

THERMO-FIT REPLACEMENT WINDOW INSTALLATION INSTRUCTIONS

(NO NAILING FLANGE)

Double-Hung, Single-Hung, Horizontal Slider, Casement, Awning, Fixed Casement & Direct-Set Windows

Materials included:

- (10) #8 x 1-1/2" Phillips Pan head Screws
- (10) #8 x 2-1/2" Phillips Pan head Screws
- (2) #8 x 2-1/2" Phillips Flat head Screws
- (2) #6x 2-1/2" Phillips Flat head Screws
- (10) 3/8" Hole plugs

Recommended materials:

- Flexible flashing tape (width determined by application and wall thickness)
- Caulking
- Fiberglass or non-expanding foam insulation
- Shims

Recommended tools:

- Tape measure
- Level
- Square
- Hammer
- Drill/screw gun
- Drill bits (1/8" and 3/8")
- Caulking gun
- Utility knife

The perimeter joint between window exterior and the exterior building material must conform to siding manufacturer's recommendations. All masonry, stucco, or synthetic stucco systems require an expansion joint around the window perimeter that must be filled with sealant compatible with the building material and window components.

For siding details for windows with and without integral J-channel see the siding manufacturer's recommendations.

Due to variables in local building codes, jurisdictions and the variety of building details these are recommended instructions only.

Penetrations and openings in exterior walls shall be flashed or sealed in such a manner that it will inhibit entry of water into the wall cavity or penetration of water to the building structural framing components.

Self-adhered membranes used as flashing shall comply with AAMA 711.

Refer to AAMA or ASTM for more additional installation guidelines.



Phone: 320-529-4012

Toll-Free: 1-877-565-0159

Fax: 320-529-4017

Toll-Free Fax: 1-877-565-0160

E-mail: info@ttwindows.com

www.ttwindows.com

1120 38th Avenue Northeast
Sauk Rapids, Minnesota 56379

1 Step 1. Prepare window opening

- Remove old window.
- Clean window opening.
- Verify the window opening with the frame size of the window. Ensure there is a minimum of 1/4" extra space for height and width. (**fig. 1**)
- Due to the variables in custom installations it is the job of the installer to determine how the window is going to be sealed to the exterior plane of the building. It is recommended that the window be sealed in a minimum of two areas of the window. See **fig. 2** for a few recommended areas to apply sealant. The window can be positioned into sealant or sealed after the window is anchored into the opening.

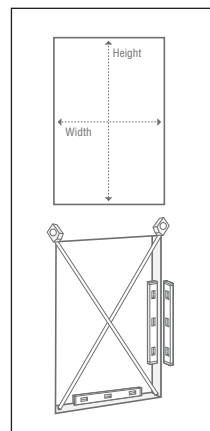


fig. 1

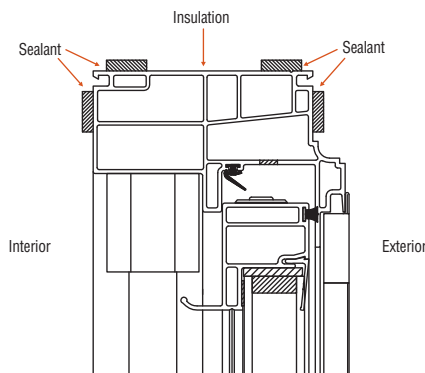


fig. 2

2 Step 2. Install the window

- Set the new Thermo-Fit window into the opening sill first and tip into window opening.
- Check for plumb and shim accordingly, shim side jambs 4" from the corners and at 8" intervals to ensure the window is plumb and square, when unit is level and plumb you may start fastening the window. (**fig. 3**)

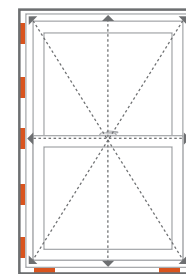


fig. 3 Single/Double-Hung window shown (interior view)

3 Step 3. Fastening the window to the rough opening

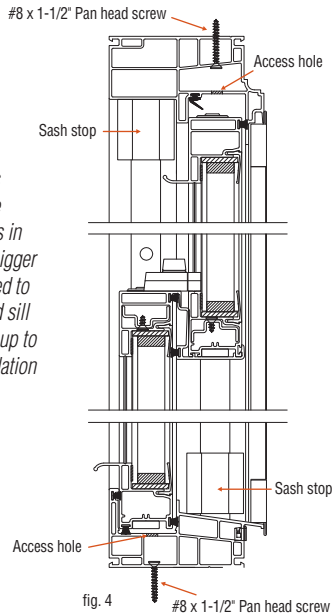
All the different window types have their own unique areas to fastening through the window frame. Follow the instructions specific to the window you are installing.

FOR DOUBLE-HUNG WINDOWS

- Fasten the window through the shims at all four corners behind the sash stops, top and bottom at each jamb using #8 x 2-1/2" truss head screws. First drill an 1/8" pilot hole for each screw centering the hole in the pocket of the frame. The sash stops can either be slid out of the way or temporarily removed. Sash stops must be replaced when done fastening the window or the balance systems may be damaged. (**fig. 4**)
- Ensure the window is level, square and plumb. (**fig. 3**)
- Shim behind each screw location.
- Fasten the center of the window through the shims by placing a screw on each side of the window just above the inside sash. (**fig. 4**)

NOTE: When removal of existing windows/doors is necessary, proper precautions and procedures for lead paint management may be required. Visit www.epa.gov/lead for more information. Consult www.energystar.gov/index.cfm?c=windows_doors_pr_recycling for recycling/reuse of old building components.

- e. Fasten the sill of the Double-Hung, the screws must be centered inside the pocket of the sill, place the screws at quarter points (window width divided by 4). It will be necessary to drill a 3/8" access hole only through the first layer of the vinyl frame material and then fasten through the 3/8" access hole with a #8 x 1-1/2" Pan head screw (**fig. 4**). It is important to seal the screws and 3/8" hole plug in silicone caulk to prevent any water intrusion.
- e. To fasten the top or the head of the window, unlock the window and pull the sash down to access the pocket the top sash closes in to. Follow the same procedure used to fasten the sill.



NOTE: It is not always necessary to fasten the Double-Hung windows in the head and sill. On bigger units it is recommended to help keep the head and sill straight and rigid. It is up to the nature of the installation and the installer.

FOR HORIZONTAL SLIDING WINDOWS

- a. Fasten the jambs through the interior pocket using a #8 x 2-1/2" Pan head screw. Drill a 1/8" pilot hole for each screw, centering the hole in the pocket of the frame, place the screws approximately 16" to 18" apart. Repeat steps for fastening the head. (**fig. 5**)
- b. Ensure the window frame is level, square and plumb. (**fig. 3**)
- c. Shim behind each screw location.
- c. To fasten the sill of the slider you first remove the interior sash and then unsnap the bottom slider track (**fig. 6**). Drill a 3/8" access hole through the first chamber of the frame using a #8 x 1-1/2" Pan head screw fasten through the access hole. It is important to seal the screws in silicone caulk and insert a 3/8" hole plug (**fig. 7**).

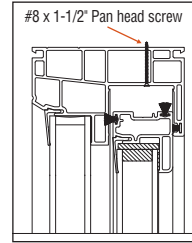


fig. 5

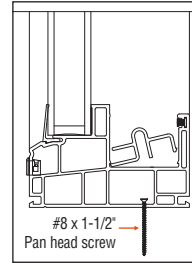


fig. 6

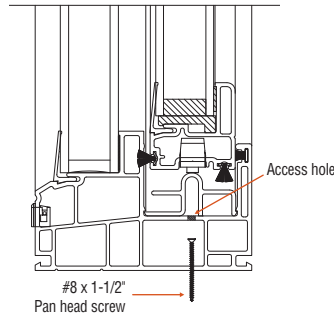


fig. 7

FOR SINGLE-HUNG WINDOWS

- a. Fasten the top of the Single-Hung behind the sash stops on each side using a #8 x 2-1/2" Phillips Pan head screw. Either slide the sash stops down or remove to insert screws. (**fig. 8**)
- c. Ensure the window frame is level square and plumb. (**fig. 3**)
- b. Shim behind each screw location.
- d. Fasten the bottom jamb by removing the screen and inserting fasteners using #8 x 2-1/2" flat head screws through the screen retainer slot on each side, replace screen. (**fig. 9**)
- e. To fasten the center of the window place a screw on each side of the window just above the inside sash. (**fig. 8**)
- f. To fasten the sill of the Single-Hung the screws must be centered inside the pocket of the sill, locate the screws at quarter points (window width divided by 4). It will be necessary to drill a 3/8" access hole only through the first layer of vinyl and then fasten through the access hole with a #8 x 1-1/2" Pan head screw, then insert a 3/8" hole plug. It is important to seal the screws and 3/8" plugs in silicone caulk to prevent any water intrusion.

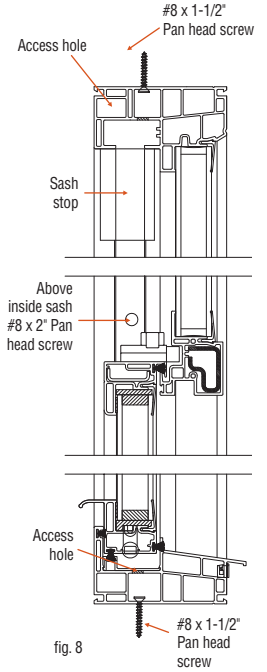


fig. 8

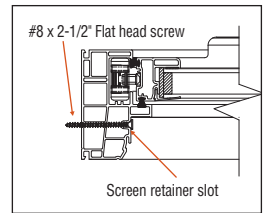


fig. 9

g. To fasten the top or head of the window, the screws must be centered inside the interior pocket at the head located at quarter points (window width divide by 4). For each side drill 1/8" pilot holes centered on the interior pocket and fasten the head with # 8 x 1-1/2" Phillips Pan head screws.

NOTE: It is not always necessary to fasten the Single-Hung windows in the head and sill. On bigger units it is recommended to help keep the head and sill straight and rigid. It is up to the nature of the installation and the installer.

FOR CASEMENT WINDOWS:

- Pre-drill 1/8" holes in the location shown on **fig. 10**.
- Ensure the window is level, square and plumb. (**fig. 3**)
- Shim behind each screw location.
- Fasten the window through the main frame in the location shown on (**fig. 10 & 11**) with #8 x 2-1/2" Pan head screws.
- Place four screws within 4" of each corner on the jamb sides and then space the screws approximately 8" to 12" apart on the remainder of the jamb. Quantity of screws are determined by the size of the window. For the head use two screws 4" from each corner. (**fig. 11**)

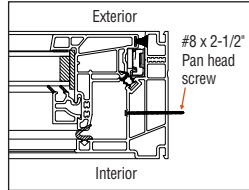


fig. 10

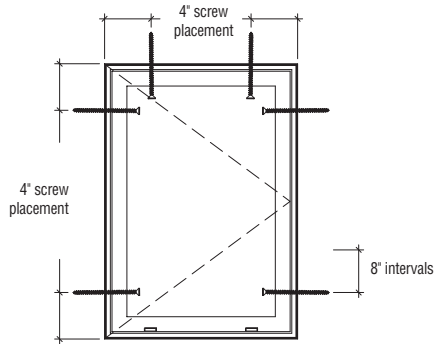


fig. 11

- To fasten the sill, use two #6 x 2-1/2" Phillips Flat head screws. Remove two screws, one from each side of the operator bracket, place a small amount of silicone caulk in the screw hole and insert screws through those holes into the rough opening. (**fig. 12**)

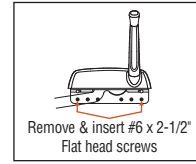


fig. 12

FOR AWNING WINDOWS:

- Pre-drill 1/8" holes in the 6 areas as shown on **fig. 13** and **fig. 14** and then at 8" intervals.
- Ensure the window is level, square and plumb. (**fig. 3**)
- Shim behind each screw location.
- Fasten the window through the main frame (**fig. 13 & 14**) with #8 x 2-1/2" Pan head screws. Quantity of screws are determined by the size of the window.

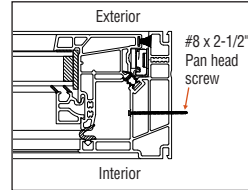


fig. 13

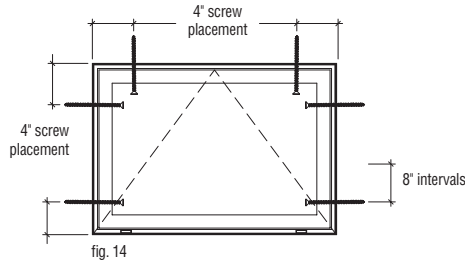


fig. 14

- To fasten the sill use two #6 x 2-1/2" Phillips flat head screws. Remove two screws one from each side of the operator bracket. Place a small amount of silicone caulk in the screw hole and insert through-holes into the rough opening. (**fig. 15**)

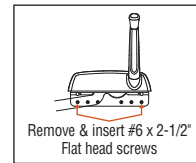


fig. 15

FOR FIXED CASEMENT WINDOWS:

- Pre-drill 3/8" access holes through the outer wall of the frame as shown on **fig 16**. Place the holes 4" from each corner and then spaced evenly every 8" to 14" apart. The number of fasteners are dependent on the overall frame size.
- Ensure the window is level, square and plumb. (**fig. 3**)
- Shim behind each screw location.
- Fasten the 4 corners first with a #8 x 2-1/2" Pan head screws.
- Finish fastening the frame through the 3/8" access holes. Fill the cavity with sealant so it comes out of the access hole, use 3/8" hole plugs to seal the hole and conceal the fasteners.

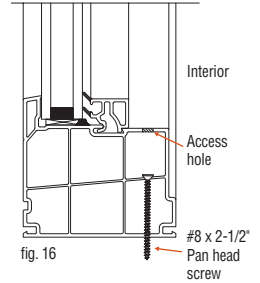


fig. 16

FOR DIRECT-SET PICTURE WINDOWS:

- From the exterior pre-drill 3/8" access holes through the outer wall of the frame as shown on **fig. 17**. Place holes 4" from each corner and then spaced evenly every 8" to 14" apart. The number of fasteners are dependent on the overall frame size.
- Ensure the window is level, square and plumb. (**fig. 3**)
- Shim behind each screw location.
- Fasten the 4 corners first with a #8 x 2-1/2" Pan head screws.
- Finish fastening the frame through the 3/8" access holes. Fill the cavity with sealant so it comes out of the access hole, use 3/8" hole plugs to seal the hole and conceal the fasteners.

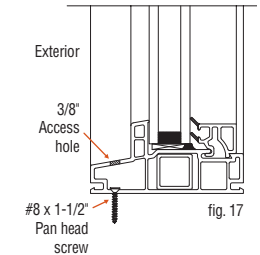


fig. 17

4 Step 4. Sill expander

Use the supplied sill expander if the replacement window is set into an existing window frame where there is a sloped sill. The sill expander fills the gap between the existing sloped sill and the new window. (**fig. 18 & 19**)

- a. Insulate between the sill and the new window with loose fiberglass insulation or non-expanding foam insulation.
- b. Cut the female sill expander to size, place a small amount of silicone caulk into the exterior accessory groove and press the female sill expander into the exterior accessory groove.
- c. Cut the male sill expander to size, apply silicone caulk and insert into the female expander. Cut the male sill expander to the appropriate height to properly fill the gap between the window frame and the existing sloped sill by scribing the grooves in the back with a utility knife.
- d. Do not caulk the sill, caulking the sill can trap water and cause the sill to rot.
- e. Two small screws can be placed at the bottom of the male sill expander to hold it in place if needed.

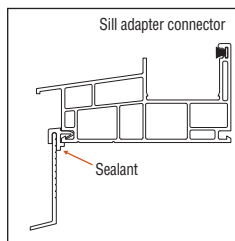


fig. 18

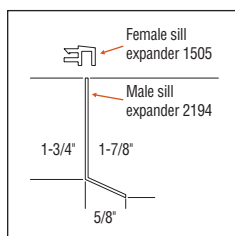


fig. 19