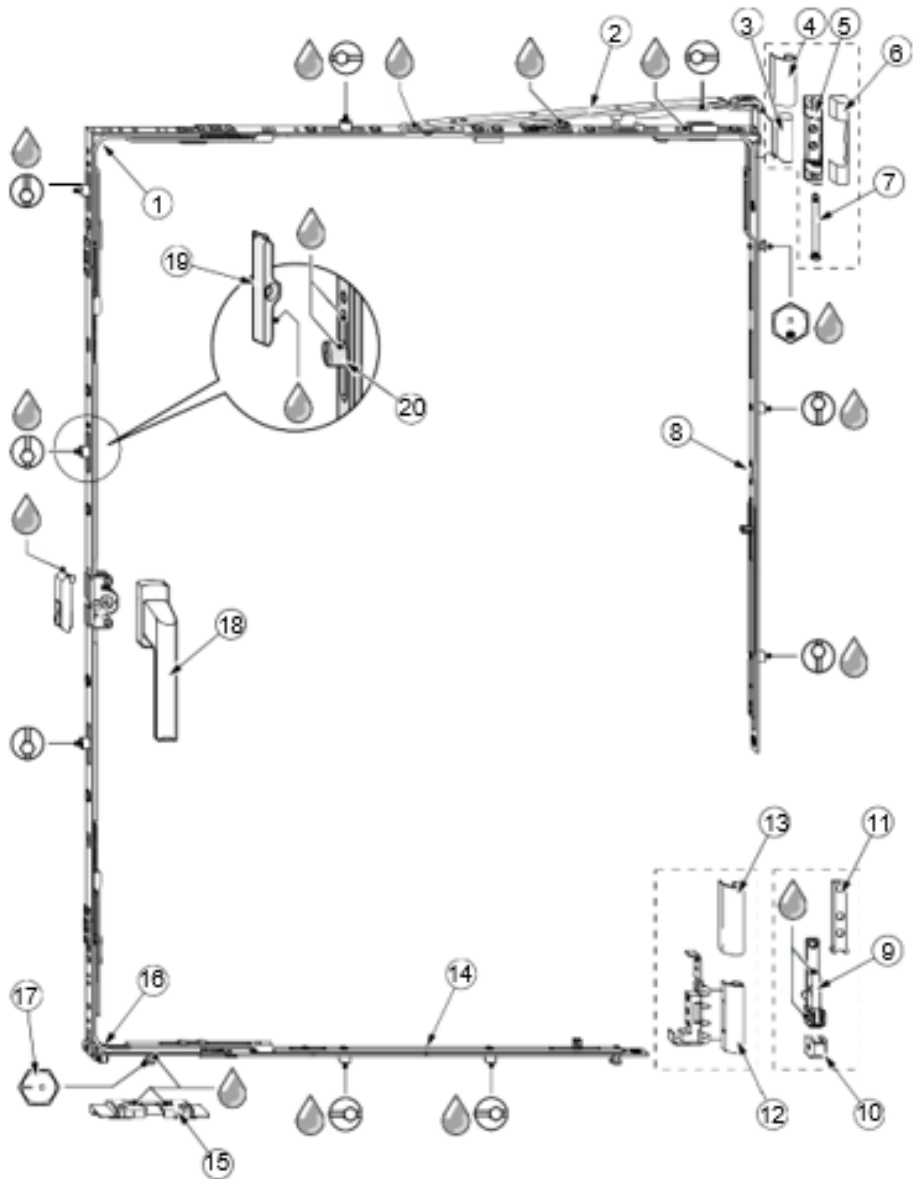


Figure 2-2.

GASKETS

All gaskets must be examined periodically for damage. Windows or doors with damaged gaskets will not perform properly. If you have air or water leaks, inspect the gasket if required.

SECTION 3

VENTILATION AND CONDENSATION

If your home was not designed with a continuous fresh air ventilation system, you may need to open your windows regularly to make sure that your living area is well ventilated, and to prevent condensation.

You will find ventilation is comfortable and efficient when you open your windows in the Tilt position.

Condensation and Household Humidity

Warm air can hold much more water vapor than cold air. Condensation will occur when warm, moist air makes contact with a cold surface. You can see this on a mirror in a bathroom. As the air cools, it releases moisture onto the cold surface, and drops of water will appear.

Condensation depends on two factors: the relative humidity inside your home, and the temperature of the interior surface of your windows.

There are two things you can do to reduce the occurrence of condensation. The first thing is to choose energy-efficient windows with glass that keeps the heat in your home. Energy-efficient windows stay warmer in the winter. The second thing you can do is reduce the humidity in your home.

Condensation is not always a sign of poor-quality windows. New homes are often built very airtight and may therefore have higher humidity levels than older homes. Condensation is more common on the indoor side of windows and doors. It can also appear on the outdoor side of very energy-efficient windows.

What are some of the causes of humidity in the home? Warm room temperature increases the moisture-carrying capacity of the air. Plants release large quantities of water vapor. Certain cooking methods also release much moisture into the household air. Humidifiers, interior fountains, large fish tanks, and clothes dryers not vented to the exterior all contribute to high levels of household humidity.

If your EuroLine windows showroom-side condensation, consider how you could reduce the humidity level in your home. This will control the condensation. When the outdoor temperature is very low, even energy-efficient windows will get colder, and condensation may appear.

The chart to the left shows the general relationship between interior humidity and the occurrence of condensation when the outside air temperature is low. The actual conditions under which condensation can occur depend on several factors, such as the type of glass in the windows, the air tightness of the home, the size of the windows and their position within the wall, the presence of blinds or window shades, and the interior humidity. In most cases, the interior humidity is the only factor that is under the homeowner's control.

Relationship Between Outdoor Temperature and Condensation for Double Glazed Windows.

Outside temperature		Approximate interior humidity at which condensation occurs at the center of glass
Fahrenheit	Celsius	
40°	4°	63%
32°	0°	57%
20°	-7°	50%
10°	-12°	45%
0°	-18°	40%
-10°	-23°	36%
-20°	-30°	32%

NOTE

These values are based on center-of-glass temperature. Condensation may occur at lower humidity levels on the edge of the glass.

SECTION 4 ADJUSTMENTS

How To Adjust Tilt & Turn Windows & Doors

TOOLS REQUIRED:

11 mm wrench
4 mm Allen key

With EuroLine's unique Tilt & Turn hardware system you can adjust window or door sashes to compensate for the effects of small settlements, heavy use, and for wear of the hardware components and the sealing gaskets. These adjustments allow you to maintain the performance of your windows and doors much longer than conventional hardware systems allow.

Sash Binding Problems?

The sash may bind against the fixed frame at one or more points after the building settles, or because of heavy use. You can increase the clearance between the frame and the sash with one or more of these three adjustments:

Adjustment 1: Upper Hinge Offset

Adjustment 2: Sash Height

Adjustment 3: Lower Hinge Offset

Closing Tightness Problems?

The sash may close less tightly after many years of use. These adjustments make the sash close more tightly or less tightly. To reduce air leakage around the sash, make the sash close more tightly. To make the Euro-Handle easier to operate, make the sash close less tightly.

You can increase or decrease the closing tightness with one or more of these adjustments:

Adjustment 4: Locking Cam Closing Tightness

Adjustment 5: Shear Closing Tightness

Adjustment 6: Corner Drive Closing Tightness

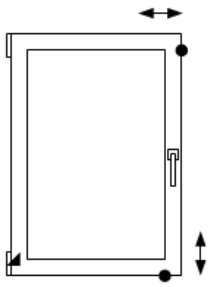
NOTE

In addition to these instructions, you can access videos showing how to do adjustments and troubleshooting at www.euroline-windows.com/support-videos/

HOW TO CORRECT SASH BINDING PROBLEMS

Use a 4 mm Allen key for Adjustments 1 - 3. For all of these adjustments, first turn the Allen screw 1/4 turn, then operate the sash to see if you have corrected the problem. Repeat if necessary: turn the screw approximately 1/4 turn each time, until the sash stops binding.

When you correct the binding with one adjustment, you may cause the sash to bind in another place. You may have to make more than one adjustment to correct all of the binding problems.



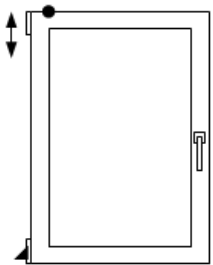
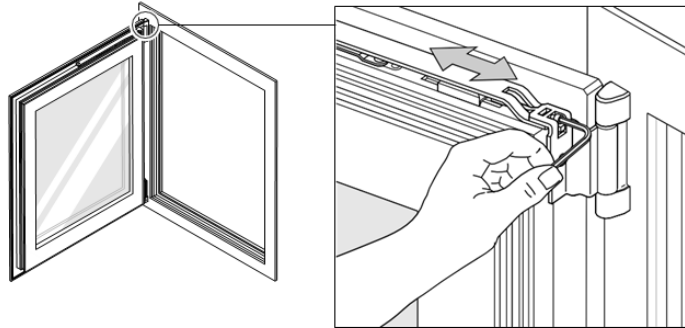
If the sash binds at one of these locations, use this adjustment to “tilt” the sash towards the upper hinge.

Adjustment 1: Upper Hinge Offset

Maximum Adjustment: Raises the bottom corner of the sash 3 mm. Lowers the bottom corner of the sash 1.5 mm.

This adjustment moves the top of the sash towards the upper hinge or away from it.

With the Euro-Handle in the Turn position, open the sash as far as it will open. Insert the 4 mm Allen key into the head of the screw at the end of the shear arm. To tilt the sash towards the upper hinge, rotate this screw in a counter-clockwise direction. This raises the bottom corner of the sash on the handle side. To tilt the sash away from the upper hinge, rotate the screw in a clockwise direction. This lowers the bottom corner of the sash on the handle side.

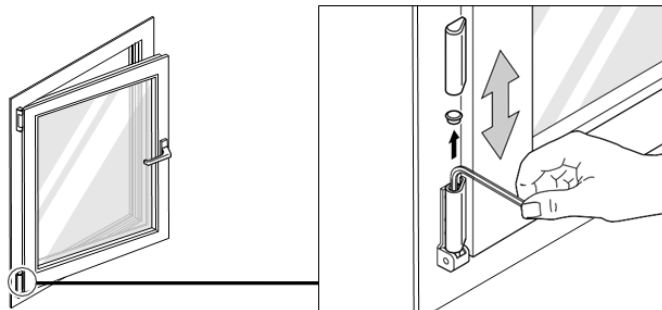


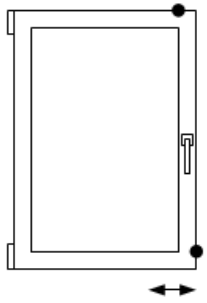
If the sash binds at the top when you open it in the Tilt position, use this adjustment to lower the sash.

Adjustment 2: Sash Height

Maximum Adjustment: Raises the sash 3 mm. Lowers the sash 3 mm
This adjustment raises or lowers the sash.

With the Euro-Handle in the Turn position, open the sash approximately 2" (50 mm). Remove the plastic cover from the top of the lower hinge body. Insert the 4 mm Allen key into the top of the exposed screw head. To raise the sash, rotate the screw in a clockwise direction. To lower the sash, rotate the screw in a counter-clockwise direction. After adjusting, check that the tilt function operates correctly.





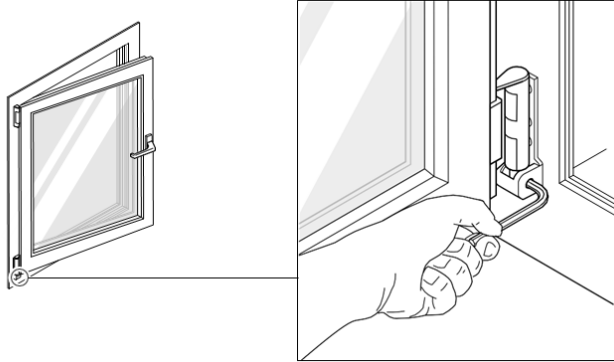
If the sash binds at one of these locations, use this adjustment to “tilt” the sash towards the lower hinge.

Adjustment 3: Lower Hinge Offset

Maximum Adjustment: Moves the sash 2 mm to the right. Moves the sash 2 mm to the left.

This adjustment moves the bottom of the sash towards the lower hinge, or away from it.

With the Euro-Handle in the Turn position, open the sash. Insert the 4 mm Allen key into the pivot screw below the lower hinge. To move the sash towards the hinge, rotate the screw in a clockwise direction. This lowers the top of the sash. To move the sash away from the hinge, rotate the screw in a counter-clockwise direction. This raises the top of the sash.



HOW TO CORRECT CLOSING TIGHTNESS PROBLEMS

NOTE

In addition to these instructions, you can access videos showing how to do adjustments and troubleshooting at www.euroline-windows.com/support-videos/

Use these adjustments to reduce air leakage around the sash, or to make the Euro-Handle easier to operate.

If you have an air leakage problem, you need to adjust the hardware that is closest to the location where the air leaks in. First, try to correct the problem by increasing the closing tightness of the nearest locking cam using Adjustment 4. If this does not correct the problem, you will need to do one of the adjustments that follow. If the air leaks at the upper hinge, increase the closing tightness using Adjustment 5. If the air leaks at the corner of the sash below the handle, increase the closing tightness using Adjustment 6. If you have air leakage at another location, increase the closing tightness of the nearest locking cam(s) using Adjustment 4. Do not increase the closing tightness any more than you need to in order to control the immediate problem, or the Euro-Handle will become difficult to operate.

If the Euro-Handle is difficult to operate, use these adjustments to decrease the closing tightness. Do the adjustments in the following order: first, use Adjustment 4 to decrease the closing tightness of the locking cams. If this does not correct the problem, use Adjustment 5 to decrease the shear closing tightness. If this does not make the handle operate more easily, undo the adjustment. Then use Adjustment 6 to decrease the corner drive closing tightness.

Adjustment 4: Locking Cam Closing Tightness

Maximum Adjustment: Moves the sash 0.8 mm towards the frame. Moves the sash 0.8 mm away from the frame.

Open the sash, notice the cylindrical eccentric locking cams along the top and along both sides of the open sash. Close the sash. With the Euro-Handle in the Turn position, open the sash. You may also find one or more cams along the bottom of the sash.

Notice that each cam has an index groove stamped into its head. There are many different positions for each locking cam head. The index groove shows the current position. Refer to the position of the index groove before you adjust a cam.

With the sash in the most convenient Tilt or Turn position, adjust the closing tightness of a locking cam using the 4 mm Allen key.

To increase the closing tightness, turn the fat side of the cam towards the gasket. To decrease the closing tightness, turn the fat side of the cam away from the gasket.

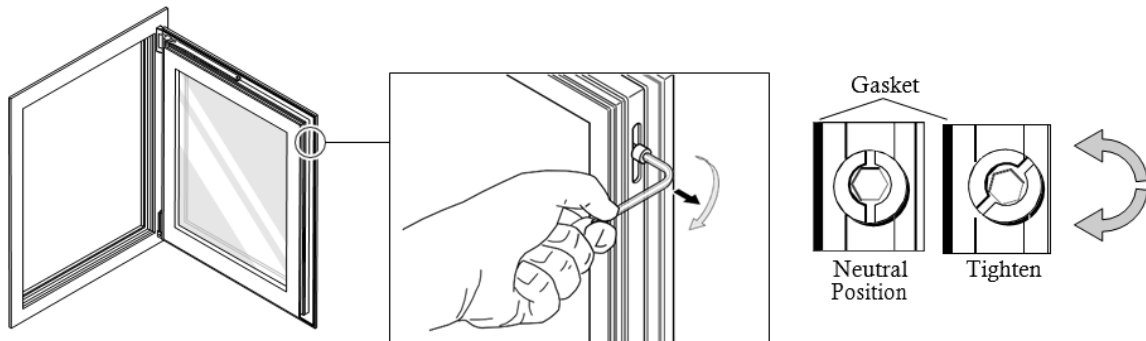


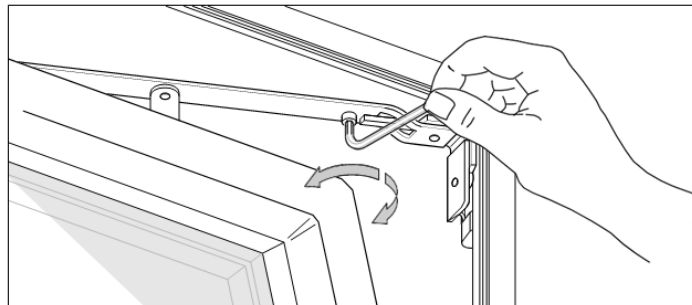
Figure 4-4.

Adjustment 5: Shear Closing Tightness

With the Euro-Handle in the bottom (Tilt) position, tilt the sash. Insert the 4 mm Allen key into the screw head on the underside of the shear arm. To increase the closing tightness, rotate the screw in a clockwise direction. To decrease the closing tightness, rotate the screw in a counter-clockwise direction. First turn the screw 1/4 turn, then operate the sash to see if you have corrected the problem. Repeat if necessary, turning the screw approximately 1/4 turn each time until you have corrected the problem.

CAUTION

When you increase the closing tightness with Adjustments 5 and 6, the Euro-Handle will become more difficult to operate. Increase the closing tightness only if you have excessive air leakage.



Adjustment 6: Corner Drive Closing Tightness

Maximum Adjustment: Moves the sash 1.5 mm closer to the frame. Moves the sash 1.5 mm away from the frame.

With the Euro-Handle in the Turn position, open the sash. On the Euro-Handle side of the sash, at the bottom corner, find the screw head located on the sliding plate. Insert the 11 mm wrench as shown in Figures 4-6.

When you use the wrench, first turn the screw 1/4 turn, then operate the sash to see if you have corrected the problem. Repeat if necessary: turn the screw approximately 1/4 turn each time, until you correct the problem.

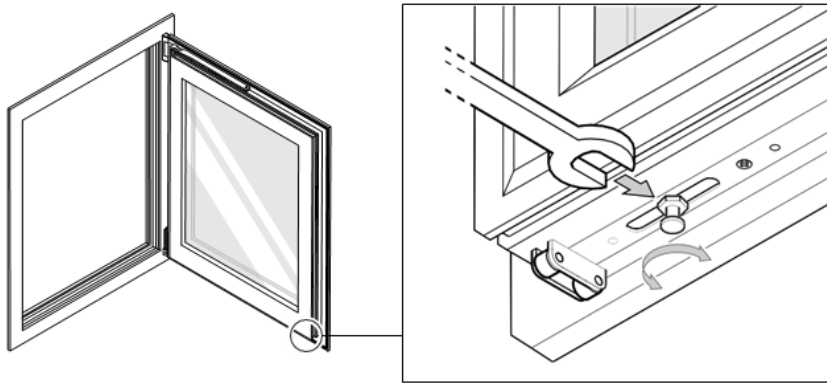


Figure 4-6.

NOTE

To remove or reinstall a sash, read our 4700 Installation Instructions. It is available at www.euroline-windows.com, or contact us directly.

HOW TO RESET A HUNG SASH

- Step 1** Depress the fail-safe switch and turn the handle to the tilt position. See fig. 2-23.
- Step 2** Gently push the upper hinge corner of the sash against the frame, while leaving the sash open.
- Step 3** While depressing the fail-safe switch, rotate the handle to the turn position. Release the fail-safe switch. The window is now reset in the turn position.

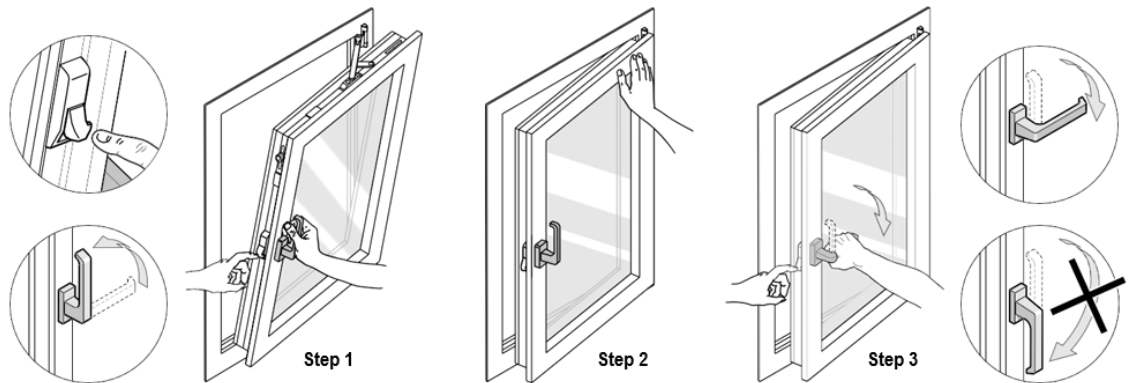
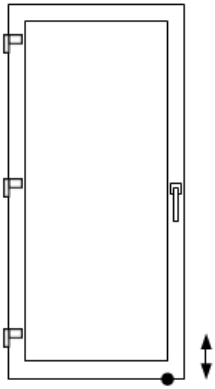


Figure 4-7.



If the sash binds at the bottom, use this adjustment to raise the sash.

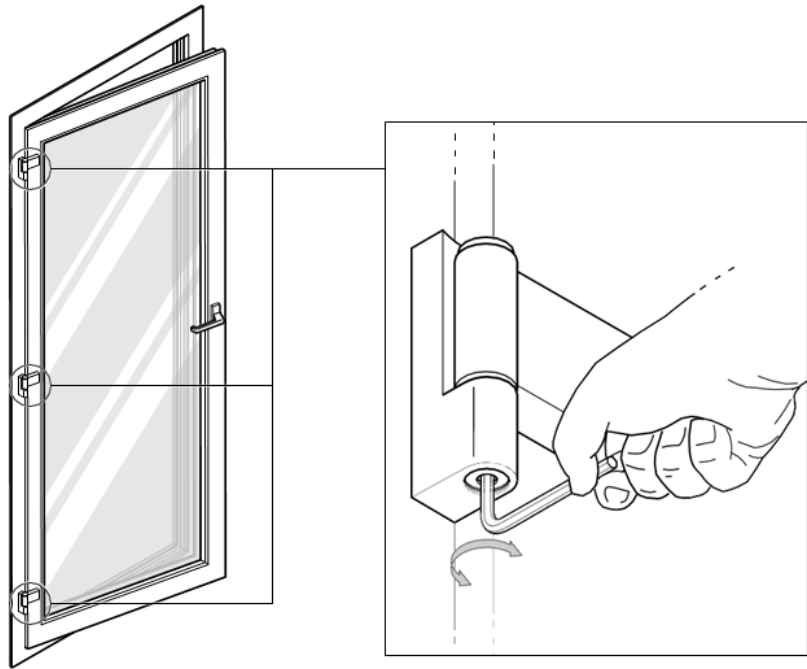
Adjustment 1: Vertical Clearance

Maximum Adjustment: Raises the sash 4 mm from the factory setting.

This adjustment moves the sash up or down.

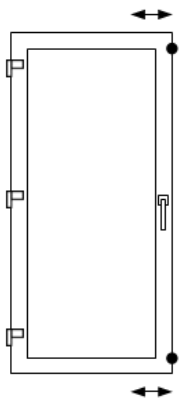
Open the sash approximately 2" (50 mm). Insert the 4 mm Allen key into the recessed screw head in the bottom of the hinge. To raise the sash height, rotate the screw in a clockwise direction. To lower the sash height, rotate the screw in a counter-clockwise direction.

Make sure that you **raise or lower all three hinges by the same amount.**



NOTE

In addition to these instructions, you can access videos showing how to do adjustments and troubleshooting at www.euroline-windows.com/support-videos/



If the sash binds at the handle side, use this adjustment to move the sash towards the hinges.

Adjustment 2: Horizontal Clearance

Maximum Adjustment: Moves the sash 5 mm to the left. Moves the sash 5 mm to the right.

This adjustment moves the sash from side to side.

How To Remove The Security Cover

Most EuroLine pivot hinges have a tamperproof security cover. One screw holds the cover in place. To find the concealed screw, open the sash 90°. The screw is on the back side of the hinge body. Use a 4 mm Allen key to loosen the screw.

How To Make The Horizontal Clearance Adjustment

CAUTION

Do not adjust the sash more than 2 mm to the left or 2 mm to the right. If you adjust the sash more than 2 mm, you will reduce the coverage of the sealing gaskets.

Open the sash approximately 2" (50 mm). Insert the 4 mm Allen key into the recessed screw head on the edge of the hinge body. To move the sash away from the hinge, rotate the screw in a clockwise direction. To move the sash towards the hinge, rotate the screw in a counter-clockwise direction.

Make sure that you **adjust all three hinges by the same amount.**

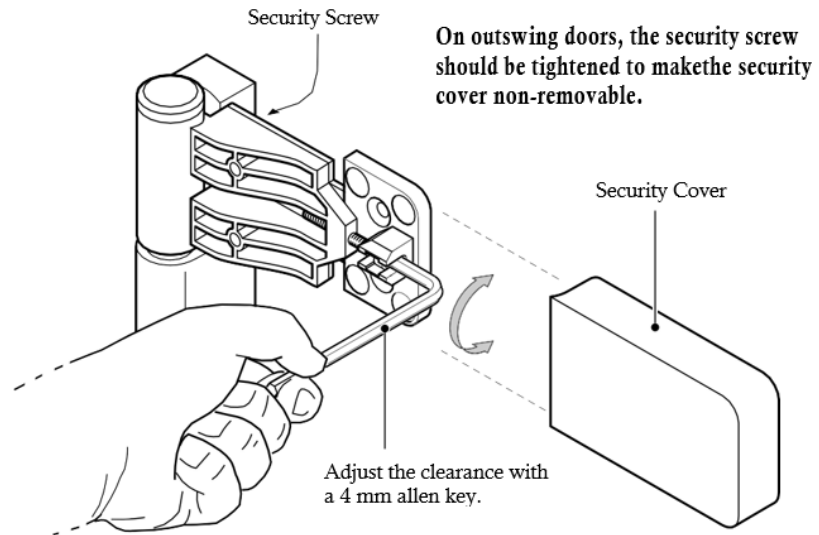


Figure 4-9.

HOW TO CORRECT CLOSING TIGHTNESS PROBLEMS

Use these adjustments to reduce air leakage around the sash, or to make the Euro-Handle easier to operate.

If you have an air leakage problem, try to correct it by increasing the closing tightness of the nearest locking cam(s) using Adjustment 3. If this does not correct the problem because the air leakage occurs at a hinge, increase the closing tightness of that hinge using Adjustment 4. Do not increase the closing tightness any more than you need to in order to control the immediate problem, or the Euro-Handle will become difficult to operate.

If the Euro-Handle is difficult to operate, use Adjustment 3 to decrease the closing tightness of the locking cams.

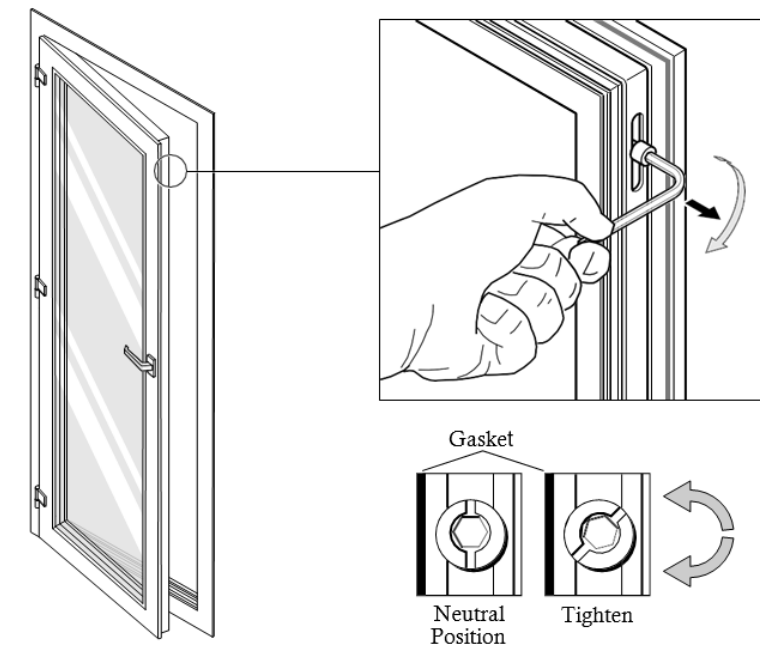
Adjustment 3: Locking Cam Closing Tightness

Maximum Adjustment: Moves the sash 0.8 mm towards the frame. Moves the sash 0.8 mm away from the frame.

Open the sash. Notice the cylindrical locking cams along the vertical edge of the open sash. You may find one or more cams along the top or along the bottom of the sash as well. Notice that each cam has an index groove stamped into its head. The index groove shows the current position. Refer to the position of the index groove before you adjust a cam.

With the sash in the most convenient Tilt or Turn position, adjust the closing tightness of a locking cam using the 4 mm Allen key.

To increase the closing tightness, turn the fat side of the cam towards the gasket. To decrease the closing tightness, turn the fat side of the cam away from the gasket.



Adjustment 4: Corner Drive Closing Tightness

Maximum Adjustment: Moves the sash 1.5 mm closer to the frame. Moves the sash 1.5 mm away from the frame.

With the Euro-Handle in the Turn position, open the sash. On the Euro-Handle side of the sash, at the bottom corner, find the screw head located on the sliding plate. Insert the 11mm wrench as shown in fig. 4-11 on the next page.

When you use the wrench, first turn the screw 1/4 turn, then operate the sash to see if you have corrected the problem. Repeat if necessary: turn the screw approximately 1/4 turn each time, until you correct the problem.

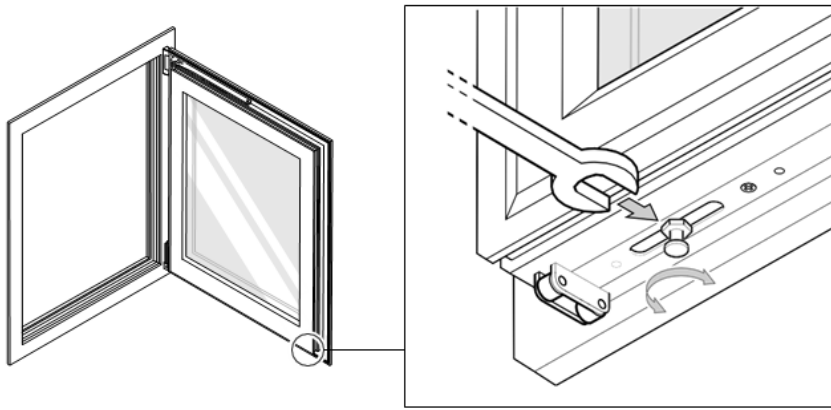


Figure 4-11. Corner Drive Closing Tightness

Adjustment 5: Hinge Closing Tightness

NOTE

Do not adjust the sash more than 2 mm to the left or 2 mm to the right. If you adjust the sash more than 2 mm, you will reduce the coverage of the sealing gaskets.

Maximum Adjustment: Moves the sash 0.8 mm closer to the frame. Moves the sash 0.8 mm away from the frame.

Use a small knife blade or a flat head screwdriver to remove the plastic cap from the top of each hinge.

Open the sash approximately 2" (50 mm). Insert the 4 mm Allen key into the recessed screw head on the top of the hinge pin. To move the sash closer to the frame or to move it farther away, rotate the screw. This adjustment also moves the sash slightly to one side or to the other. You can rotate the screw in either direction.

You can measure the distance between the moving part of the hinge and the fixed part of the hinge that is attached to the frame. **Adjust all three hinges to the same distance.** Replace the plastic cap with the top of each hinge.

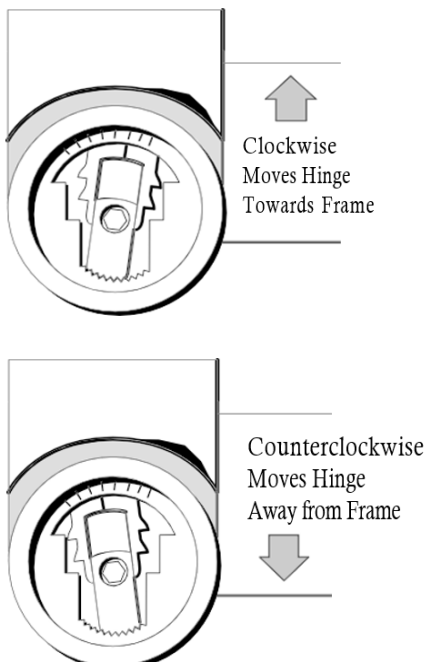
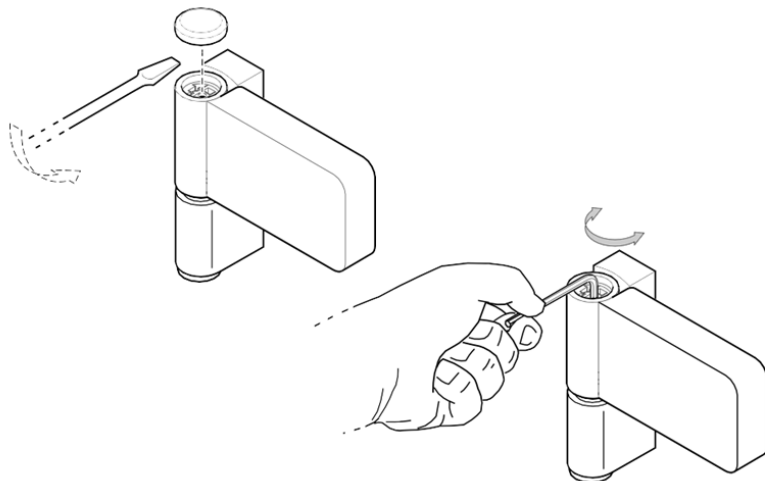


Figure 4-12.



There are different hinge styles. The hinge may not look exactly as shown.

Figure 4-13.

How to Adjust Tilt & Glide Doors

With EuroLine's unique Tilt & Glide hardware system you can adjust window or door sashes to compensate for the effects of settling, heavy use, and for wear of the hardware components and the sealing gaskets. These adjustments allow you to maintain the performance of your windows and doors much longer than conventional hardware systems allow.

NOTE

In addition to these instructions, you can access videos showing how to do adjustments and troubleshooting at www.euroline-windows.com/support-videos/

Sash Binding Problems?

The sash may bind against the fixed frame at one or more points after the building settles, or because of heavy use. You can increase the clearance between the frame and the sash with Adjustment 1: Gliding Shoe Height.

Closing Tightness Problems?

The sash may close less tightly after many years of use. These adjustments make the sash close more tightly or less tightly. To reduce air leakage around the sash, make the sash close more tightly. To make the Euro-Handle easier to operate, make the sash close less tightly.

You can increase or decrease the closing tightness with Adjustment 2: Locking Cam Closing Tightness.

HOW TO CORRECT SASH BINDING PROBLEMS

There are two gliding shoes on a sliding sash. This adjustment raises or lowers the side of the sash nearest to the gliding shoe. When you raise or lower the sash on only one side, you make the sash tilt. When you raise or lower the sash differently on each side, you also make the sash tilt.

If the bottom of the sash binds against the frame (see Figure 5-16, Item B), use this adjustment on both shoes to lift the bottom of the sash. If the top of the sash binds against the frame (see Figure 5-16, Item A), use this adjustment on both shoes to lower the sash. To move the sash straight up or straight down, adjust both shoes by the same amount.

Adjustment 1: Gliding Shoe Height

Maximum Adjustment: Raises the sash 3 mm. Lowers the sash 3 mm.

This procedure shows you how to adjust the sash height on one gliding shoe. If you want to move the sash straight up or straight down, adjust the sash height on both gliding shoes by the same amount. If you want to tilt the sash to correct binding problems on the sides of the sash, you may only need to raise or lower the sash on one gliding shoe. You may also need to raise the sash height on one gliding shoe and lower it on the other.

Remove both end caps from the hardware cover (see fig. 4-14).

Remove the hardware cover. Press down on the top of the cover with one hand, and gently pull the bottom of the cover away from the sash, until it “clicks.” Do not use force, or you will damage the cover (see fig. 4-15). Now lift the cover straight up (see fig. 4-16).

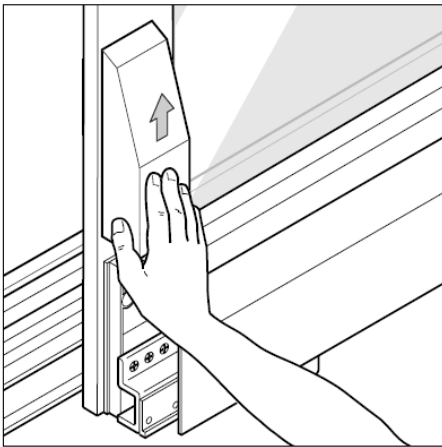


Figure 4-14. End Cap Removal

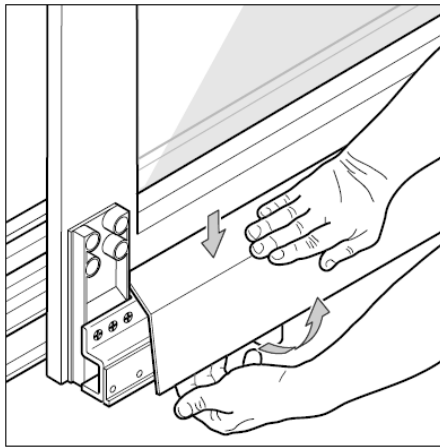


Figure 4-15. Hardware Cover Removal

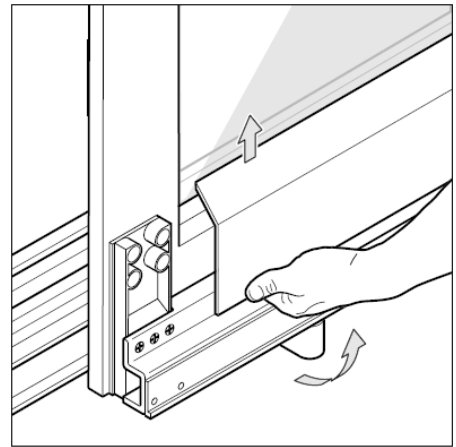


Figure 4-16. Hardware Cover Removal

Use the 4 mm wrench to loosen the lock nut on the side of the gliding shoe (see fig. 4-16).

Insert the 8 mm Allen key into the top of the adjusting screw. Turn the screw in a clockwise direction to raise the sash. Turn the screw in a counter-clockwise direction to lower the sash (see fig. 5-22).

Turn the Allen screw 1/4 turn at first, then operate the sash to see if you have corrected the problem. Repeat if necessary: turn the screw approximately 1/4 turn each time, until the sash stops binding.

Use the 4 mm wrench to tighten the lock nut on the side of the gliding shoe (see fig. 5-21).

Replace the hardware cover. First, hang the top of the cover on the gliding shoes. Then press downwards on the face of the cover until it clicks in place (see fig. 5-23).

Replace the end caps (see fig. 5-23).

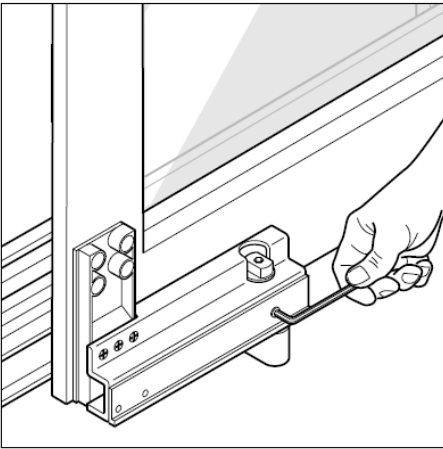


Figure 4-17. Use 4 mm Allen Key

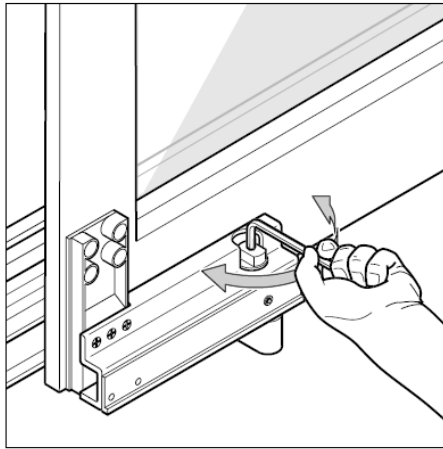


Figure 4-18. Use 8mm Allen Key

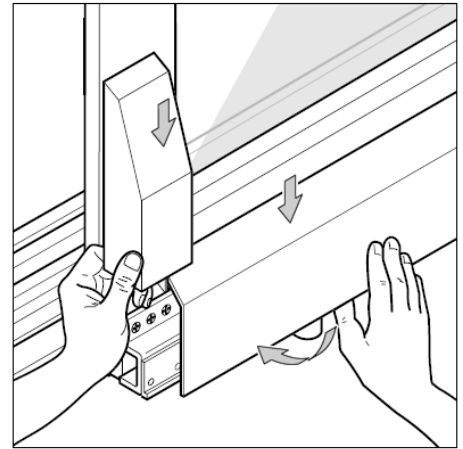


Figure 4-19. Replace Covers

HOW TO CORRECT CLOSING TIGHTNESS PROBLEMS

Use this adjustment to reduce air leakage around the sash, or to make the Euro-Handle easier to operate.

If you have air leakage at any point around the sash, increase the closing tightness of the nearest locking cam(s) using Adjustment 2. Do not increase the closing tightness any more than you need to in order to control the immediate problem, or the Euro-Handle will become difficult to operate.

If the Euro-Handle is difficult to operate, use Adjustment 2 to decrease the closing tightness of the locking cams.

Adjustment 2: Locking Cam Closing Tightness

Maximum Adjustment: Moves the sash 0.8 mm towards the frame. Moves the sash 0.8 mm away from the frame.

With the Euro-Handle in the Glide position, open the sash. Notice the cylindrical locking cams along the top and along both sides of the open sash.

Notice that each cam has an index groove stamped into its head. The index groove shows the current position. Refer to the position of the index groove before you adjust a cam.

With the sash open in the Glide position, adjust the closing tightness of a locking cam as follows:

Insert the 4 mm Allen key into the cam.

To increase the closing tightness, turn the fat side of the cam towards the gasket. To decrease the closing tightness, turn the fat side of the cam away from the gasket.

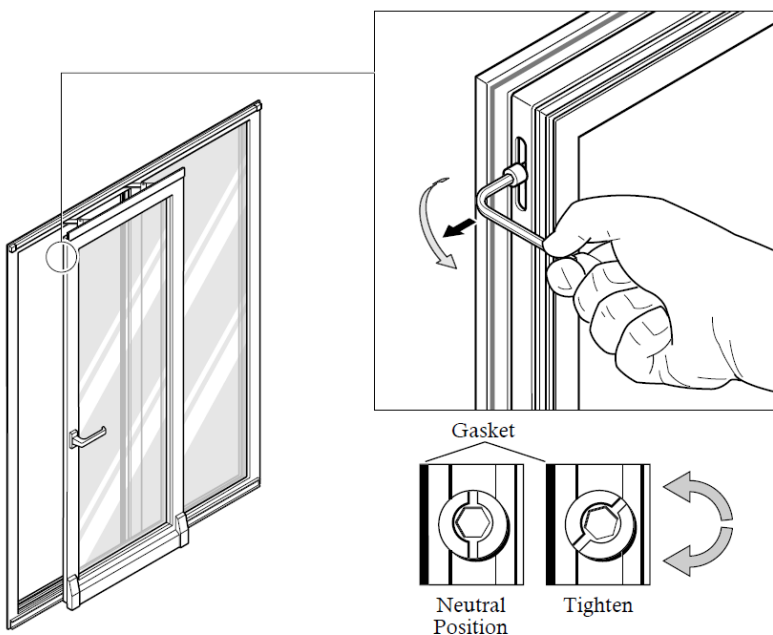


Figure 4-20.

SECTION 5

BLIND INSTALLATION

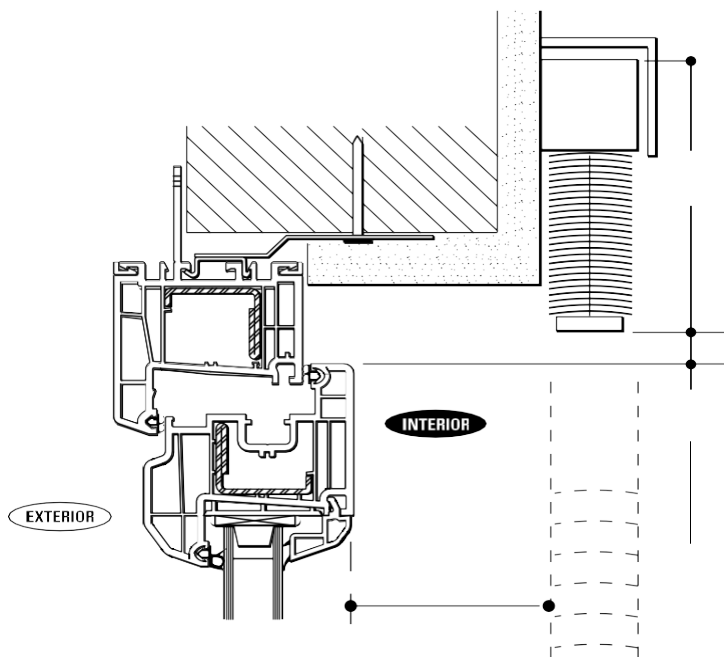
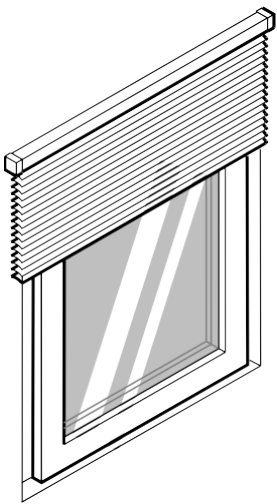
When choosing blinds for your EuroLine windows and doors, please remember that most 4700 Series windows and doors open to the interior of your home. If you choose blinds or pleated shades that stack vertically, you need to make sure that when the blinds are raised, they will not interfere with the opening of your window or door sashes.

Most window coverings are outside-mounted: they are attached to the room side of the wall above the window and are made to be wider than the window opening. Some window coverings can be inside-mounted: vertical mini-blinds and pleated shades can be attached to the wall above the window. Inside mounted blinds and shades are made to be narrower than the window opening. Venetian mini-blinds can be mounted directly to the window framing.

Here are some things to consider when choosing the kind of blinds you will be using with your 4700 Series windows and doors.

Outside Mounting (outside window return)

Outside-mounted window coverings are attached to the room side of the wall above a window and are made to be wider than the window opening. If the outside-mounted blinds stack vertically, please make sure they are mounted high enough so that the sash can open fully when the blinds are raised. See Figure5-1.



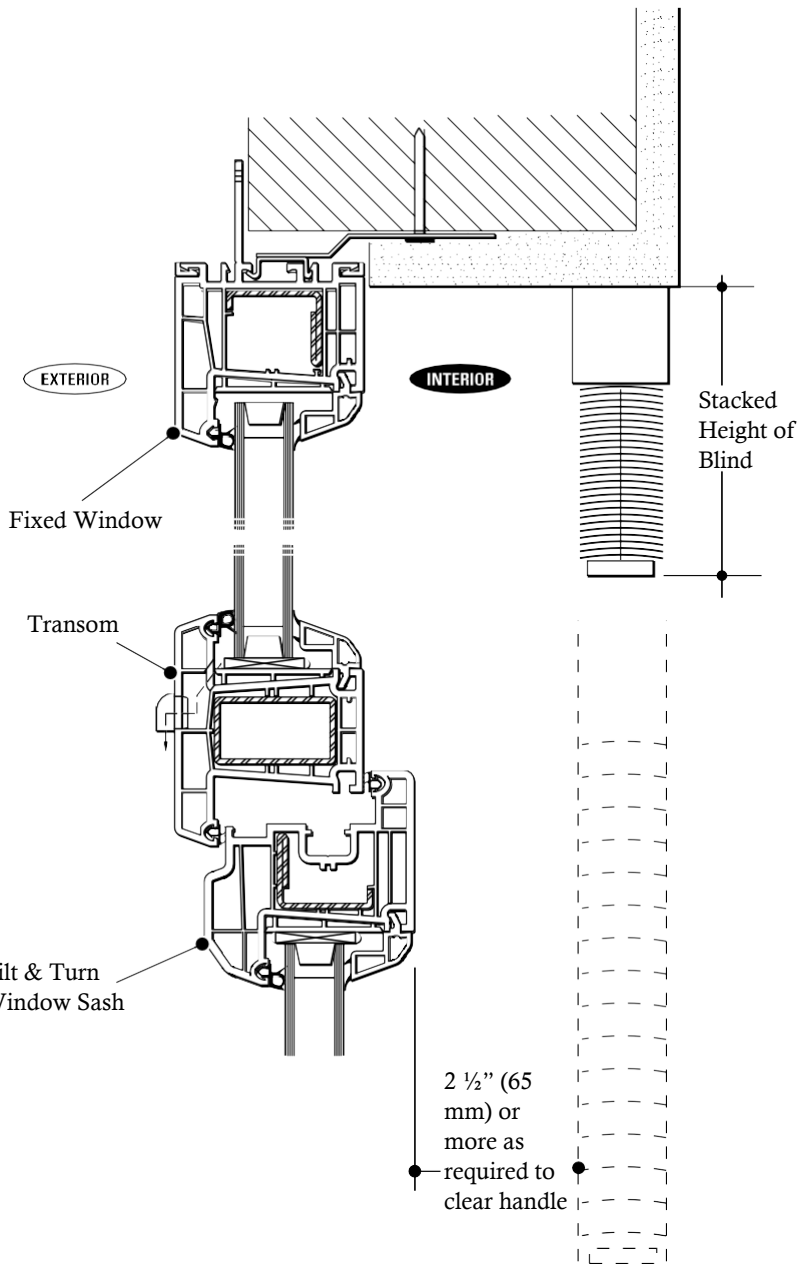
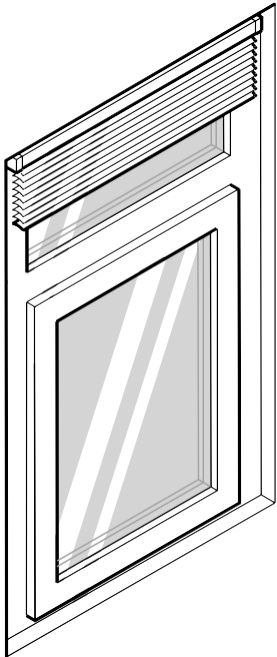
NOTE

Interface details and flashings are not shown. Such details are the responsibility of others.

Figure 5-1. Outside Mounted Blinds

Inside Mounting (inside window return)

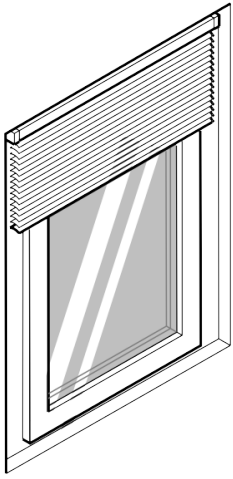
Inside mounted window coverings such as vertical mini-blinds and pleated shades can be attached to the wall above the window. If the inside mounted blinds stack vertically, please make sure they are mounted high enough so that the sash can open fully when the blinds are raised. There are two ways you can do this: order your windows and doors with a transom (see Figure 5-2), or have your builder frame a recessed pocket in the wall framing above your window (see Figure 5-3). In each case, make sure there is enough room above the inward opening sash to store the raised blind.



NOTE

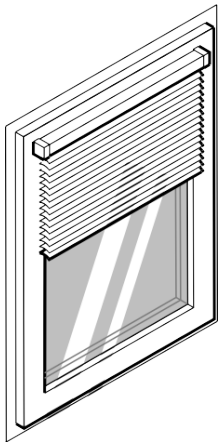
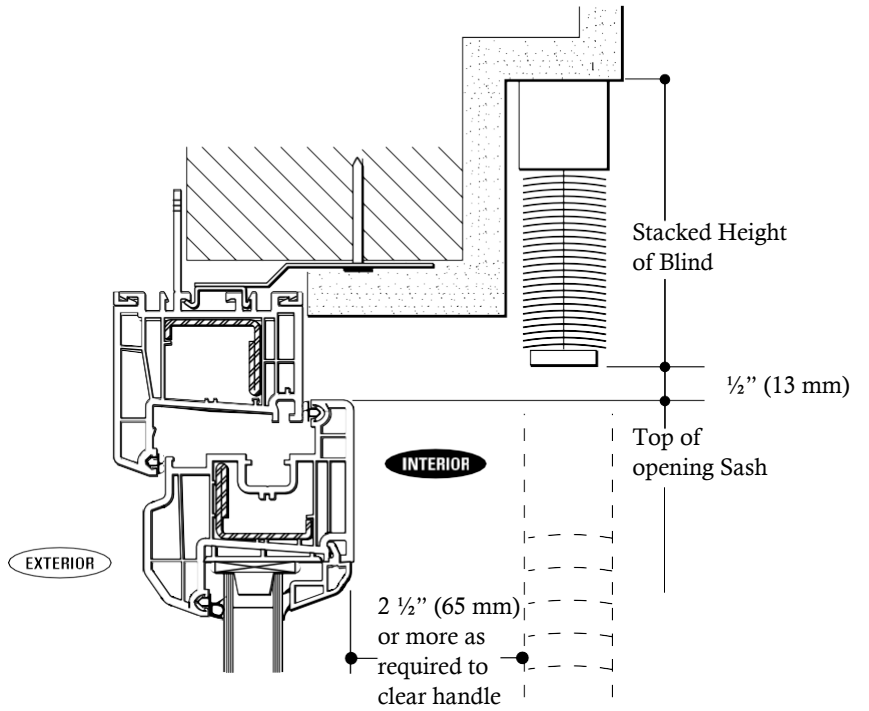
Interface details and flashings are not shown. Such details are the responsibility of others.

Figure 5-2. Inside mounted blind with transom



NOTE

Interface details and flashings are not shown.

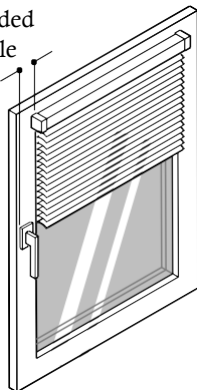


HANDLE

CLEARANCE

When measuring face-mounted blinds, allow for the width of the operating handle and base plate.

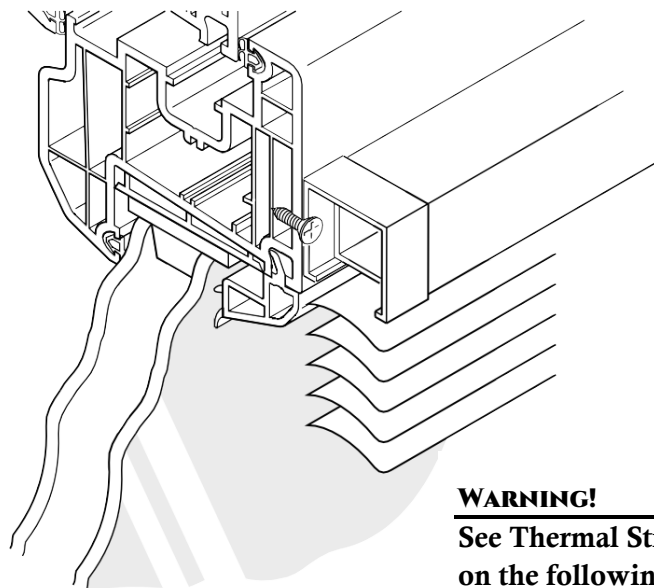
Distance needed to clear handle



FRAME MOUNTING

You can mount the blinds to the face of the window or door sash. You can also partially recess the blinds so that they only cover the glass. It is easier to mount the blind to the face of the sash, and with this method, minor variations in blind width will be less noticeable. See Figure 5-5.

Frame-mounted blinds on window or door sashes will hang vertically when these are open in the Tilt position unless they have side channels or retaining wires.



WARNING!

See Thermal Stress Considerations on the following page.

Figure 5-4. Handle Clearance

Figure 5-5. Blind mounted to face of the sash

A FEW MORE THINGS TO CONSIDER

Wand and Cord Location

Consider the position of tilt wands and lift cords. These should be located where they will not interfere with sash opening.

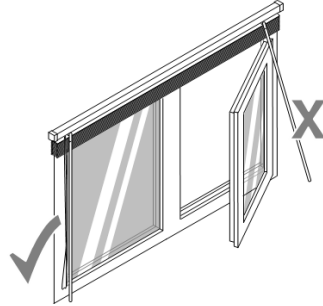


Figure 5-6. Wand and cord location

WARNING!

If you have egress requirements, frame mounting may not give you the required size of egress opening.

Wall Interference

Face-mounted blinds hinged against a wall will hit the wall before the sash is fully opened. You can order a stay arm to limit how far the sash is opened, but the sash will only be able to open about 45°.

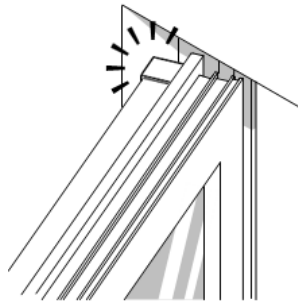


Figure 5-7. Wall interference

CAUTION

Glass is not warranted if blinds are not at least 2" (50 mm) from the glass surface and vented both top and bottom.

Thermal Stress Considerations

There are several things you should consider before you choose to use frame mounted blinds.

Because the blinds hang close to the glass, they can affect the window in several ways. In winter, they may shield the glass surface from room heat and increase the incidence of condensation. In winter and summer, they may trap solar heat against the glass and increase the risk of thermal glass breakage.

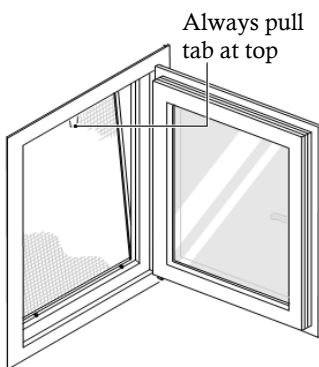
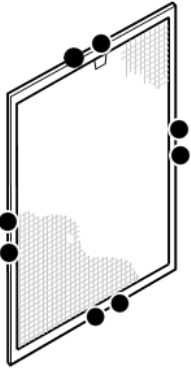
These effects also depend a great deal on the local climate. Consult your blind supplier for their experience in your area before you decide to use frame mounted blinds.

SECTION 6

SCREEN INSTALLATION

NOTE

If the side of the screen is greater than 48" (1200 mm), use 3 clips.



4700 Screen Installation

1. Install two clips on each side of the screen, except on sides of the screen greater than 48" (1200mm), use three clips. Snap the screen clips into the screen bar by gripping the clip as shown in figure 6-2. By turning the clip 30 degrees and engaging one of the barbs as shown, then pressing and rotating the clip at the same time, the barbs will snap into the grooves of the screen bar. Force may be required.
2. Place the clips in the position shown in figure 6-1 in preparation for the screen to be installed. Keep the clips at the top and sides from sliding by using a short piece of masking or duct tape to secure the clips to the interface of the screen bar.
3. With the sash open and standing inside the room, grip the screen by the sides. By holding the screen at an angle, move the unit through the window opening to outside the window.
4. Place the screen clips on the bottom screen bar onto the window frame as shown in figure 6-3, while holding the top of the screen angled out at about 15 degrees. Hold the top of the screen by the tab.
5. Now tilt at the top of the screen until the clips engage. The side clips may pop into place at the same time. If they don't, pull the clips towards the interior of the room, until they snap into place. The lip of the screen clip should be under the gasket against the frame itself. See fig. 6-4.
6. Remove the tape and slide the clips to the 1/4 points along each side of the screen, as shown in figure 6-5. If three clips are installed per side, place the third at the mid-point. Your installation is complete.

Note:

Be careful not to drop the screen while installing. Use the nylon tab located at the top to grip the screen. Do not pull too hard on the nylon tab as it may pull out.

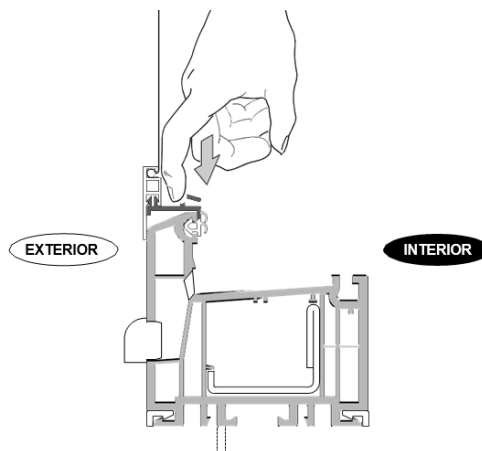


Figure 6-4. Locate clip between frame and seal, press down to locate clip

4700 Series Screen Removal

1. Slide the clips to the mid-point of the screen bars (figure6-1).
2. Holding the pull-tab with your right hand, pull on the clip handles (figure6-6) to release the clips at the head and push outward a 1/4 inch(6mm) on the screen so as to keep the clips from re-setting themselves.
3. Pull the clip handles on the left side of the screen while maintaining a grip on the pull-tab with your right hand.
4. With the clips released on two sides, the other will release by themselves.
5. Grip the screen with both hands and angle the screen through the opening into the room.

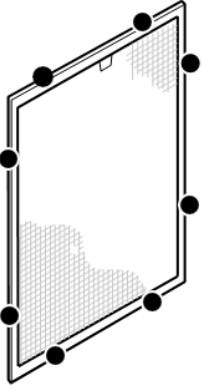


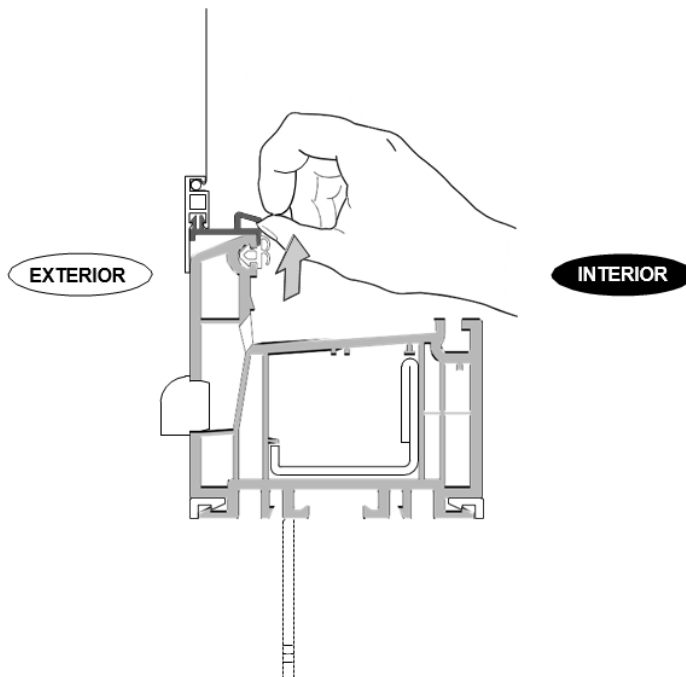
Figure 6-5. Clip locations

Note:

4700 Series screens may only be installed or removed from the interior of the building.

Note:

Do not drop the screen while removing it. Use the nylon tab located at the top to grip the screen. Do not pull too hard on the nylon tab as it may pull out.



For more information on these quality products
please contact:

EuroLine Windows Inc.

7620 MacDonald Road
Delta, BC. Canada V4G1N2

T. 604.940.8485

F. 604.940.8486

E. mail@euroline-windows.com

W. www.euroline-windows.com

Toll-Free: 1 800 337.8604

Other publications available from

EuroLine Windows Inc. can be found on our website at www.euroline-windows.com

Do not reproduce this manual without prior written permission from EuroLine Windows Inc.