

Therma-Tru[®] Hinged Patio Door System

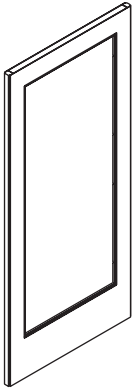
Double/Triple Panel Unit Assembly

Read all instructions before starting.

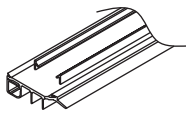
The applicable standards for these products are governed by
the International Residential Code.
Copies of performance ratings and testing are available on our website
www.thermatru.com and our product manual.

Part identificaion

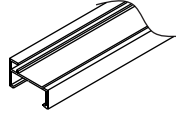
Not all parts shown will be included in package.
Parts will vary for type of unit purchased.



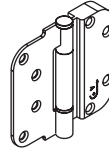
Door Panel



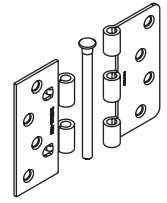
Door Bottom-Active



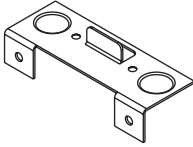
Door Bottom-Inactive



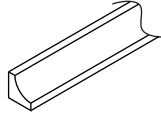
Adjustable Hinge



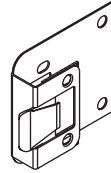
Standard Hinge



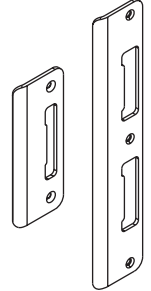
Transport Clip



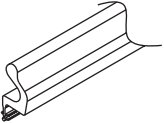
Cove Molding



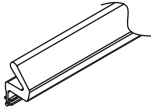
Standard Strike-Jamb



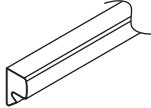
Multi-point Lock Strikes



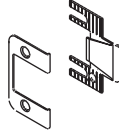
Head & Lock Weatherstrip



Hinge Weatherstrip



Inactive Weatherstrip



Standard Strike-Mullion



Lock Jamb



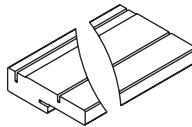
Hinge Jamb



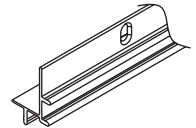
Lock Mullion



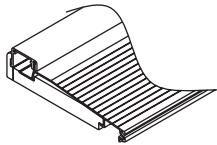
Hinge Mullion



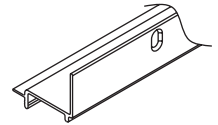
Head Jamb



Inswing Flange



Inswing sill

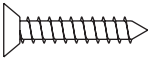


Outswing Flange

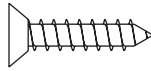


End Seal Pad

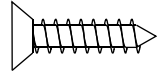
Part identification - continued



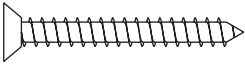
#6 x 3/4"
flat head screw



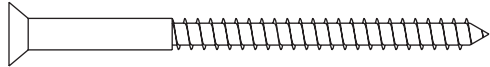
#8 x 3/4"
flat head screw



#10 x 3/4"
flat head screw



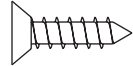
#8 x 1-1/4"
flat head screw



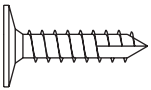
#8 x 2-1/2"
flat head screw



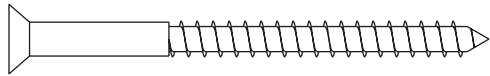
#8 x 2-3/4"
trim head screw



#8 x 5/8"
flat head screws



#8 x 3/4"
wafer head screw



#10 x 2-1/2"
flat head screw

Tools/materials required

This is a listing of tools that may be required to assemble unit.

- Drill/screw gun
- Phillips head drive bit or screwdriver #2 & #3
- Silicone sealant and caulk gun
- Utility knife
- Rubber mallet
- Hammer
- 3/32" & 1/8" dia. drill bit
- (2) 3/4" thick x 6' long boards
- Miter saw



NOTE:

A large work area is needed to assemble the frame kit. Cover area with cardboard from one or more door panel cartons to protect frame parts and floor. If available a carpeted table can be used to avoid marring prefinished surfaces.

1 REMOVE COMPONENTS FROM PACKAGING

NOTE:

Product that is purchased with the multi-point lock system will have additional instructions in the handle hardware box.

Installation instructions will be included in the site package.

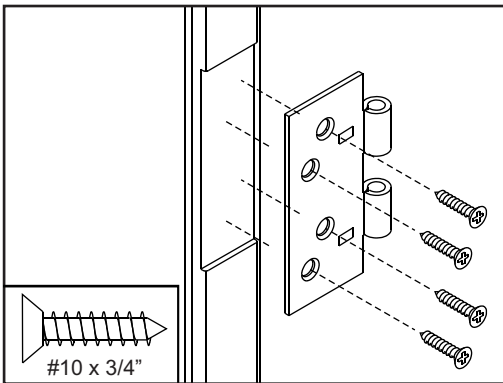
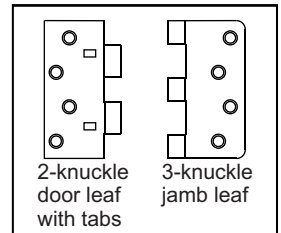
2 ATTACH HINGES TO DOOR

Standard Hinge Option

Use Correct Hinge Leaf

Leaves applied to door have 2 knuckles.

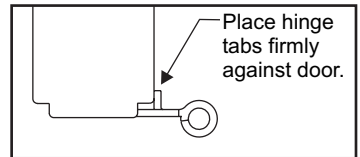
Leaves applied to jamb have 3 knuckles.



Align and Install Hinges

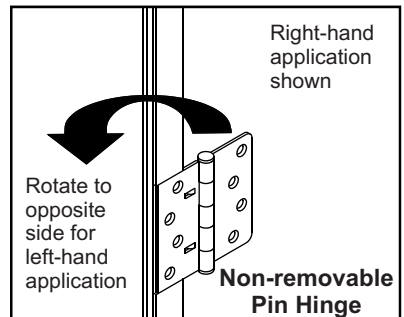
Place tabs firmly against door.

Fasten 2-knuckle hinge leaves with #10 x 3/4" flat head screws.



NOTE:

Outswing packages come with a non-removable pin (NRP) hinge. It is recommended to attach the hinge in the middle location. For 8' heights, two NRP hinges are included. NRP hinges have locating tabs. Fasten to door panel using same method as for unassembled hinges, placing tabs against door face to locate hinge.



2 ATTACH HINGES TO DOOR - *continued*

Adjustable Hinge Option

Attach hinge to door

Locate the “H” and “V” markings on hinges. The two “H” hinges go in top and bottom locations with the “V” hinge in the center.

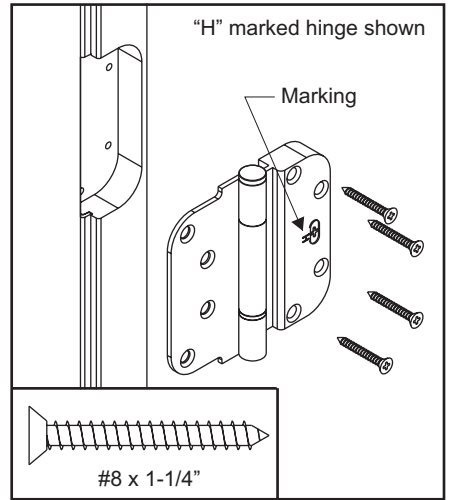
For 8', the “V” hinge is located second from top of door.

Insert thick side of hinge into pocket in door and fasten with #8 x 1-1/4" flat head screws.

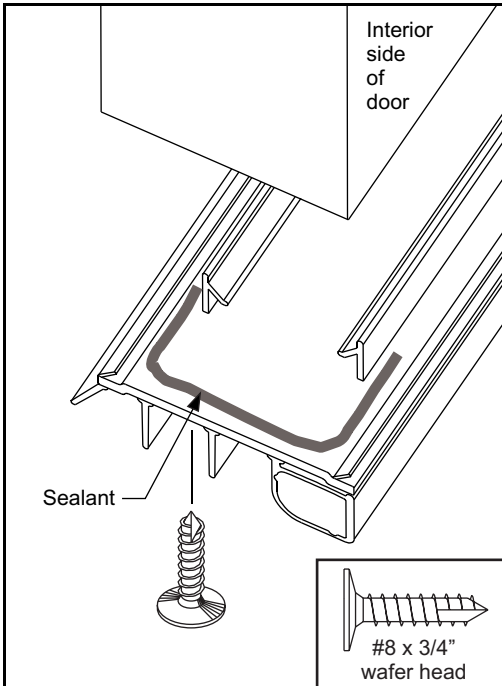


NOTE:

Inswing hinges are reversible by removal of hinge pin. Outswing hinges are reversible by removal of set screw then removal of hinge pin.



3 INSTALL DOOR BOTTOM



NOTE:

Outswing units do not require door bottoms.

Caulk and Fasten Door Bottom

Select a sealant that provides excellent adhesion to both plastic and wood.

Apply sealant as shown to ends of door bottom.

Center door bottom and press into rail kerfs.

Secure each end of door bottom with (1) #8 x 3/4" wafer head screw.

4 INSTALL WEATHERSTRIP

Apply Weatherstrip to Active Frame Parts

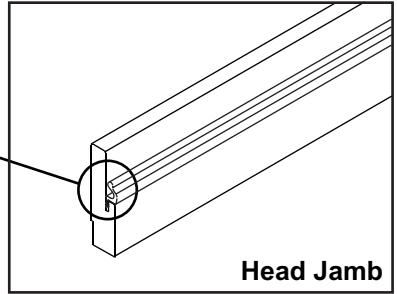
Press in kerf.

Head Jamb

Align starting end with head gain.

Fit and secure in place along full length.

Trim finish end flush with end of jamb.



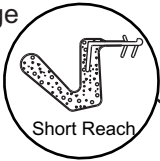
Head Jamb

Side Jamb

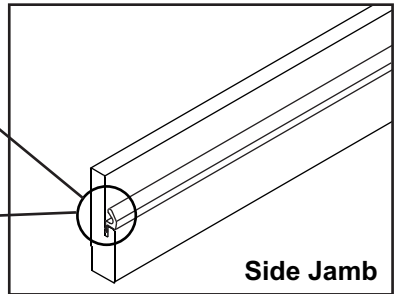
Align starting end with head gain.

Fit and secure in place along full length.

Hinge



Lock



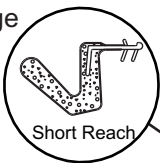
Side Jamb

Mullions

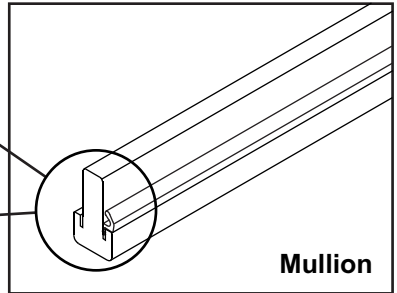
Align starting end with top end of mullion.

Fit and secure in place along full length.

Hinge



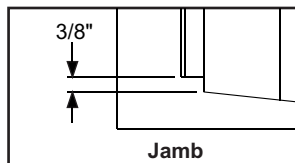
Lock



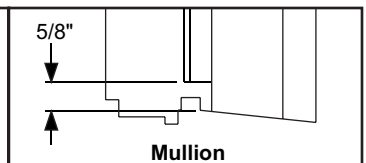
Mullion

Trim Bottom End

Trim weatherstrip as shown.



Jamb



Mullion

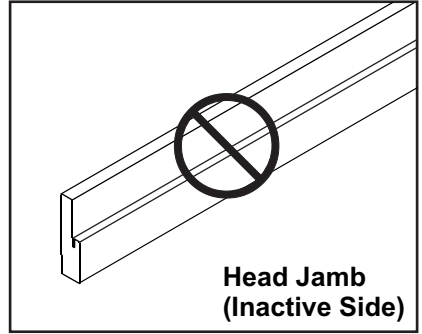
4 **INSTALL WEATHERSTRIP - continued**

Apply Weatherstrip to Inactive Frame Parts

Press in kerf.

Head Jamb

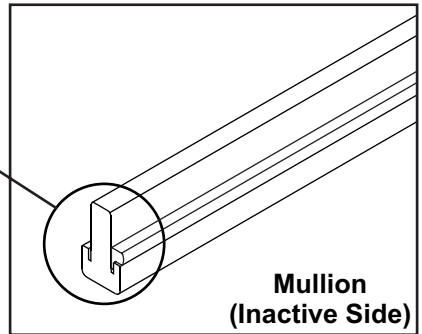
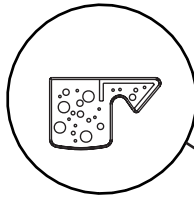
Do not apply inactive weatherstrip to inactive side of head jamb. Apply a bead of sealant during inactive panel installation.



Mullions

Align starting end with top end of mullion.

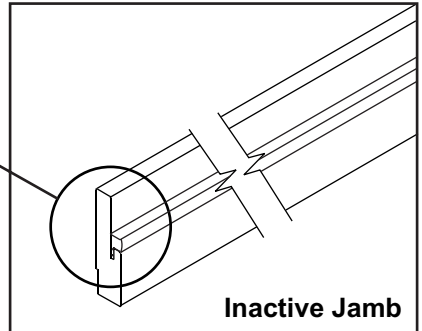
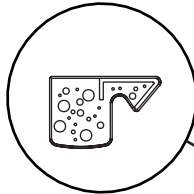
Fit and secure in place along full length.



Jamb

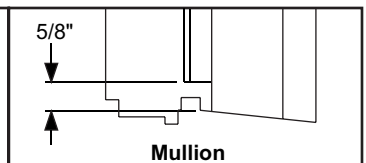
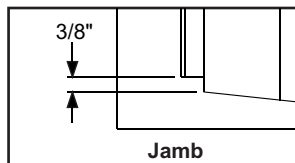
Align starting end with head gain.

Fit and secure in place along full length.



Trim Bottom End

Trim weatherstrip as shown.



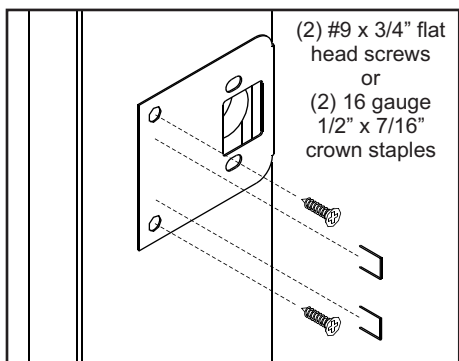
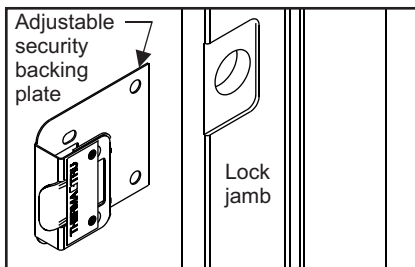
5 INSTALL STRIKES

Standard Strike Option

(units hinged off mullion)

Slide Strike Assembly onto Lock Jamb

Lightly bend tongue area of backing plate inward to allow for a snug fit then slide over edge of lock jamb into mortise.



Fasten Security Strike Assembly to Lock Jamb

Fasten with (2) #9 x 3/4" flat head screws or (2) 16 gauge 1/2" x 7/16" crown staples (not supplied) through strike plate on back side of jamb.

NOTE:

Do not staple through screw holes when using staples in place of screws.

Multi-point Lock Option

(units hinged off mullion)

Fasten Strike Plates to Lock Jamb

Fit strike plates into mortises on lock jamb.

Pre-drill 3/32" dia. pilot holes through jamb.

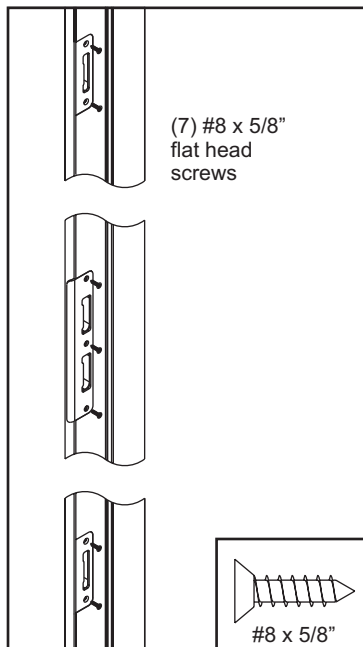
Fasten with (7) #8 x 5/8" flat head screws.

DO NOT OVER TORQUE.



HINGED OFF JAMB OPTION

Strikes attached to mullions are installed during inactive panel installation.



6 INSTALL HINGES



NOTE:

These are instructions for installation of standard hinges. Proceed to step 7, FRAME ASSEMBLY, if using adjustable hinges.

Standard Hinge Option

Fasten Hinges to Hinge Jamb

Place hinges into hinge mortise.

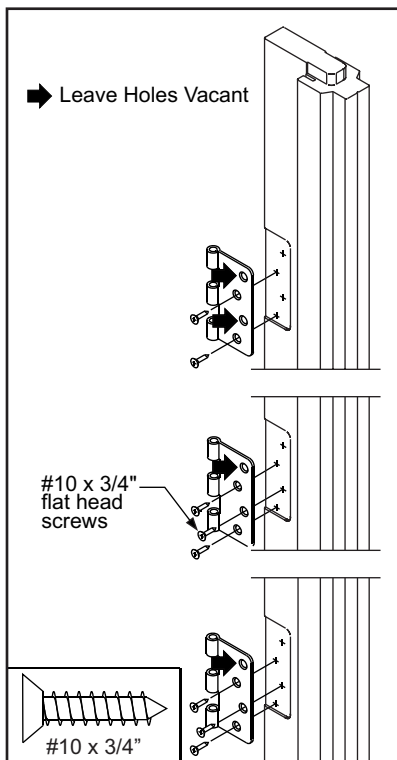
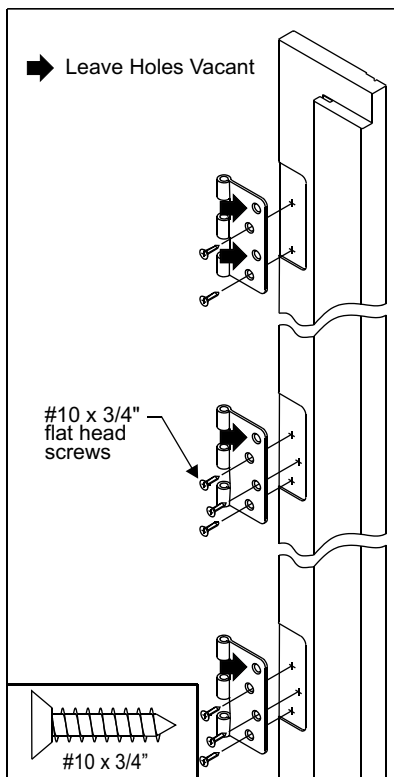
Fasten top hinge with (2) #10 x 3/4" flat head screws in hole locations shown.

Fasten middle and bottom hinges each with (3) #10 x 3/4" flat head screws.



CAUTION:

Do not over torque screws.



Fasten Hinges to Mullion

Place hinge leaves into mortises.

Fasten top hinge in holes as shown with (2) #10 x 3/4" flat head screws.

Fasten middle and bottom hinges in holes as shown with (3) #10 x 3/4" flat head screws.



CAUTION:

Do not over torque screws.

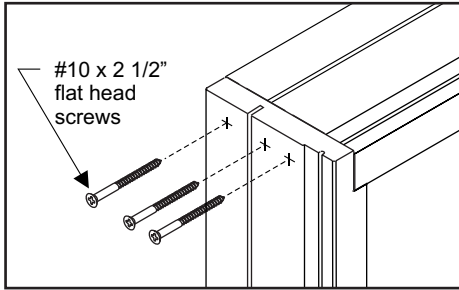
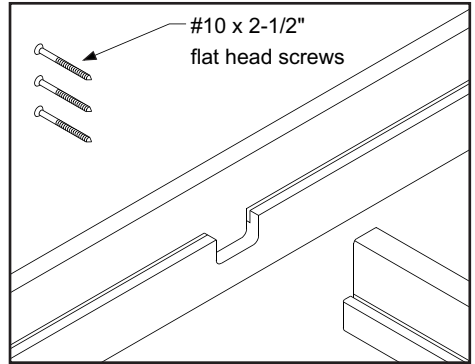
7 FRAME ASSEMBLY

Fasten Mullion to Head Jamb

Insert mullion into head jamb mortise.

Pre-drill 1/8" dia. pilot holes through head jamb into mullion.

Fasten with (3) #10 x 2-1/2" screws through head jamb into mullion.



Fasten Side Jambs to Head Jamb

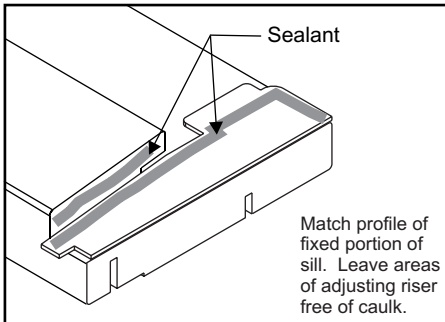
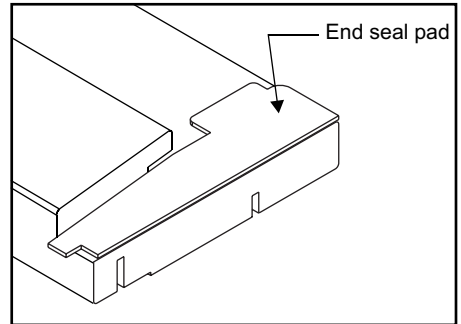
Butt and align head jamb to side jambs.

Pre-drill 1/8" dia. pilot holes through side jamb into head jamb.

Fasten side jambs to head jamb with (3) #10 x 2 1/2" flat head screws through lock and hinge jamb into head jamb.

Apply End Seal Pads

Remove from paper backing and apply adhesive side of end seal pads at bottom of each jamb.



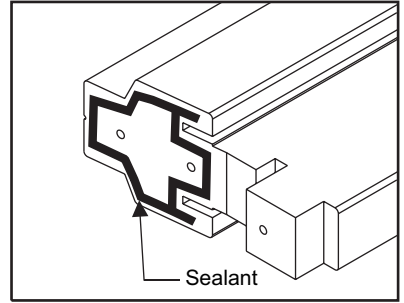
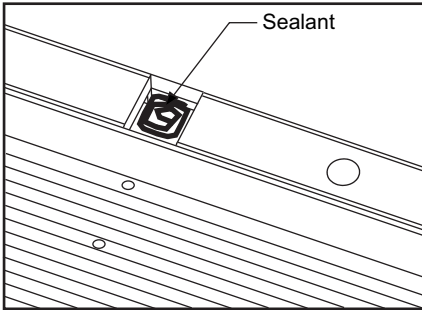
Caulk Entire Sill Gain

Apply a 1/4" bead of sealant to sill gain and a bead that matches profile of sill.

7 FRAME ASSEMBLY

Apply Sealant to Bottom End of Mullion

Apply a 1/4" bead of sealant around bottom of each mullion.



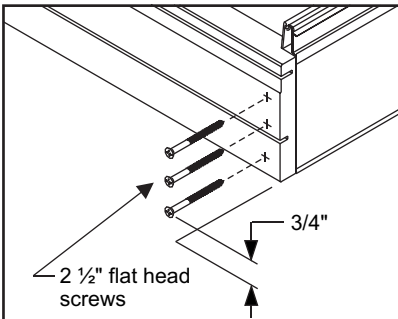
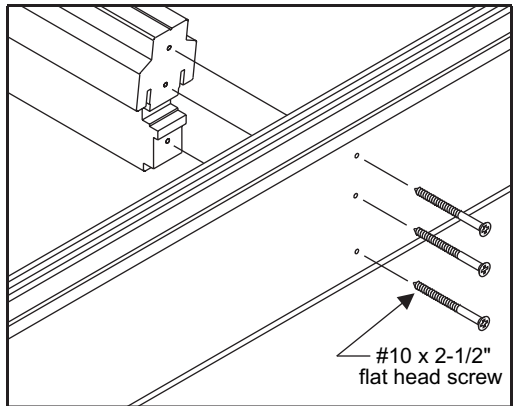
Apply Sealant to Sill

Apply a generous amount of sealant inside cutout section of sill saddle.

Fasten Sill to Mullion

Position mullion onto sill. Mullion should be flush with back of sill saddle.

Drive (3) #10 x 2-1/2" brass screws up through the pilot holes in sill and screw into mullion. DO NOT overtighten.

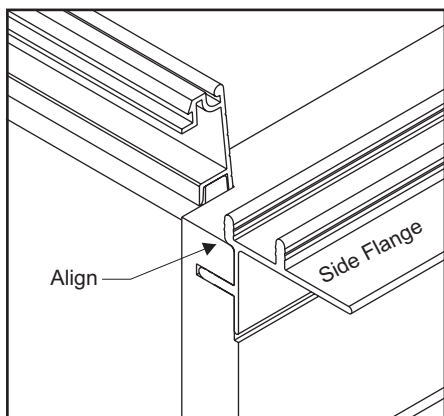
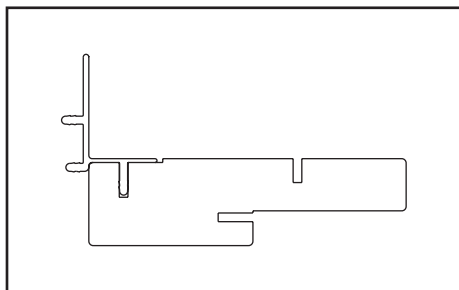


Fasten Sill to Side Jambs

Fit and align sill between lock and hinge jamb.

Starting approximately 3/4" from interior side of jamb, drill (3) 1/8" pilot holes through each jamb into sill substrate.

Fasten each jamb to sill with (3) #10 x 2 1/2" flat head screws.

***Align and Install Side Flanges***

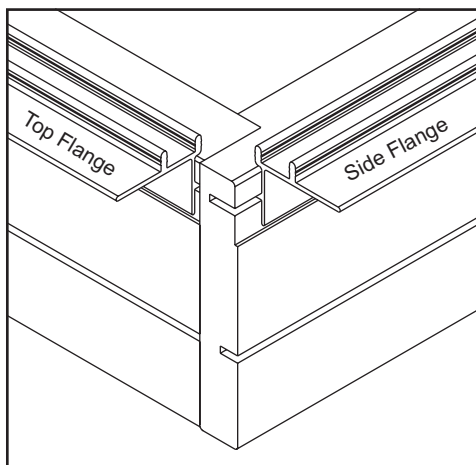
Align edge of side flange with bottom of side jambs.

Firmly press into kerf in jamb using a rubber mallet if necessary.

Flange will be set back approximately 1/2" from top edge of jamb.

Install Top Flange

Center top flange into head jamb kerf and press into place using a rubber mallet if necessary.



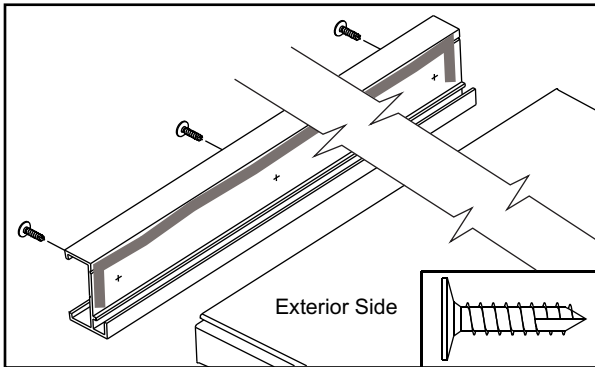
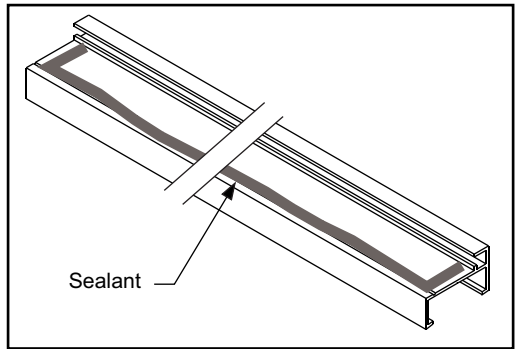
9

INACTIVE PANEL INSTALLATION

Caulk Door Bottom

Select a sealant that provides excellent adhesion to both plastic and wood.

Apply a 1/4" bead of sealant to top surface of door bottom.

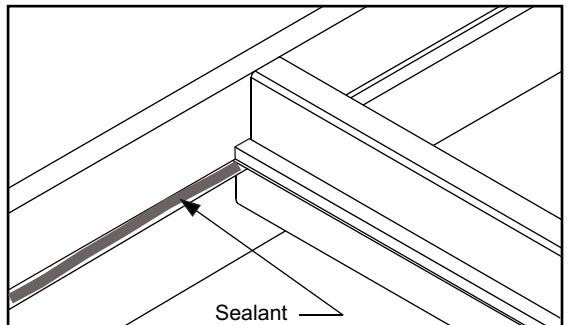


Attach Door Bottom

Fasten door bottom to inactive slab with 1" staples or #8-15 x 3/4" Phillips dual angle wafer head type 17 gimlet point screws.

Caulk Head Jamb

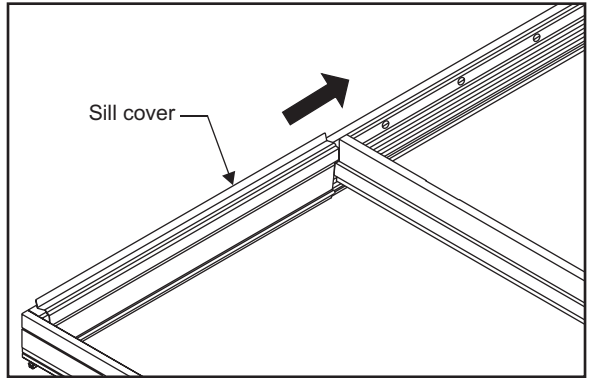
Apply a 1/4" bead of sealant on inactive side of head jambs to ensure a weather seal.



9 INACTIVE PANEL INSTALLATION - cont.

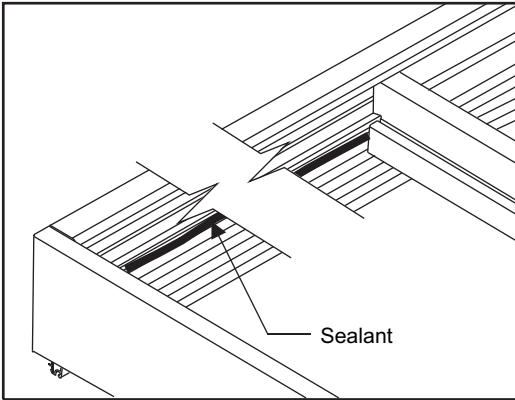
Move Sill Cover

Remove and reinstall sill cover to active panel side if necessary.



Caulk Sill Where Door Bottom Meets

Apply a 1/4" bead of sealant along length of sill where inactive door bottom makes contact.

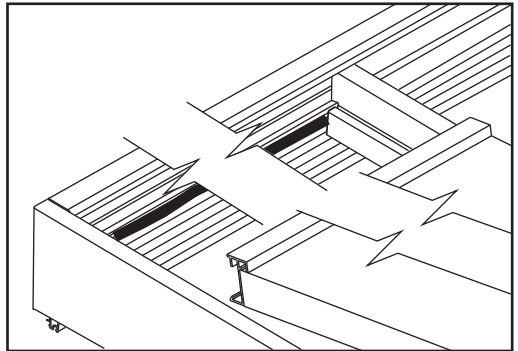


Install Inactive Panel into Frame

Place sill end in first, mating plastic bottom to sill.

If necessary, use putty knife blade at top to aid insertion of panel in frame.

Panels are nominally 1/16" narrower than frame opening for 1/32" clearance on each side.



CAUTION:

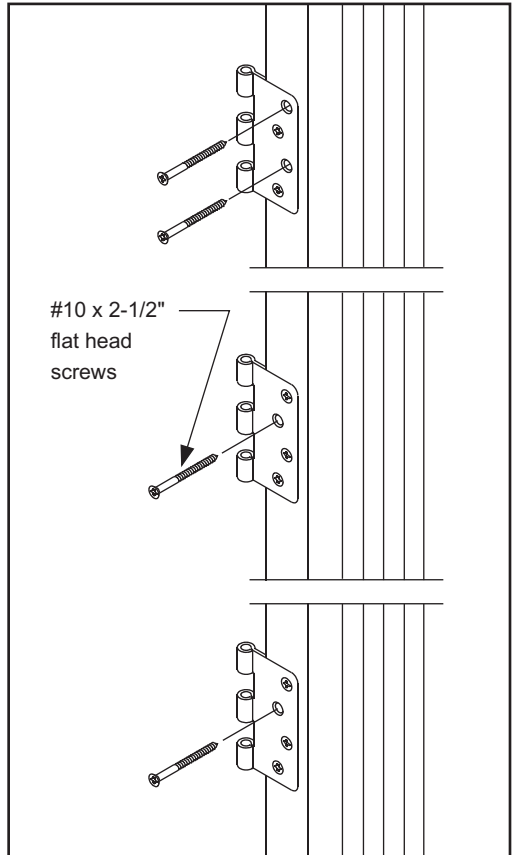
Press down firmly on inactive panel to ensure proper seal against frame stop.

9 INACTIVE PANEL INSTALLATION - cont.

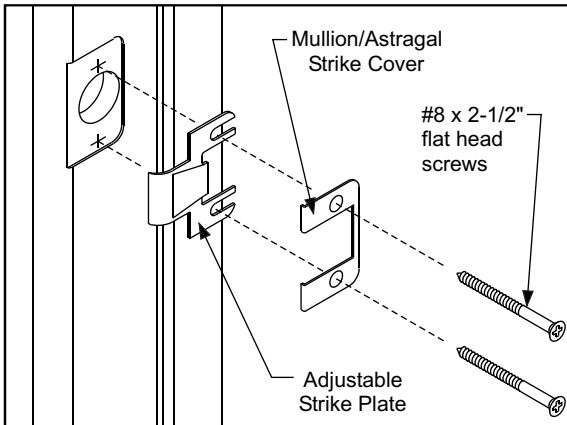
Hinged Off Mullion Option

Fasten Panel Through Hinge Mullion

Fasten panel with (4) #10 x 2-1/2" flat head screws through unused holes in hinges.



Hinged Off Jamb Option



Mount Strike to Mullion

Use strike cover as template.

Drill 1/8" pilot holes, as shown through mullion.

Place security strike onto mullion.

Fasten to mullion with (2) #8 x 2-1/2" flat head screws.

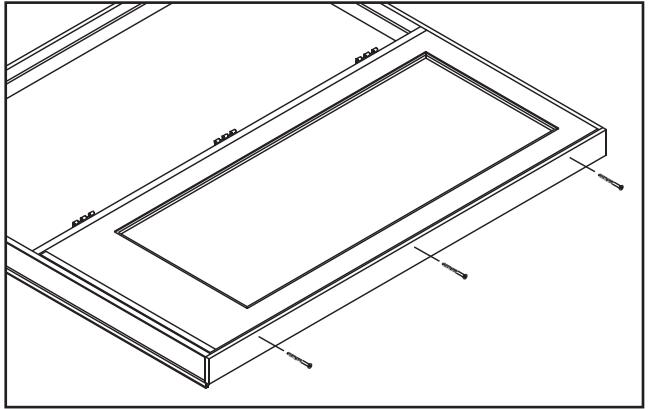
Drive screws through mullion into inactive panel.

9 **INACTIVE PANEL INSTALLATION - cont.**

Fasten Panel Through Jamb

Pre-drill 1/8" dia. pilot holes through jamb into inactive panel.

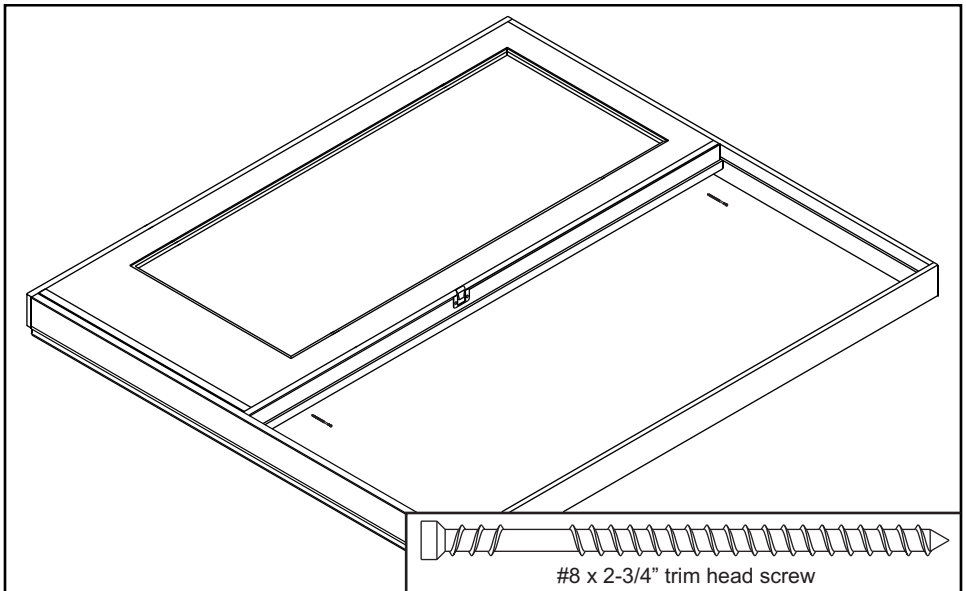
Fasten inactive panel with #10 x 2-1/2" flat head screws, as shown.



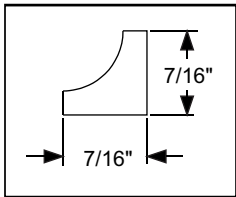
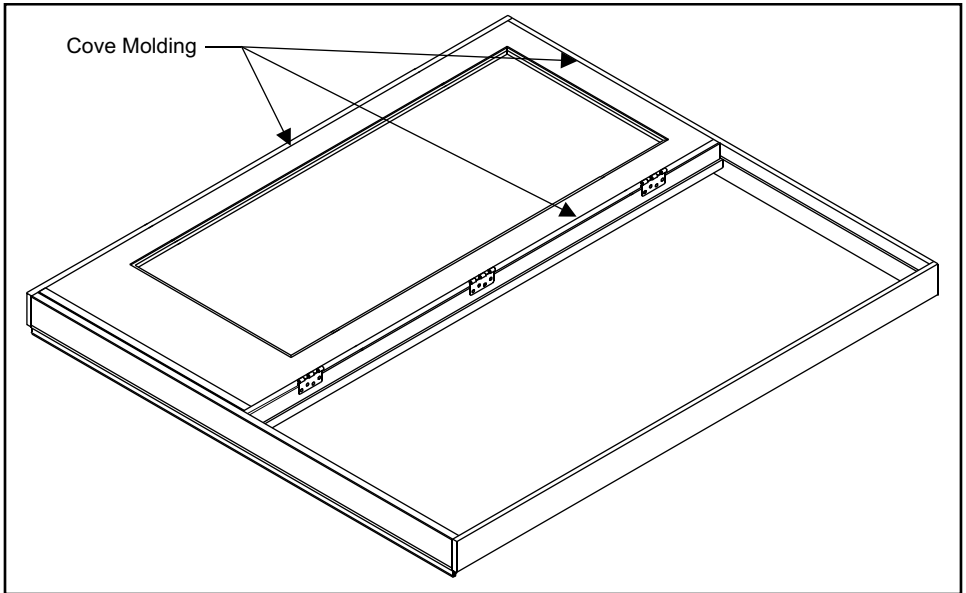
Fasten Inactive Panel Through Mullion

Pre-drill 3/32" dia. pilot holes through mullion into inactive panel.

Secure inactive panel with (2) #8 x 2-3/4" trim head screws through mullion near top and bottom.



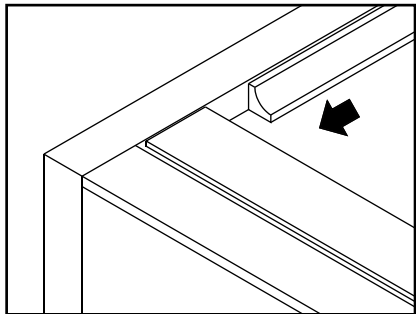
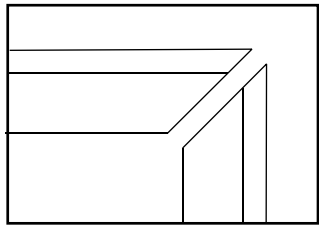
10 **INSTALL COVE MOLDING**



Apply Cove Molding

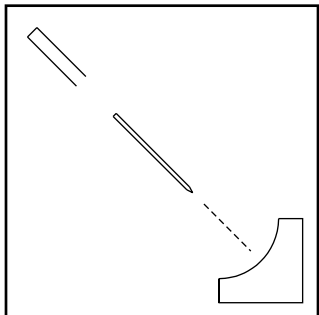
Cove molding is furnished with frame kit.

Miter top corners with 45° angle cuts.



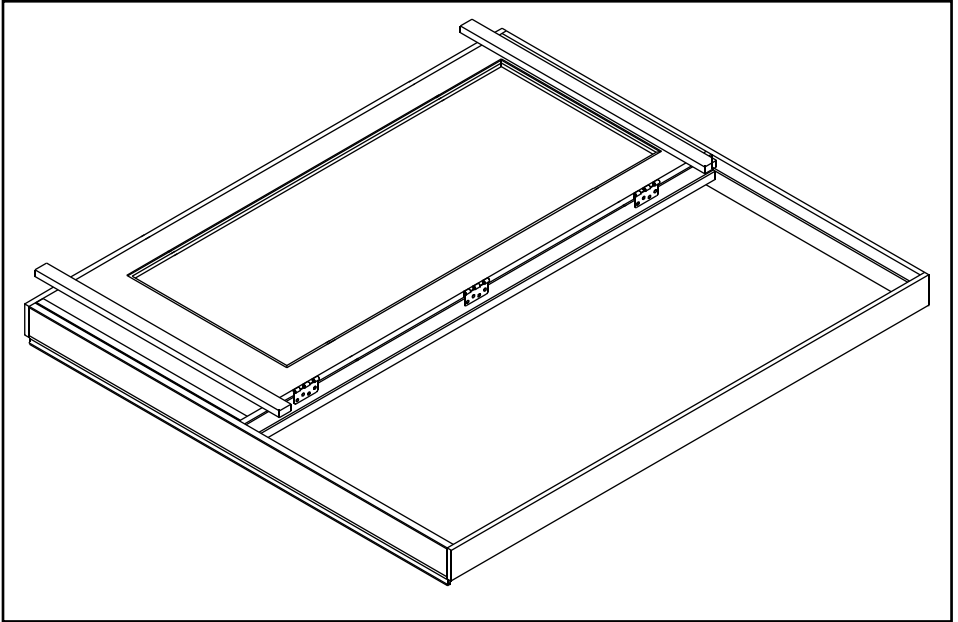
Butt-joint bottom ends to plastic door bottom ledge with square cuts.

Fasten with small staples or finishing nails (not supplied).



11 ACTIVE PANEL INSTALLATION

Hinged Off Mullion - Standard Hinges



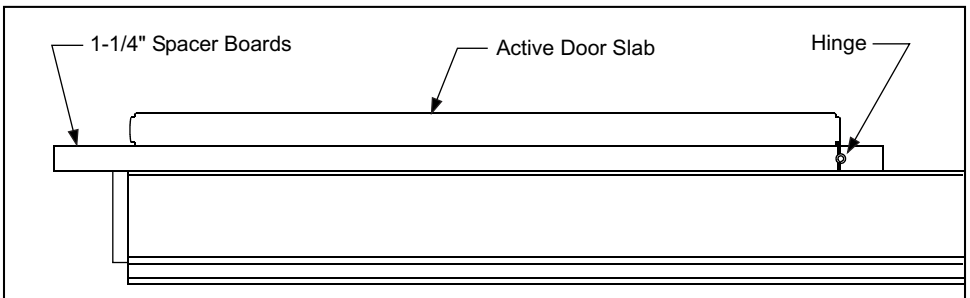
Place Door Panel into Frame

Lay frame on table with hinges on mullion pointed up as shown.

Place two 1-1/4" thick spacer boards (scrap wood pieces) above and below glass area on inactive slab.

Place active door on top of inactive door with hinge knuckles facing downward.

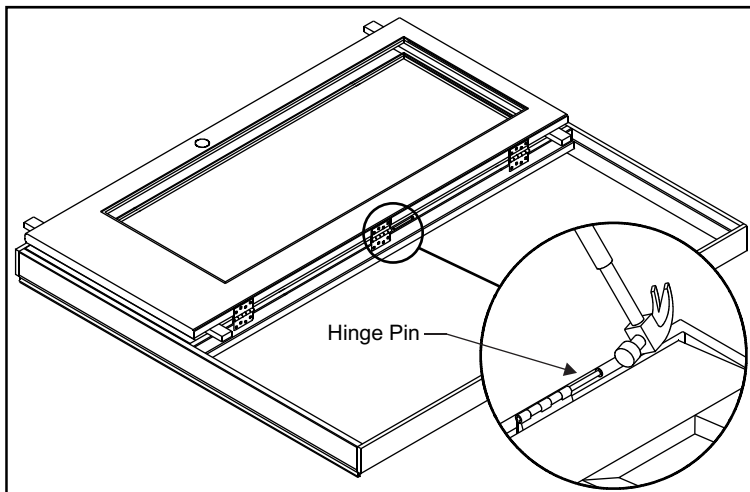
Engage hinges.



11 ACTIVE PANEL INSTALLATION - cont.

Install Hinge Pins

Tap in pins. Be certain to insert so heads are on top edges of hinges.

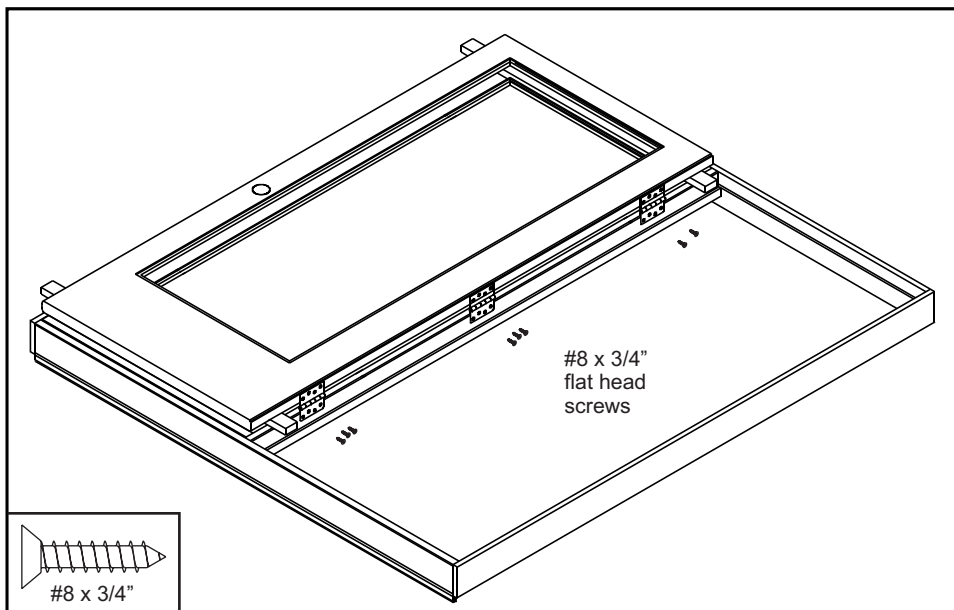


Hinged Off Mullion - Adjustable Hinges

Fasten door panel to mullion

Place two spacer boards on top of inactive panel then lay active panel on top of spacer boards aligning hinges into mortises in mullion.

Fasten door panel to mullion with #8 x 3/4" flat head screws, (2) in top hinge and (3) in middle and bottom hinge.



11 ACTIVE PANEL INSTALLATION - cont.

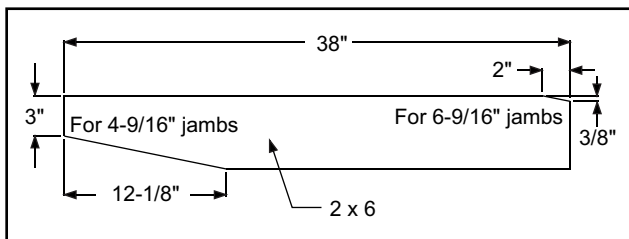
Hinged Off Jamb - Standard Hinge Option

Make 2 "Insert Skids"

Make from 2 x 6 boards.



NOTE:
It is recommended to cover skids with cardboard or other material to protect surface of door.



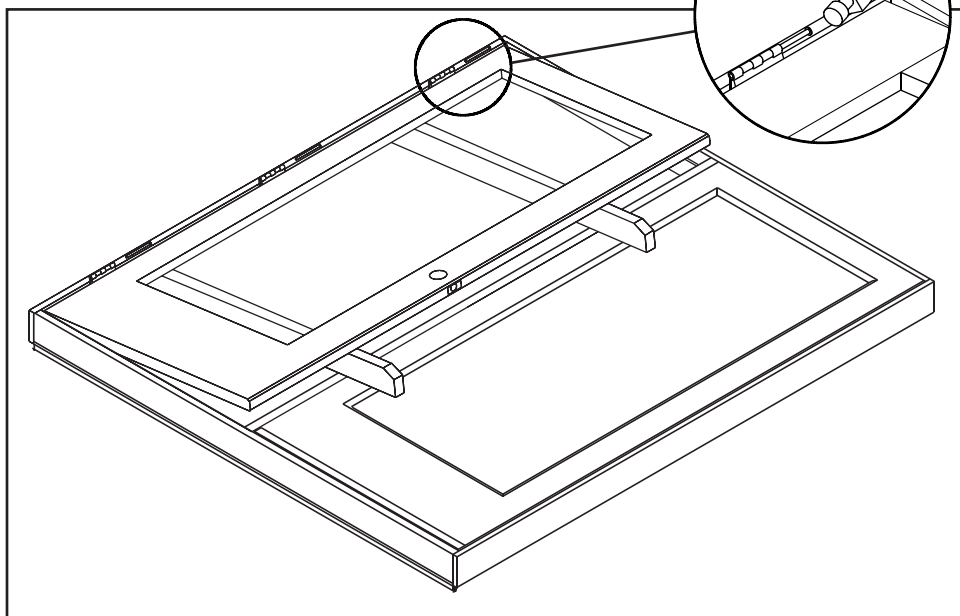
Place Door into Frame

Lay frame on flat surface with hinges on jamb pointed up as shown.

Slide door down on top of skids.

Engage hinges.

Tap in pins. Be certain to insert pins so heads are on top edges of hinges.



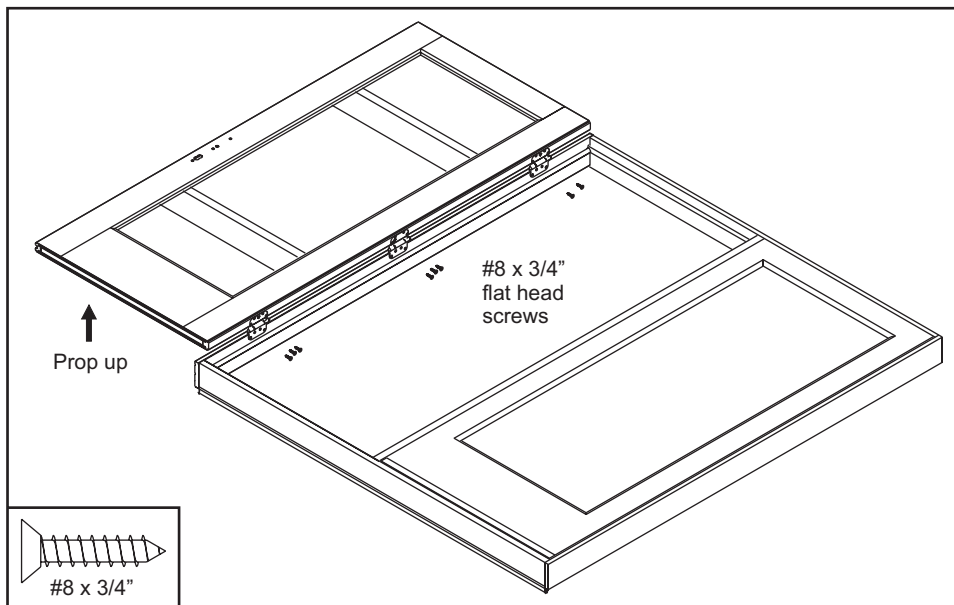
11 ACTIVE PANEL INSTALLATION - cont.

Hinged Off Jamb - Adjustable Hinge Option

Fasten door panel to frame

Prop up hinge side of door panel until hinges can align into mortises on hinge jamb.

Fasten door panel to frame with #8 x 3/4" flat head screws, (2) in top hinge and (3) in middle and bottom hinge.

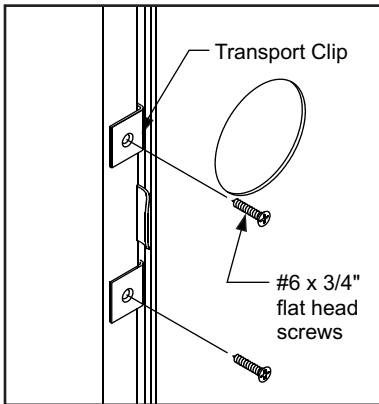
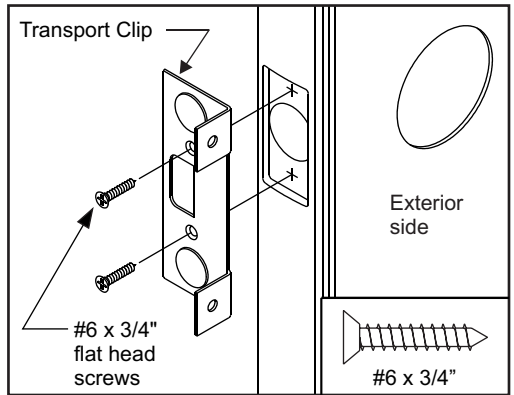


Standard Lock Option***Attach Transport Clip to Door***

Insert tab into latch bore,

Position reference lip at edge of stile against exterior side of door.

Fasten with (2) #6 x 3/4" flat head screws.

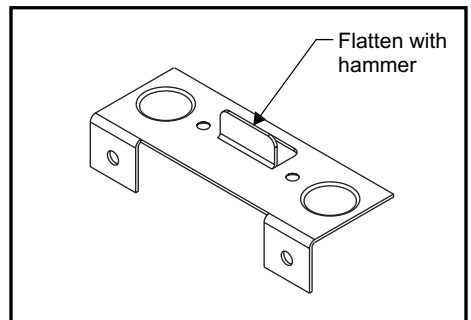
***Attach Transport Clip to Frame***

Close door into frame ensuring margins are even at head jamb.

Fasten transport clip to frame with (2) #6 x 3/4" flat head screws.

Multi-point Lock Option

Flatten lock tab with hammer.

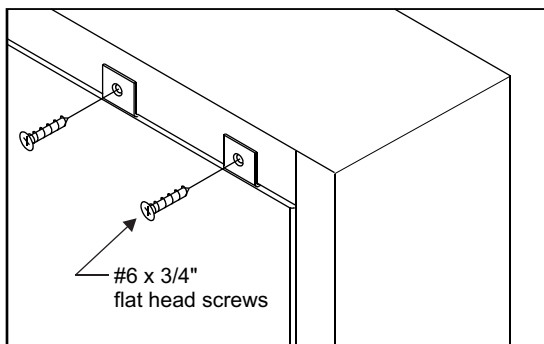
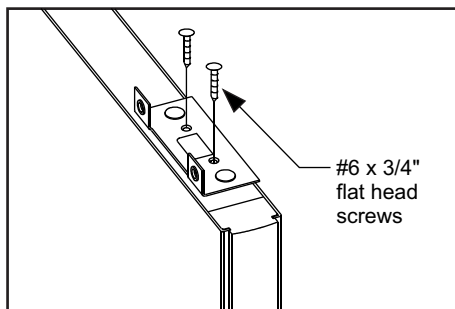


11 ACTIVE PANEL INSTALLATION - cont.

Attach Transport Clip to Door

Place flattened transport clip on top of door approximately 1 to 2 inches from lock side edge.

Fasten with (2) #6 x 3/4" flat head screws.



Attach Transport Clip to Frame

Close door into frame ensuring margins are even at head jamb.

Fasten transport clip to frame with (2) #6 x 3/4" flat head screws.

12 UNIT READY FOR INSTALLATION

Unit can now be transferred for installation. Gather any remaining components and hardware as they may be used for installation.

See "Unit Installation" instructions.

THERMA TRU[®]

PATIO DOOR SYSTEMS

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