



Windsor
Fully Assembled Patio Door

07/2013-R1 FJF

Detailed installation instructions

GENERAL: Door elevations shown in these instructions are as viewed from the outside.



'X' denotes the active or moving panel(s).

'O' denotes the inactive or fixed panel(s).



All Brighton and Hampton 2 panel doors between 72" to 84" high are fully reversible. The locking hardware on the operating panel is located at the mid-point of the panel unless otherwise requested. For 3 and 4 panel doors refer to the supplemental instruction sheet. All factory assembled Windsor doors are handed and are not reversible. The assembly procedures for doors with or without nailing fins is the same. The installation procedures for the Brighton and Hampton doors are the same.

NOTE: If you have purchased a pre-assembled Windsor door, we recommend removing the operating panels before moving the door around the construction site. Rough handling may damage joint assemblies which could result in reduced product performance.

ROUGH OPENING

The rough opening should be made 1/2" wider and 3/8" higher (+/-1/8" each way) than the actual door frame size. (Refer to catalogue for frame sizes.) The sill or base of the opening must be solid, level, and of sufficient width and depth to support the entire door sill in a continuous and uniform manner. It is important that the opening be plumb and square as the door will not perform to its potential if installed into an improperly prepared opening.

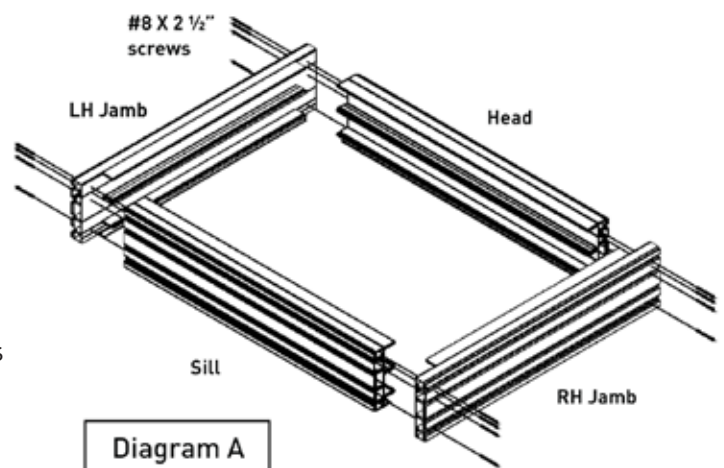
MAIN FRAME ASSEMBLY (for Brighton K.D. doors)

If you have purchased an assembled Windsor door or Hampton welded frame door, go to the "Frame Installation" step.

The Brighton frame consists of 4 main members:

Head, Sill, Right hand jamb, Left hand jamb.

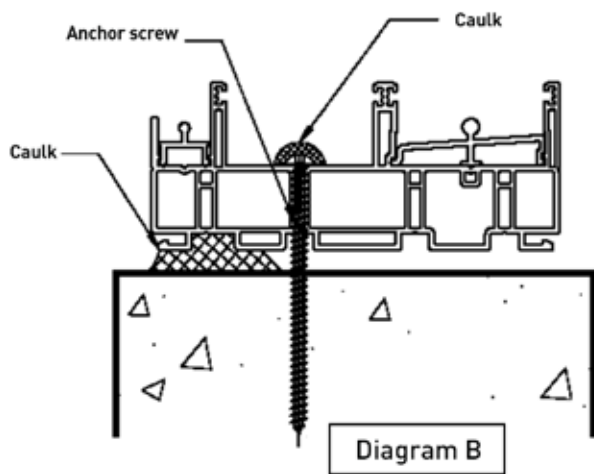
All main frame members are machined so that they may be assembled in only one way. Lay out the framing members as shown on Diagram A.



Ensure that the foam gaskets attached at the top and bottom of the jambs are in good condition and replace if they appear torn or defective.

Using the #8 X 2 1/2" screws provided fasten the head and sill to the jambs through the factory drilled holes making sure the screws are drawn tight

If exterior brick mold or interior jamb and sill extensions are being used, refer to the supplemental instruction sheet before proceeding with the frame installation.



FRAME INSTALLATION

The main frame is always installed with the sill sloping to the outside. **Ensure that the sill which has drainage slots is located at the bottom of the door, facing outwards.**

Apply a heavy bead of good quality urethane caulking along the full width of the sill opening inset 1/2" from the line the sill will be installed to so that the bottom of the sill will embed into the sealant. (See diagram B) Insert the main frame into the opening and centre the door frame leaving equal clearance at both jambs.

Installation holes are not provided. It is the responsibility of the installer to drill them. The use of concealed screws and cap plugs is recommended for aesthetic reasons. Alternatively, exposed installation screws may be used if permitted by the specifier. All screws must engage the surrounding structure a minimum of 1".

The sill must be installed level and uniformly supported from end to end and from front to back. Use a level, and

use solid shims if necessary to compensate for unevenness in the opening. At a minimum, fasten the sill to the surrounding structure at each meeting rail or parting rail.

At the sill of over sized Brighton and Hampton doors, pre-drill a clearance hole in the outer track as shown on Diagram B at the location of the meeting rails or parting rails. Clean the area around the hole with isopropyl alcohol and apply a dab of urethane sealant in and around the hole. Install the installation screw through the hole and apply a bead of the urethane sealant over top of the screw and tool the sealant around the screw to ensure water will not pass through the hole. **It is essential that the screw and hole are waterproof.**

Screws may not be used to fasten Windsor doors through the top of the sill to the structure. If anchoring is required, fixing brackets that do not puncture the water drainage path must be fabricated and provided by the installer.

At a minimum, the head must be anchored at each meeting rail and parting rail. **Final anchoring of heads at the meeting rails will be done after panel installation. Do not install head fasteners until following panel installation.**

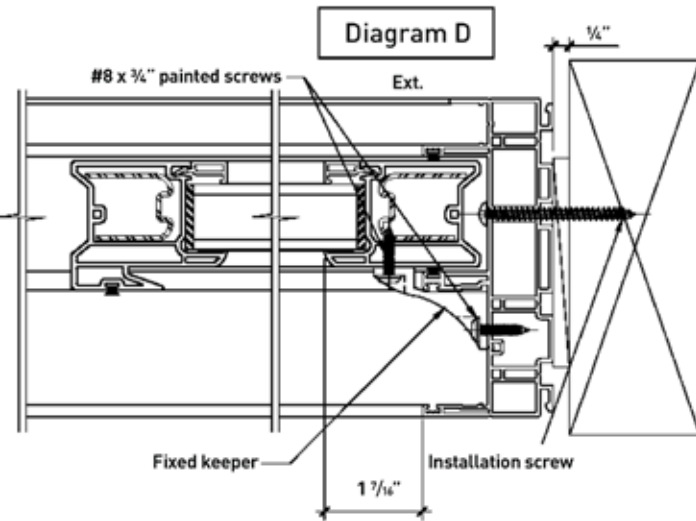
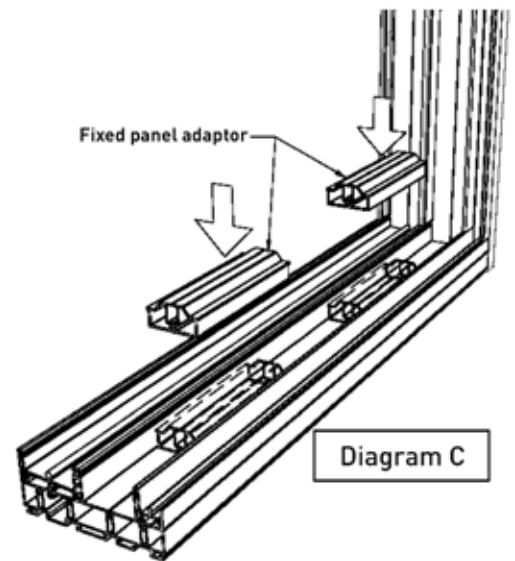
The jambs must be fastened within 6" of each corner and at mid height on doors up to 80" high. Additional fastening is required on taller doors.

Set shims behind frame installation holes to make the main frame plumb and square then temporarily fasten the frame to the surrounding structure. For doors with nailing fins, insert shims at the jamb corners to square the frame. Using a level and measuring diagonally, check that the frame is straight, plumb and square, make adjustments to the shims if necessary, and securely fasten all jamb screws.

NOTE: For installations in high rise buildings or high wind areas, the quantity, size, type, and engagement of the fasteners and the supporting shims must be engineered and is the responsibility of the installation contractor.

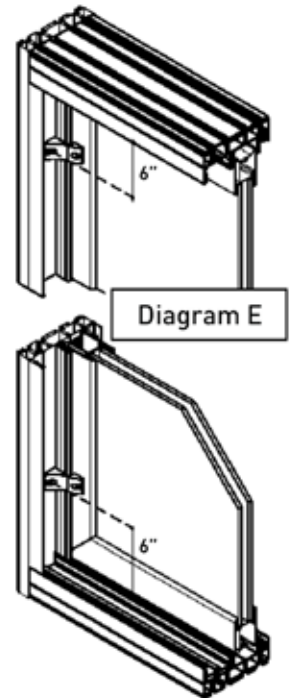
INSTALLING THE FIXED PANEL SUPPORTS

Each fixed panel is supplied with two 5" long (125 mm) support inserts. Place the supports in the outer track 6" (150 mm) in from the frame corner and 6" in from the mid-point of the door on the side the fixed panel is to be located as shown on Diagram C.



INSTALLING THE FIXED PANEL

Lift the fixed panel into the centre track of the frame head, rotate the panel in at the bottom and carefully lower onto the fixed panel supports on the sill. Push the fixed panel securely and completely into the jamb as shown on Diagram D. The meeting rail with interlocking hook and the wool pile weather stripping should now be in the middle of the door facing inside.



Fasten the fixed panel clips at 6" from the head and sill onto the fixed panel and into the jamb as shown on Diagrams D & E using the #8 X 3/4" painted screws supplied

INSTALLING THE OPERATING PANEL

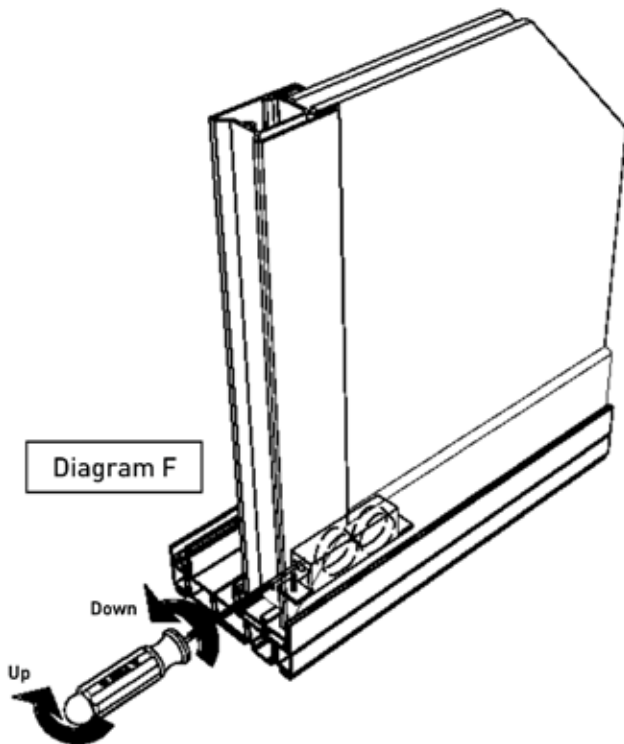
The operating panel is factory supplied with the wheels located in the bottom rail for an XO handed door. If the handing is to be reversed to make an OX door, remove the screws from the bottom rail, rotate the panel, and install the wheels into the opposite rail. Ensure that the adjustment screw head on the roller assembly is facing outwards towards the end of the panel.

Lift the active panel into the inside track of the frame head and carefully lower the panel onto the roller track of the sill frame.

Using a hand held screw driver, adjust the rollers up or down so that the bottom rail of the operating panel aligns with the bottom rail of the fixed panel.

Turn the screw clockwise to raise the panel or counter clockwise to lower the panel as shown on Diagram F. NOTE: Lift the panel slightly when adjusting the wheels for ease of turning and to ensure against stripping the adjustment mechanism.

Slide the panel in the closing direction to within $\frac{1}{4}$ " of the jamb. Visually, the joint between the panel and the jamb should be uniform from top to bottom. If not, adjust the panel up or down at one corner until the panel aligns to the jamb. If the jamb is bowed, remove the installation screws, adjust the shims, and re-fasten.

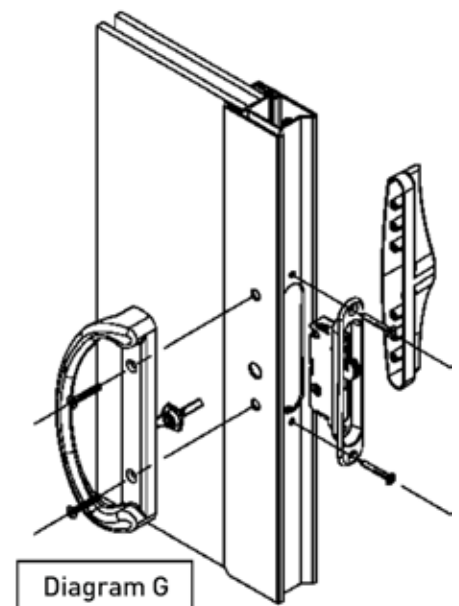


HARDWARE AND KEEPER INSTALLATION

Brighton and Hampton doors are supplied with Elite Locking Hardware which is shipped packaged separately. Follow the instructions enclosed in the hardware package. Only after the wheels have been adjusted as previously noted, attach the operating mechanism, handles, and lock keeper as follows:

Install the lock mechanism into the pre-drilled slot in the side of the operating panel with the adjustment screw to the top and the striker hook facing upwards. Insert the thumb lever into the slot on the inside of the lock mechanism as shown on Diagram G.

Install the interior and exterior pull handles with the screws provided from the inside. Ensure the exterior pull is installed as shown on Diagram G with the finger pull recesses facing towards the jamb.



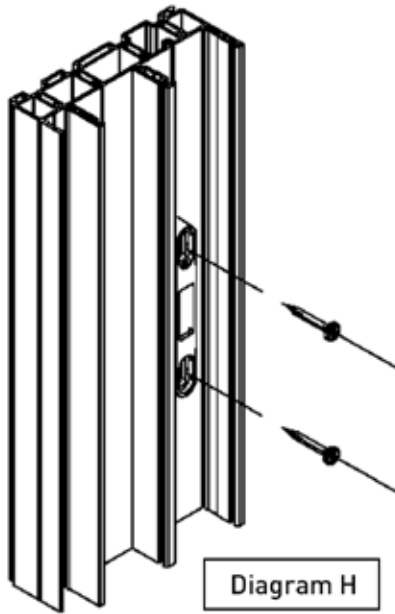


Diagram H

To locate the latch keeper on the jamb open the operating panel, nest the keeper into the opening on the lock mechanism, and engage the thumb turn to hold the keeper within the lock mechanism. Apply a piece of 2 sided tape to the back of the keeper and firmly close the panel into the jamb. Disengage the thumb turn and slide away the operating panel. The latch keeper should be held in the jamb by the 2 sided tape. Mark the keeper location with a pencil and remove the tape.

Install solid shims between the jamb and the opening and attach the keeper to the jamb and into the surrounding structure with two 2 1/2" screws as shown on Diagram H. Follow this procedure for doors with and without nailing fins.

NOTE: Install the screws through the centre of the slots in the keeper to allow for future vertical adjustments if necessary.

HEAD FRAME FASTENING

After all panels are installed in the frame, insert shims between the head and the surrounding structure above the fastening point ensuring that the head frame is true and not bowed. With the operating panel in the fully open position, fasten the head to the surrounding structure using the #8 X 1 3/4" screw provided through the inner track as shown on Diagram I.

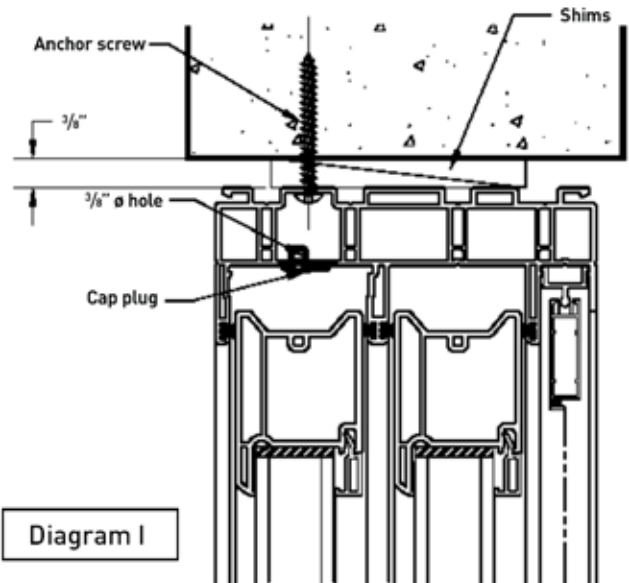
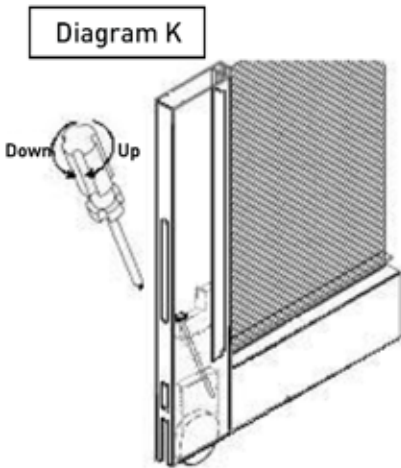
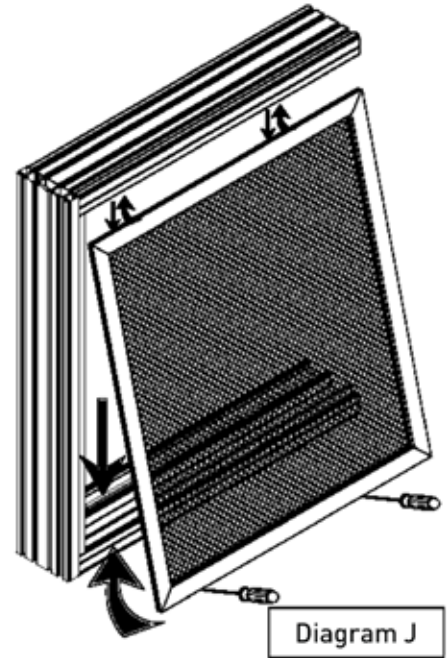


Diagram I

SCREEN INSTALLATION

Insert the screen in the outside track of the frame head, swing the bottom of the screen towards the sill, then depress the bottom rollers with a flat head screw driver or spatula and snap the rollers over the sill screen track as shown on Diagram J.

Slide the screen in the closing direction to within $\frac{1}{4}$ " of the jamb. Visually, the joint between the screen and the jamb should be uniform from top to bottom.

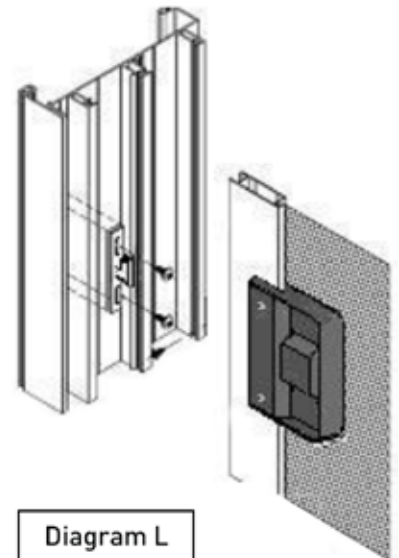


Using a screwdriver adjust the rollers on the bottom of the screen upwards or downwards to align the screen as shown on Diagram K.

Adjust the top rollers just enough to snug the screen in the top track and allow easy rolling.

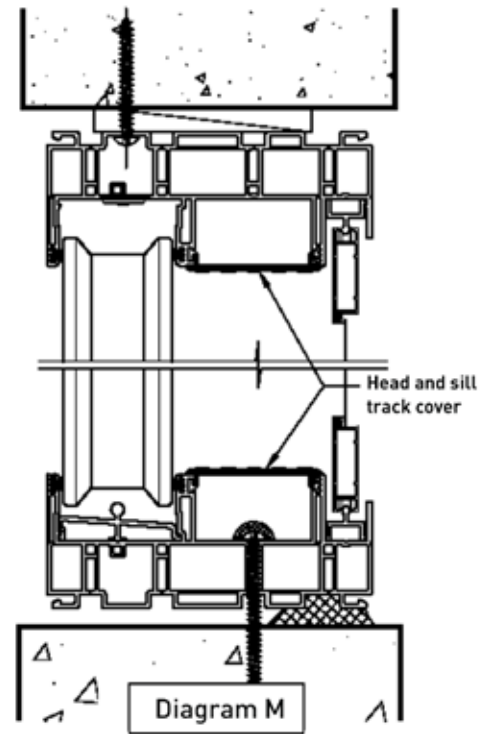
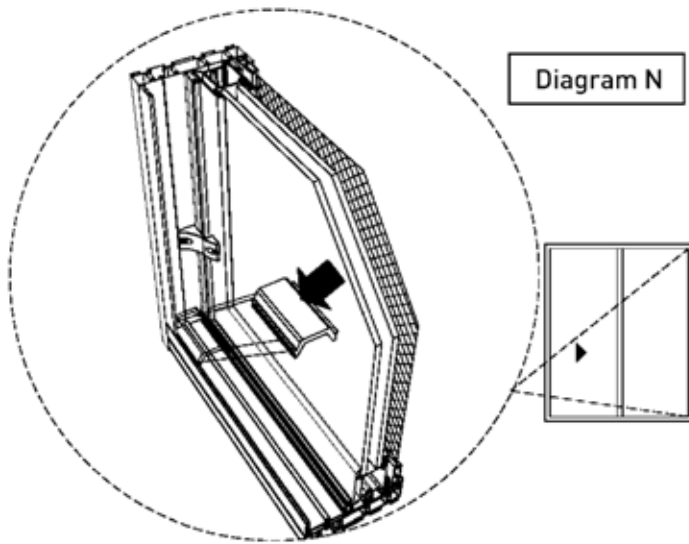
For standard size doors the screens are supplied with the latch mechanism pre-installed.

With the striker latch in the open position, slide the screen close to the jamb (or astragal mullion on OXO doors), mark the location of the top of the striker in the jamb, and position the keeper within the jamb so that the striker will cleanly engage the keeper. Attach the keeper to the jamb using the self drilling screws provided. Ensure the latch securely holds the screens locked and adjust the keeper up or down as necessary.



HEAD & SILL FIXED TRACK COVER

Following installing the panels, snap fit the fixed track cover into the head and sill beside the fixed panel as shown on Diagram M.



BUMPER INSTALLATION

Snap fit the 3" long soft plastic bumpers into the corner of the inside head and sill track as shown on Diagram N.

CAULKING

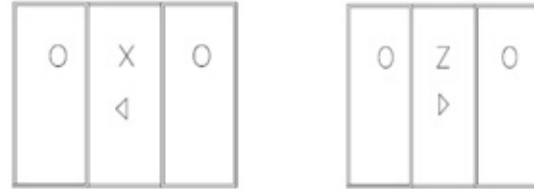
Use a good quality building sealant that is compatible with the vinyl surfaces of the sliding door and the surrounding structure. It is important that all surfaces to be caulked are free of smut, dust, and grease and are well cleaned with an isopropyl alcohol solution followed by a clean dry wipe. Depending on the sealants being used, a primer may also be necessary. Check the application with your sealant supplier.

CAUTION: If expanding foam insulation is being used to fill the void between the door frame and surrounding structure, we recommend the use of good quality low expanding material only applied by an experienced applicator. The use of high expanding foam can bow and deform framing members resulting in poor performance and difficult operation of the door.

CLEANING : Remove all debris and vacuum all dirt and filings from the sill. Using a mild soap and water solution, clean all vinyl and glass surfaces. Do not use solvents or harsh cleaners as they may damage the finish surfaces.

3 PANEL OXO AND OZO

SUPPLEMENTAL INSTRUCTIONS



FRAME INSTALLATION – HEAD ANCHORING – OXO and OXXO DOORS

At a minimum, the head and sill of OXO and OXXO must be anchored at each meeting or parting rail following the loading of the fixed and operable panels. See two panel installation instructions.

Drill 3/8" diameter clearance holes through the bottom surface of the head to allow passage of the screw head and 3/16" diameter clearance holes through the secondary surface to allow passage of the screw shaft as shown on Diagram I.

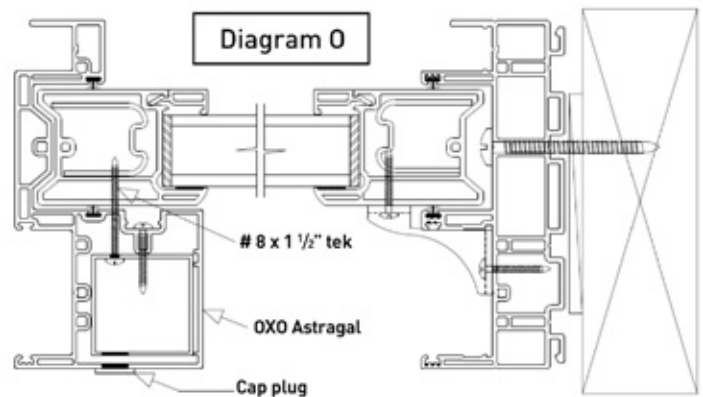
Use solid shims and ensure that the head is not bowed or twisted by the installation screws. Check for straightness and squareness before proceeding further. After installing the screws, apply urethane sealant around the hole and install the cap plug. Wipe clean any excess sealant.

INSTALLING THE FIXED PANELS – 3 PANEL DOORS

The installation procedure is the same as for 2 panel doors. Insert the fixed panel supports at both ends of the outer track as shown on Diagram C.

For an OXO door, as viewed from the outside, install the fixed panel with the meeting rail to the left jamb of the door with the interlock hook and the wool pile weather stripping facing inside. Install the fixed panel with standard sash rails on both sides to the right jamb of the door. Push the fixed panels securely into the jambs as shown on Diagram D.

Push fit attach the OXO mullion astragal to the standard sash rail of the right hand panel as shown on Diagram O and hold snug and securely in place. (NOTE: The mullion astragal is machined to be applied in only one way.) Using the #8 X 1 1/2" tek screws provided, fasten the astragal to the sash rail through the three pre-drilled holes located on the inside at the top, bottom, and mid-point as shown on Diagram "O". Once fastened, snap fit the cap plugs provided into the 3/8" diameter screw clearance holes.



INSTALLING THE OPERATING PANEL – 3 PANEL DOORS

For OXO doors, adjust the operating panel and wheels in the same manner as for a two panel door aligning the operating panel to the mullion astragal.

HARDWARE AND KEEPER INSTALLATION

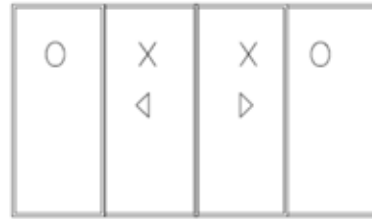
For OXO doors, install the locking mechanism and handles the same as a two panel door and use the 1" screws provided to attach the latch keeper to the astragal mullion.

SCREEN INSTALLATION – 3 PANEL DOORS

Follow the screen installation instructions for the 2 panel door and align to the astragal mullion.

4 PANEL OXXO

SUPPLEMENTAL INSTRUCTIONS

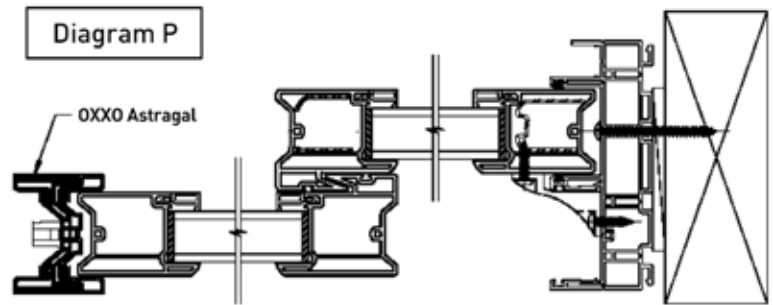


INSTALLING THE FIXED PANELS – 4 PANEL DOORS

For 4 panel doors, repeat the two panel procedure at both ends.

INSTALLING THE OPERATING PANEL OXXO

For OXXO doors, install and adjust the panels in a similar manner as two panel doors aligning the two operating panels to each other. Apply a continuous bead of caulking into the bi-parting astragal "H"-bar and push it on to the vertical rail without the cutout for the operating hardware using the #8 X 1" screws provided as shown in Diagram P.



HARDWARE AND KEEPER INSTALLATION

For OXXO doors, install the locking mechanism and handles the same as a two panel door and use the 1" screws provided to attach the latch keeper to the "H"-bar.

SCREEN INSTALLATION – OXXO DOORS

Load the screens into the frame as per the 2 panel door instructions. Slide the screens in the closing direction to within 1/4" of each other. Visually, the joint between the two screens should be uniform from top to bottom. Using a screwdriver adjust the rollers on the bottom of the screens upwards or downwards to align the screens as shown on Diagram K. Adjust the top rollers just enough to snug the screen in the top track and allow easy rolling.

On one of the screens, attach the screen "H" bar using 4 self drilling screws as shown on Diagram Q.

With the striker latch in the open position slide the screens close to each other, mark the location of the top of the striker in the screen "H"-bar, and position the keeper within the "H"-bar so that the striker will cleanly engage the keeper. Attach the keeper to the "H"-bar using the self drilling screws provided. Ensure the latch securely holds the screens locked and adjust the keeper up or down as necessary.

