



Series 9700 Sliding Door Installation Manual

Insure ALL Installation Instructions are read in their entirety prior to beginning the installation process.

All Steps must be followed to insure any Manufacturer Warranties.

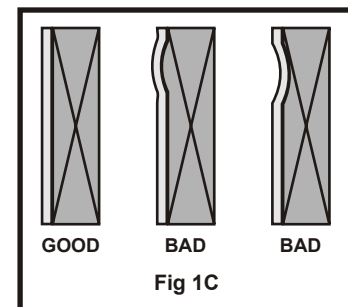
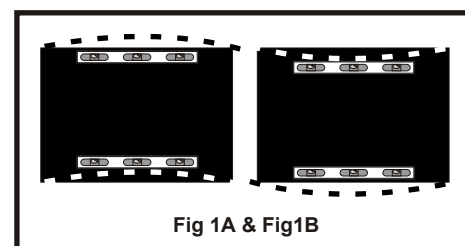
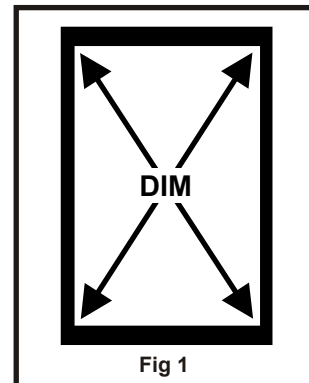
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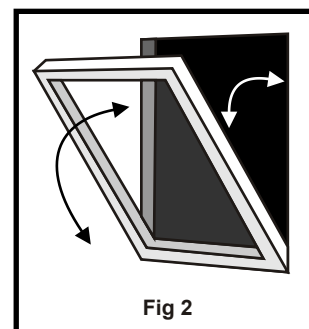
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Opening Preparation

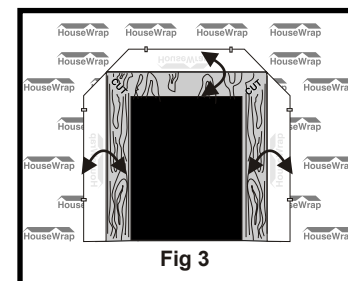
1. Check opening by X-measuring for squareness. Adjust if necessary (Fig1). Straight Edge the opening (see Fig 1A &1B). It is also necessary to insure that the mounting surface is flush and true without the presence of bulges or voids. (Fig 1C)



2. Set door frame in opening.
3. Check for clearances and shimming requirements. (Fig2)
4. Remove frame.



5. Be sure door frame will be sealing and mounting directly to a dry surface and substantial substrate. (Fig3)
6. Make Adjustments.

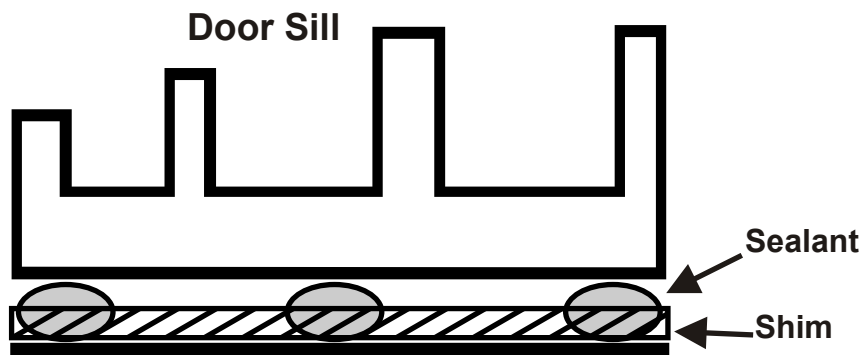


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FOR REPLACEMENT PRODUCTS

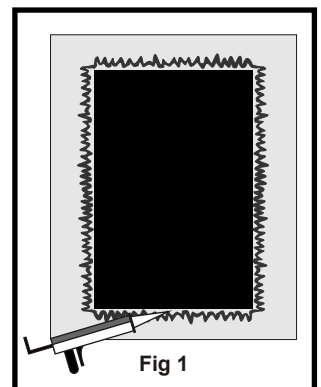
1. Thoroughly clean opening, removing existing sealants to provide clean surface to apply new sealants.
2. Note any rot or questionable substrate and make the necessary corrections to provide adequate fastening materials.
3. Straight-edge sill area to mark any variances requiring shimming or patching to provide a clean level foundation for the sill.
4. Dry fit the new door frame.



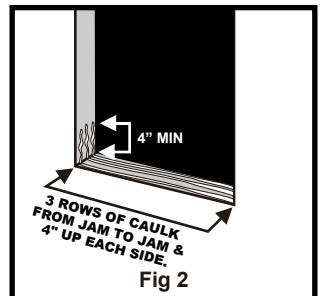
DOOR INSTALLATION

1. Run perimeter (head & jambs) with a 3/8" bead of vinyl compatible low modules 100% pure silicone or urethane (Nova Flex, Dow Corning 1199 or DAP 800). Insure that nail fin and frame contact sealant when setting. (Fig1)

NOTE: "NO FIN" Application: Do not apply sealant to face of wall. Move just inside opening (from exterior) and apply a liberal bead of sealant along exterior edge of rough opening.



2. For best results and leak prevention install a pan under door. Run a minimum of three (3) consistent beads of sealant along sill from jamb to jamb. Seal a minimum of 4" up each jamb. (Fig 2) The intent is to create a continuous sealant bed for the door frame to embed into. All efforts must be employed to eliminate the presence of voids or veins by which water will travel through to the interior. This is especially difficult to prevent around shims, thus additional sealant should be applied around, above and under shims to prevent veins through sealant.



3. Install sill installation straps to provide sill fastening. (Fig 3)



Fig 3

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DOOR INSTALLATION (continued)

4. Drop frame into opening onto the sill sealant. DO NOT push in horizontally as this will peel away sealant. Tilt frame into opening. (Fig 4)

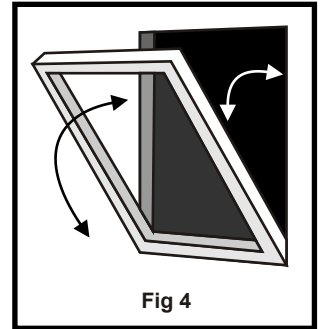


Fig 4

5. Shim door under sill at each jamb a minimum of 1/16". (Fig 5A) Straight edge or string sill to ensure flat sill. Shim as needed. (Fig 5B) Center the frame in the opening and attach sill clips (Fig 5C). Press frame sill into bedding completely.

NOTE: When shimming, insure sill track is setting on solid base that will support moving panel (MAX spacing between load bearing points is 12")

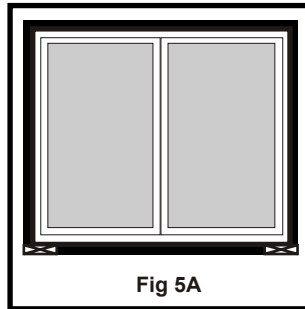


Fig 5A

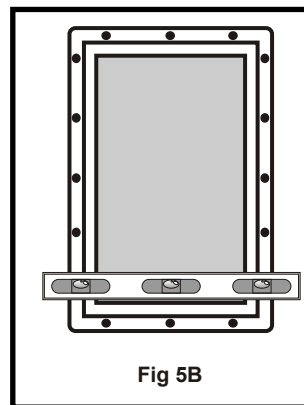


Fig 5B



Fig 5C

6. Install one (1) fastener at the top of each jamb for temporary alignment. (Fig 6)

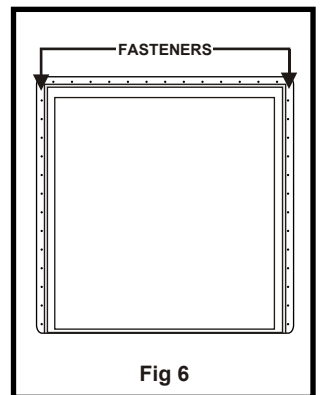


Fig 6

7. X-measure the frame for squareness. Make any corrections needed. Maximum tolerance should be 1/8" on an X-Measure check. Frame installation screws Minimum #8X2" pan head sms. (Fig 7) Once X-Measure is achieved, temporarily fasten frame in opening.

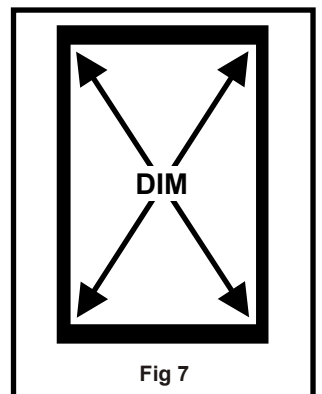


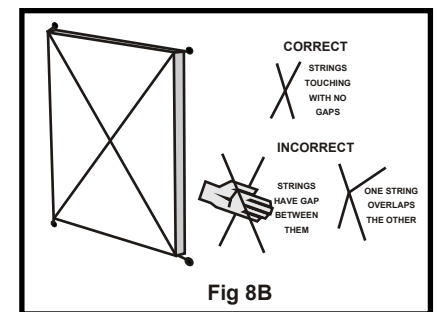
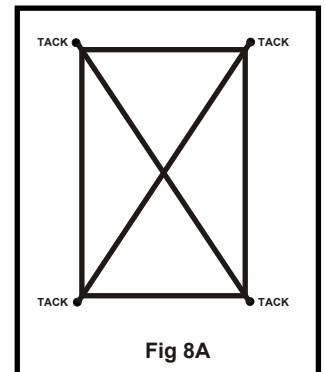
Fig 7

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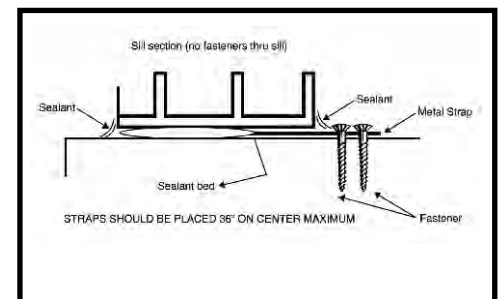
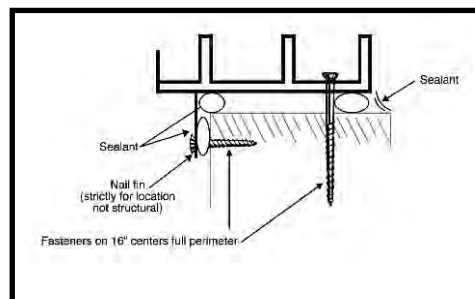
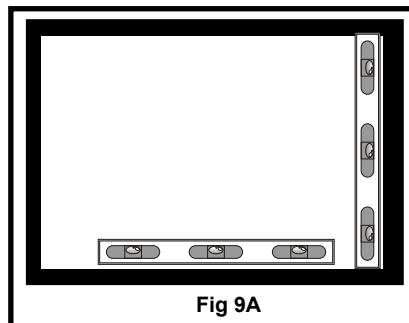
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DOOR INSTALLATION (continued)

8. Once squareness is insured in Step 7, X the opening with string by tacking a finishing nail at each corner drawing the strings between. Make sure the string lies across the face of the frame at each corner. (Fig 8A) The strings should just touch at the center without distortion. If the strings DO NOT touch or they bend around each other (1/16" tolerance allowable) then adjustments to the mounting surface must be made. (Fig 8B)



9. Plumb jambs and head with a straight edge and/or level (Fig 9A). Install fasteners through the jamb and head making sure that the installation screws adequately penetrate the substrate (Fig 9B, 9C & 9D).



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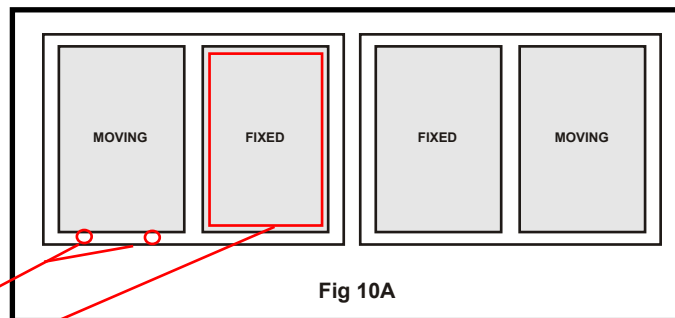
DOOR INSTALLATION (continued)

10. Set the fixed panel by first determining the desired handing (Fig 10A). Raise the fixed panel completely into the header and swing into the outer track of the door frame. Then set down onto the aluminum fixed panel riser (Fig 10B). Slide the fixed panel completely into the appropriate jamb based on handing.

Watch Out!

This door is designed with the **Adjustment Screws** and **Glazing Bead** to be on the EXTERIOR,

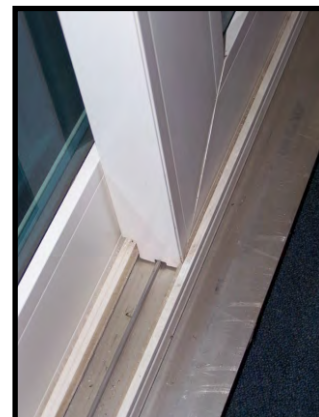
and (if Impact-rated) the **Laminated Glass** to be on the INTERIOR.



11. Place the header fixed panel clip into the cavity on the side of the fixed panel and slide upward until it bumps the header. Install the fasteners into the panel side using (3) #8 X 2" Tek Screws. DO NOT screw to header at this time. (Fig 11)



12. Place the sill fixed panel clip into the same cavity and in like manner as Step 11 and slide down into receptacle on the fixed panel riser. Install the fasteners in through the clip into the panel using (3) #8 X 2" Tek Screws. DO NOT screw into riser at this time. (Fig 12A & Fig 12B)



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DOOR INSTALLATION (continued)

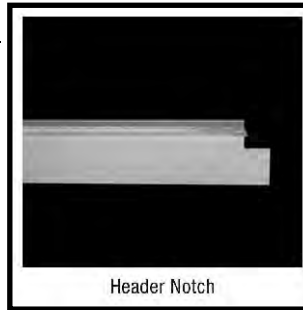


Fig 13A

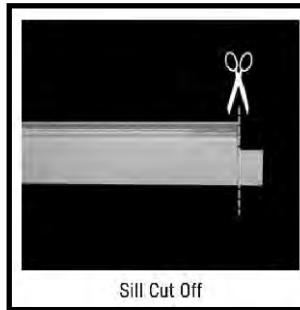


Fig 13B



Fig 13C

13. **Fixed Panel Interlock:** After determining the handling of the door, check the overall length needed (Fig 13D). The interlock is pre-cut and notched on both ends to allow field reversibility on 6' 8" height units. Handling is accomplished by cutting off the sill end of the interlock back to the notch. After cutting there should be no notch remaining (straight cut). This determines the sill end. The remaining notched end slides up into the header and the straight cut end down onto the top of the pockets on the sill (top of sill towers). This provides complete weather stripping from top to bottom. (Fig 13A, Fig 13B, Fig 13C)

The 2 rows of weather stripping in the fixed panel interlock must be located facing the INTERIOR of the home. (Fig 14B)

CAUTION: Physically hold interlock in position prior to cutting, and mark end to be cut ensuring proper handling. Once the part is cut, it cannot be reversed.

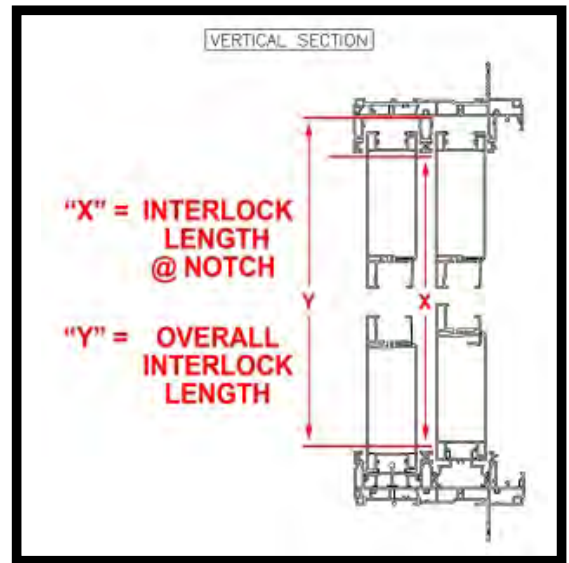


Fig 13D

14. Using a block of wood, knock the interlock onto the edge of the fixed panel. The interlock must be fully engaged into the panel in order to ensure later alignment. Install fasteners (#8 X 1 1/2" Tek Screws) through the pre-drilled mounting holes. (FIG 14A & 14B)

Interlock section must turn opposite the glazing bead (exterior) panel. Install mounting screws into pre-drilled holes after completely engaging interlock into panel. (Fig 14B)

CAUTION: Ensure proper HANDING and INTERIOR/EXTERIOR ORIENTATION prior to installing interlock screws. If incorrect, panel will be rendered unusable.



Fig 14A

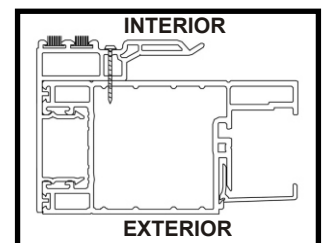


Fig 14B

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DOOR INSTALLATION (continued)

15. **Moving interlock:** Using a block of wood, knock the interlock onto the edge of the moving panel. The interlock must be fully engaged into the panel in order to ensure later alignment. Install fasteners through the pre-drilled mounting holes. (#8 X 1 1/2" Tek Screws) (Fig 15A, Fig 15B & Fig 15C)

NOTE: (FIG 15C) Interlock screws/weather stripping on the Moving Panel are located on the Glazing Bead and Roller Adjustment ports side (EXTERIOR) of panel. Roller adjustment is performed on exterior side.

CAUTION: Ensure proper HANDING and INTERIOR/EXTERIOR ORIENTATION prior to installing interlock screws. If incorrect, panel will be rendered unusable.



Fig 15A



Fig 15B

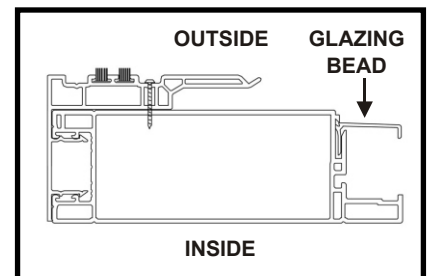


Fig 15C

16. Install the Moving Panel into the Main Frame Header Inside Track fully penetrating the head (Fig 16A) and swing bottom of panel in and set on moving track. (Fig 16B & FIG 16C)



Fig 16A



Fig 16B



Fig 16C

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DOOR INSTALLATION (continued)

17. Slide fixed Panel out of the fixed jamb on fixed panel riser located in the outer track of the sill. Move panel far enough to clear jamb by a few inches.
18. Close the Moving Panel into Lock Jamb and open back to just clear the jamb. Square the Moving Panel to Jamb by adjusting the Rollers, and align with jamb (Fig 19B). When plumb (Fig 19A) move to the next step.



Fig 19A



Fig 19B

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DOOR INSTALLATION (continued)

FOUR PANEL DOOR

Repeat Steps 10 - 14 for the second fixed panel in a four panel door.

Repeat steps 15-18 for the second Moving Panel (inactive panel) in a four panel door.

To check the moving panel alignments slide the two panels together in the middle of the door. By bumping the panels together check for gaps at the top or bottom and adjust rollers until panels align the full height. Open the moving panels back and make the astragal attachment.

(SEE ASSEMBLY DRAWINGS)

NOTE: If Moving Panels will not come all the way together at the center, pull Fixed panels away from Jamb.

ASTRAGAL ATTACHMENT

(The astragal is handed from the factory and is not reversible)

After Inactive panel is set the astragal must be attached. The Inactive panel is fabricated for hardware but gets no mortise lock mounted in the stile. Attach the astragal by standing part beside inactive panel after it has been checked for operation and plumbed. Clearance is insured by setting the astragal on an 1/8" shim and knock mounting tabs into the edge of the inactive panel. (Fig A1 & FIG A2 & FIG A3) Insure the astragal is completely seated into the inactive panel by using a block of wood and knock the part on with a hammer never hitting the vinyl but the block of wood. (Fig A4) Slide the panel back and forth to insure clearance. Permanently mount the astragal by installing the mounting screws into the pre-drilled holes (#10 x 3" Tek). (Fig A5). Proceed to Step 19.

NOTE: Sill and Head must be true or Astragal may drag at various locations.



Fig A1

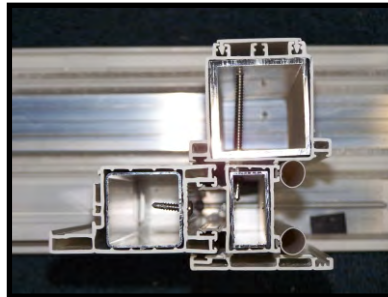


Fig A2



Fig A3



Fig A4

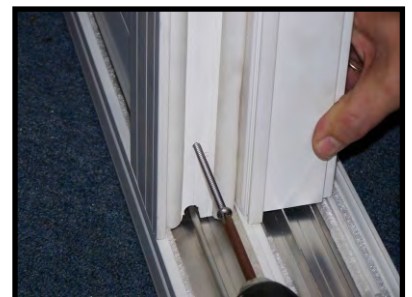


Fig A5

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DOOR INSTALLATION (continued)

THREE PANEL DOOR

If the unit is a three panel door the second fixed panel sets in by the same method as the fixed panel setting in the outer track but on the interior frame track where the Inactive fixed panel is to be located in line with the moving track. There should be a fixed panel riser located in the inside track (Fig B4 & FIG B5). If the handing on the door needs to be reversed snap out the riser and slide the track to the opposite end of the door and reinstall the fixed panel riser at the desired location.

(SEE ASSEMBLY DRAWINGS)



Fig B1

ASTRAGAL ATTACHMENT

(The astragal is handed from the factory and is not reversible)

After Second fixed panel is set the astragal must be attached. Attach the astragal by standing the part beside the inactive panel after it has been checked for plumb. Insure the astragal is completely seated into the inactive panel by using a block of wood and knock the part on with a hammer never hitting the vinyl but the block of wood. (Fig B2) Permanently mount the astragal by installing the mounting screws into the pre-drilled holes (#10 x 3"). (Fig B3) The Astragal should extend down past the fixed panel riser. If the riser is too long and does not allow this simply remove the riser and trim back. (Fig B4 & Fig B5) Proceed to Step 19.



Fig B2



Fig B3



Fig B4



Fig B5

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DOOR INSTALLATION (continued)

19. Extend the mortise tongue (Fig 19A & Fig 19B) and mark for keeper alignment. Mark extended location and height of fully locked mortise. Close the door to the jamb and mark for keeper location. (Fig 19C) (Always use a pencil)



Fig 19A

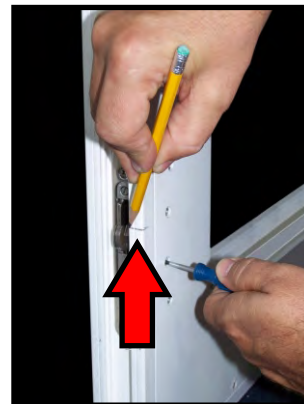


Fig 19B

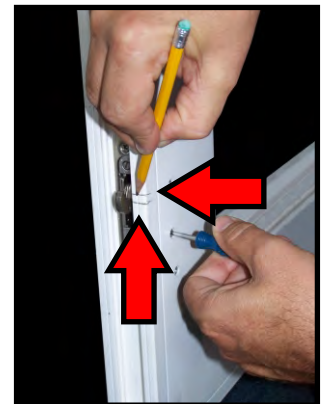


Fig 19C

20. Mount Keeper using (2) #8 x 2" screws. (#10 x 3 Tek on astragal) The keeper must be installed with a minimum shim stack to provide an overall keeper height of 3/4" (4 shims minimum). Shut and lock door proving the alignment and making the necessary adjustments. Once the position is verified install (2) more of the same type screws locking the keeper in place eliminating up and down movement.

NOTE: If locking mechanism appears to be "tight" during operation, add additional shims.

21. With the moving panel shut and locked slide the fixed panel back into the jamb until the interlock bottoms out at the center or intersection of the fixed and moving panels. This should provide 5/8" to 3/4" penetration into the fixed jamb. Make a pencil mark on the fixed panel at the jamb (Fig 21A). Pull fixed panel out of the jamb 1/16" (Fig 21B). This provides the functional tolerance needed for proper operation.



Fig 21A

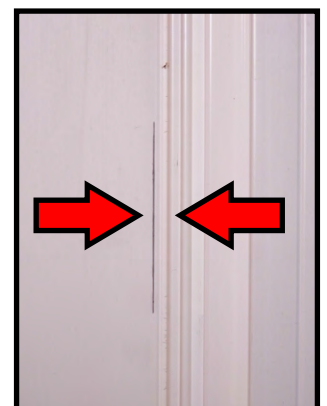


Fig 21B

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DOOR INSTALLATION (continued)

22. Install fixed panel installation screws through the weather stripping groove on the open side of frame. (Fig 22) Using #8 x 1 1/4" self drilling screws place one screw 3" from each corner in the Jamb and head and Sill (4 total corner screws per fixed panel). Then space the remainder of the installation screws every 11" (maximum) along the jamb for the full height of the door.

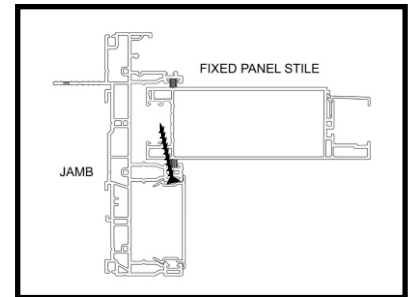


Fig 22

23. Install final screws in the fixed panel header bracket using (2) #8 x 2" screws, and penetrating into the substrate at the head (Fig 23)



Fig 23

24. Install final screws in fixed panel sill clip using (2) #8 x 3/4" Tek screws. (Fig 24)



Fig 24

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DOOR INSTALLATION (continued)

25. Snap in jamb trim (frame cover) on each open track. One per jamb (Fig 25).



Fig 25

26. Test fit the exterior threshold and trim as necessary. Snap into place using a wood block. Repeat this process for header frame trim. (Fig 26A)



Fig 26A

OPTIONAL:

If applicable mount the secondary lock onto the back edge of the moving panel by aligning the lock with the interior edge of the moving panel, moving down from the top edge of the panel 5/8". Install the (4) #8X1-1/2" mounting screws to the mount lock. After mounting the lock, extend it and place the keeper in the header based on where the consumer desires the moving panel to stop utilizing the secondary lock. Install the keeper by using (3) #8X2" pan head screws. (Fig 26B & 26C)



Secondary Lock and Keeper

Fig 26B



Secondary Lock Installation

Fig 26B

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DOOR INSTALLATION (continued) - OPTIONAL SILL RISER

If optional Sill Riser is used then proceed through the following Steps.

- (1) After a completed installation clean the inside frame legs with alcohol. (Fig 1)
- (2) Remove weather stripping on interior leg at sill only by making an incision (approx 6") along the weather stripping at the center of the weather stripping with a razor knife. Once weather stripping is split, it can be easily pulled from the frame with pliers.



Fig 1

- (3) Apply a small bead (1/8") of silicone along the top of the inside leg and along the back of the frame (Fig 2A & Fig 2B).



Fig 2A



Fig 2B

- (4) Apply a liberal amount of silicone on each end of the Sill Riser where it laps over the inside face of the frame (Fig3)

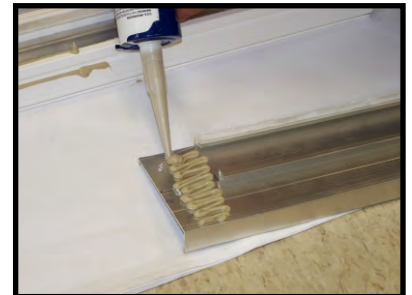


Fig 3

- (5) Install Riser by snapping over inside leg of frame insuring that there is a complete seal from jamb to jamb. Pay special attention to the intersection at the corners insuring no gaps in sealant. With a block of wood knock riser on to leg seating all the way to the floor. (Fig 4)



Fig 4

- (6) Once riser is in place install (2) #8 x 1 1/2" screws at each end of riser in pre-punched holes. (Fig 5)

- (7) Install installation screws along the floor in pre-punched holes insuring adequate penetration into floor.



Fig 4

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SCREEN INSTALLATION

27. Snap the screen track onto the integral frame track.
(Fig 27)



Fig 27



Fig 28A

28. Install the screen by inserting the screen fully into the header (Fig 28A) and swing screen in at the sill and set down onto the screen track (Fig 28B). Raise the screen by tightening the roller adjustment screws on the bottom of the screen (Fig 28C) until screen rolls freely and clears the track by approximately 1/8" (Fig 28D). Tighten top adjustment screws (Fig 28D) until snug against header and adjust as necessary to insure free but snug movement.

29. Mount Screen Keeper. Close and Latch to prove function.



Fig 28B



Fig 28C



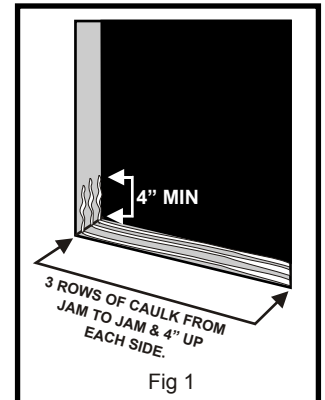
Fig 28D

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SEALING

1. For best results, utilize a pan system under door.
2. Insure door has a minimum of three (3) 3/8" beads of sealant under sill and 4" up each jamb. (Fig 1) The intent is to create a continuous sealant bed for the door frame to embed into. All efforts must be employed to eliminate the presence of voids or veins by which water will travel through to the interior. This is especially difficult to prevent around shims.



3. Insure door is sealed between nail fin and structure. Door is not to be attached over vapor barrier. Unit needs to be sealed to sheathing or structure. (Fig 2)

NOTE: On Flush or Replacement applications, apply an adequate bead of approved sealant between structure and door frame. Backer Rod may be needed in some applications. See sealant manufacturer recommendations for maximum and minimum joint applications.

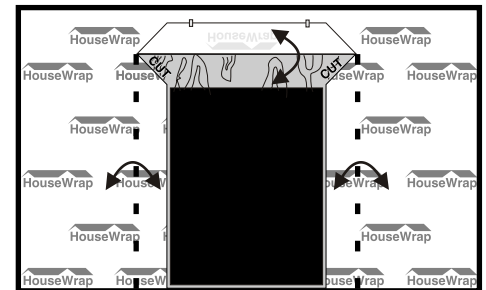


Fig 2

4. Lap vapor barrier over nailing fin. Lap Vapor Barrier over Nailing Fin cutting barrier 1/2" short of window frame and Lapping Nail Fin a minimum of 1/2". (Fig 3)

Seal Vapor Barrier to window fin by folding back and gunning a liberal amount of sealant in fin and then pressing edge into sealant.

NOTE: Replacement and Flush installations will utilize a tooled sealant joint application between frame and exposed exterior finish.

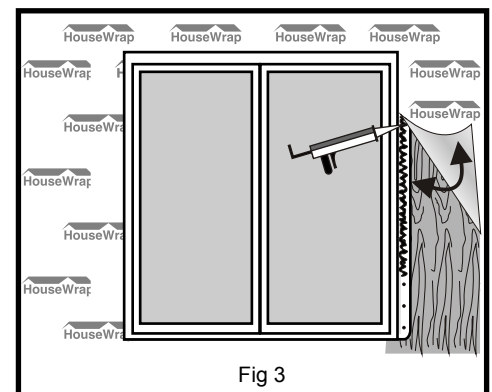


Fig 3

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SEALING (continued)

5. Install drip cap or flashing over fin by applying bead of sealant to back side of drip cap then apply drip cap over nail fin insuring drip cap extends the complete width of the door extending from tip to tip of nail fin.
(Fig 4A & Fig 4B)



Fig 4A

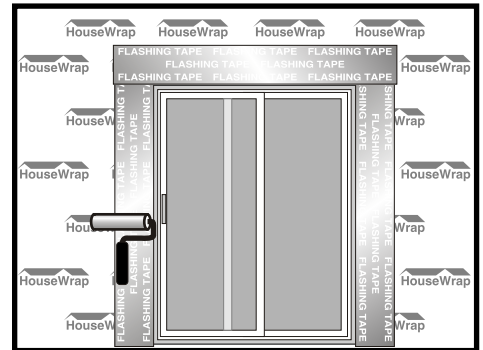


Fig 4B

6. IF using nail fin at sill, apply 6" seal tape over sill nail fin and extend 6" past unit on each side. (Fig 4B)
7. Apply 6" seal tape to each jamb lapping sill tape (if applicable) completely extending above head 3" to 4". Allow tape to turn out against door jamb and across nail fin and wall surface.
8. Apply 6" seal tape to header by fully lapping seal tape on jamb on each side. Allow tape to turn out over header and drip cap approximately 3/4" covering nail fin and cap extending above door along wall approximately 2" beyond jamb tape. Insure no air pockets exist in seal tape. Use a roller to remove these air pockets and flatten tape insuring a positive seal.
9. On the interior of the door run a continuous bead of sealant the full perimeter of the interior frame. Insure a complete interior seal. (Fig 5)

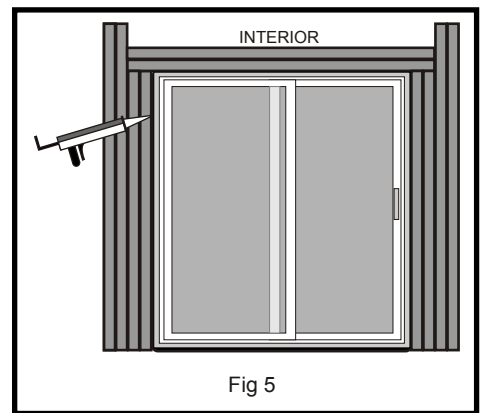


Fig 5

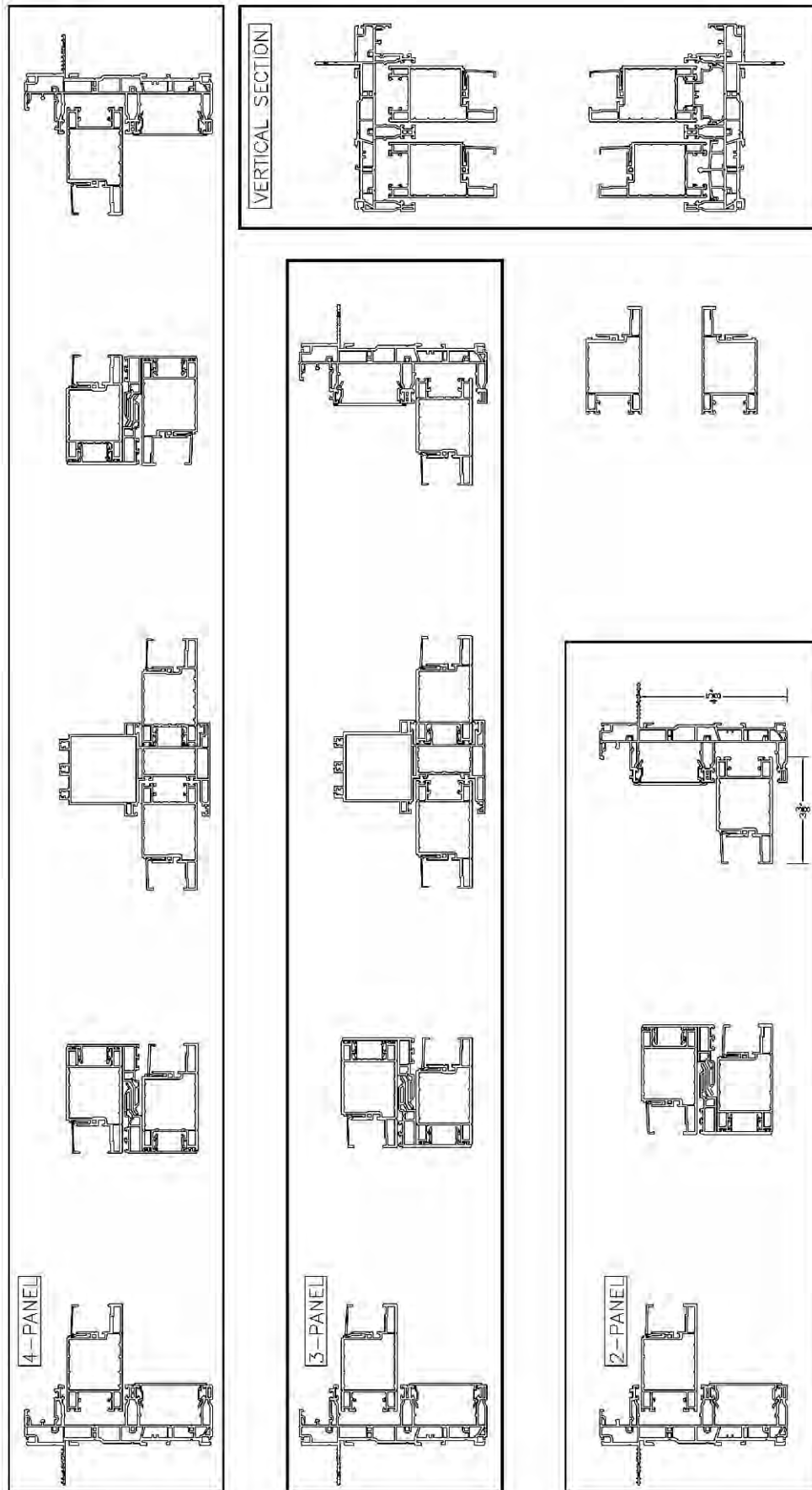
NOTE: Insure that interior seal is between unit frame and framing members. No vapor barrier or membranes should interfere with sealant to window to framing members seal application.

10. Unit is ready for operation.

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ASSEMBLY DRAWINGS • 9600 SMALL PANEL SLIDING GLASS DOOR



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Sliding Door Installation Manual

ASSEMBLY DRAWINGS • 9700 LARGE PANEL SLIDING GLASS DOOR

