

FOLDING DOOR INSTALLATION GUIDE



CASCADE
W I N D O W S

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FOLDING DOOR

INSTALLATION INSTRUCTIONS



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THINGS TO KNOW

Hazard Notations

Mistakes or misuse could cause damage to the product or result in a faulty installation.	Heavy object. Unassisted lifting may cause injury.	Information on helpful tips and procedures.

Tools needed

#2 Phillips Screwdriver
 Pry Bar
 Drill
 Square
 Tape Measure
 Fine Tooth Chop Saw
 Safety Glasses
 Utility Knife
 Level
 Hammer
 9/64 Drill Bit
 #17 Drill Bit

Supplies needed

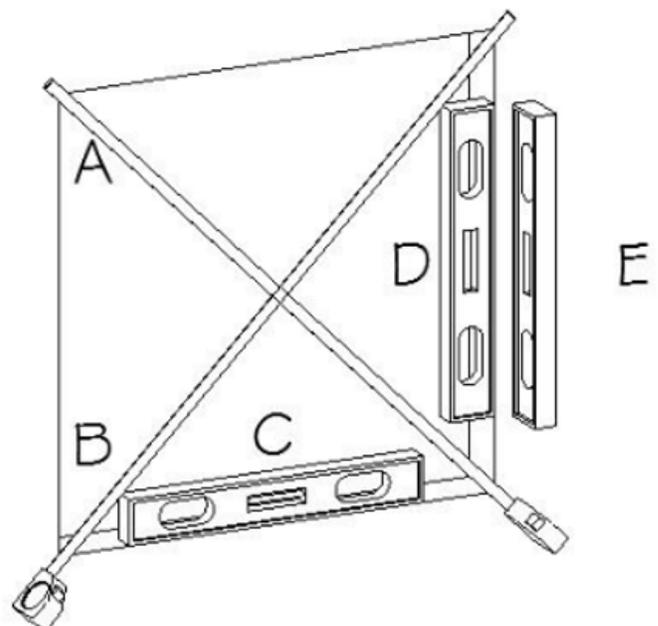
Construction Adhesive
 Flashing
 Shims
 Staples
 Low Expanding Foam
 Door Pan

SAFETY & HANDLING

- Understand ALL manufacturer's instructions before beginning to install your Cascade product.
- Do not work alone. Use safe lifting techniques.
- Always wear your P.P.E. (e.g. safety glasses, gloves, ear protection, etc.).
- Use caution when handling glass.
- Operate hand/power tools safely and follow the manufacturer's operation instructions.
- Do not put stress on corners of frames. Store door in a well-ventilated area in a vertical, leaning position to allow air circulation.
- Protect from exposure to direct sunlight during storage.
- Install only into vertical walls and when conditions and sheathing are dry.

HOW TO CHECK PLUMB, LEVEL AND SQUARE

- A & B** - Cross tape measurements to verify the opening is square.
- C** - Threshold level, free of any crowns and sags.
- D** - Plumb vertical jamb.
- E** - Plumb vertical exterior portion of the wall.



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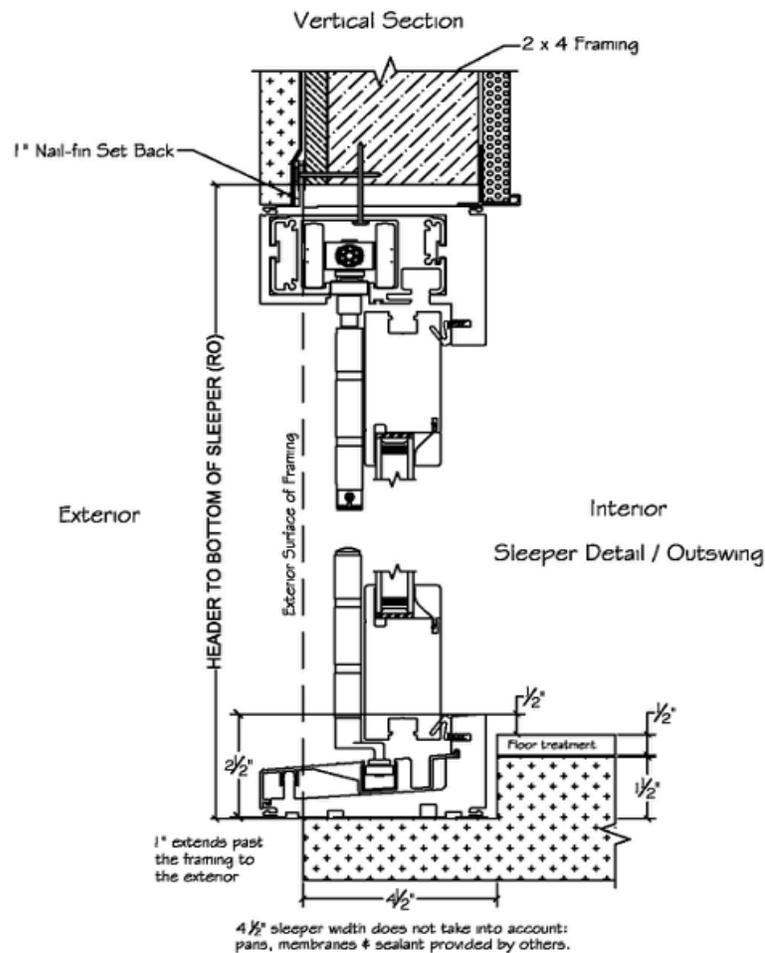


SUGGESTED METHOD OF INSTALLATION

Due to the complexity of the Folding Door System and the lengthy install manual it is highly suggested that the install is done step by step with the manual. It is recommended to read each section individually followed by the hands on install of that particular section. It is very important to thoroughly understand and follow each section of instructions as written. Failure to do so could result in faulty install.

Due to the thickness of the threshold its suggested to depress the threshold of the opening 1 1/2 inches.

*1" Nail Fin shown.



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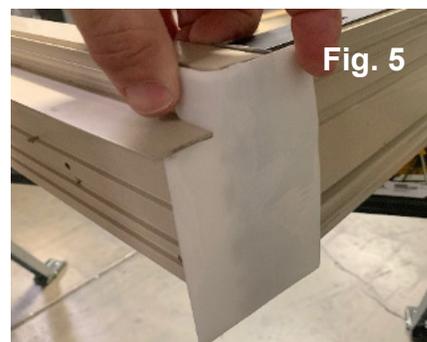
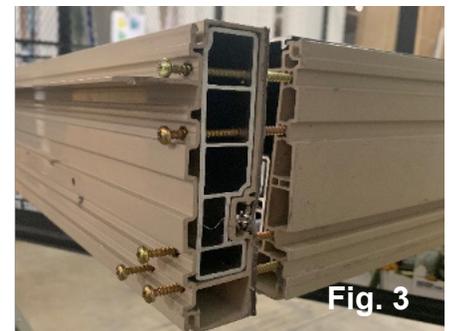
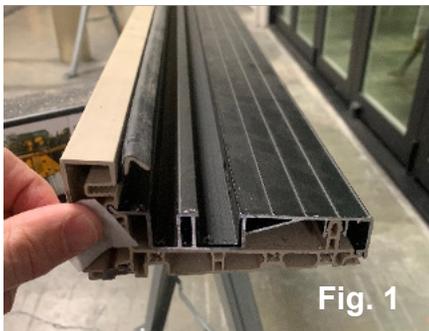
KD OR KNOCK DOWN FRAME BUILD

After you have unpacked the frame, start identifying your sill (sill can be identified by the weep holes), head and jambs. Be sure to set aside the euro caps in a safe place, these will be installed during the overall door installation. These caps will be wrapped up together with the jambs. Be sure to assemble the frame one corner at a time. Saw horses are recommended to keep the frame profiles off the ground and safe from damage during assembly.

1. You will notice that the butt ends of the frame have joining gaskets, using the provided alcohol wipes (**Fig. 1**), clean the area where the jamb gaskets will adhere to on the head and sill.
2. Remove the liner from the jamb gaskets (**Fig. 2**). Repeat the steps for the other jamb to sill/header joints.
3. Insert the packaged frame build screws into the pre-drilled holes in the jamb (**Fig. 3**). One corner at a time, make sure each screw is

aligned with the proper screw boss and tighten each screw evenly until the jamb is tightened evenly and firmly against the sill and/or header.

4. Remove the paper backing of the Block Seal Tape to expose the sticky side of the tape (**Fig. 4**). Apply the provided Block Seal Tape to the jamb-sill joint on both sides (**Fig. 5**). Line up the notch on the tape with the nail fin and wrap the tape around the joint. Once the tape has been applied remove the Mylar backing (**Fig. 6 next page**). Make sure you firmly rub one corner in as you use your fingernail to get the edge of the Mylar backing to peel off. Once the Mylar backing has been removed make sure you work the tape into any voids in the frame to ensure a good seal.



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KD OR KNOCK DOWN FRAME BUILD

5. Apply the supplied SM5555 to the joint of the sill to jamb. Make sure the twin bolt channel and guide roller channel both are sealed with the SM5555. **(Fig. 7 & 8)**
6. Fill the Euro cap pocket as well. This void along with the two channels noted on step 5 must be done properly to ensure a proper seal. **(Fig. 8)**
7. Last step, apply the nail fin corner. Using the SM5555 seam sealer, fill the outer most hole on top of the frame as well as apply a bead of the seam sealer to the nail fin on the jamb and header. Firmly apply the nail fin corner into place. Make sure the nail fin corner is on the outer portion of the frame mounted to the face of the frame **(Fig. 9)**



Fig. 6

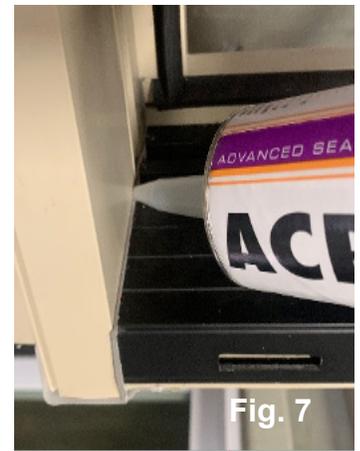


Fig. 7



Fig. 8

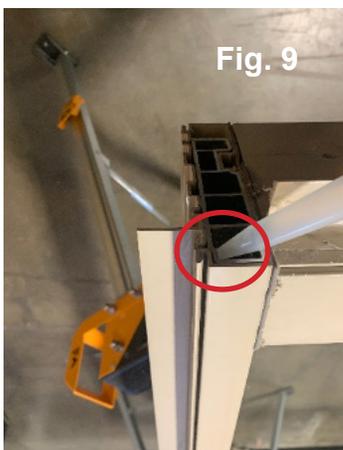
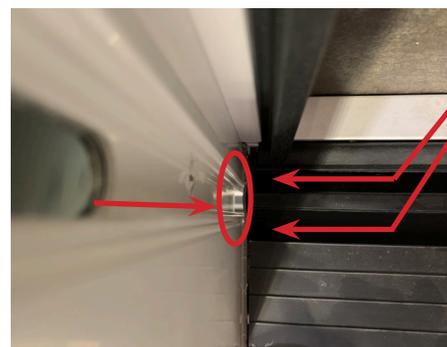


Fig. 9

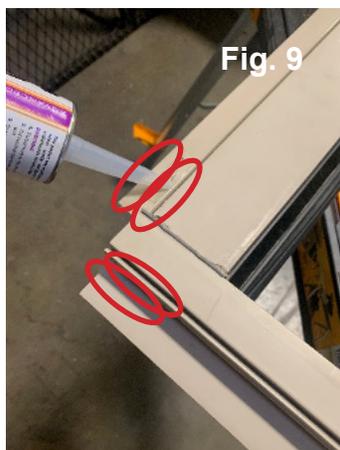


Fig. 9



Fig. 9

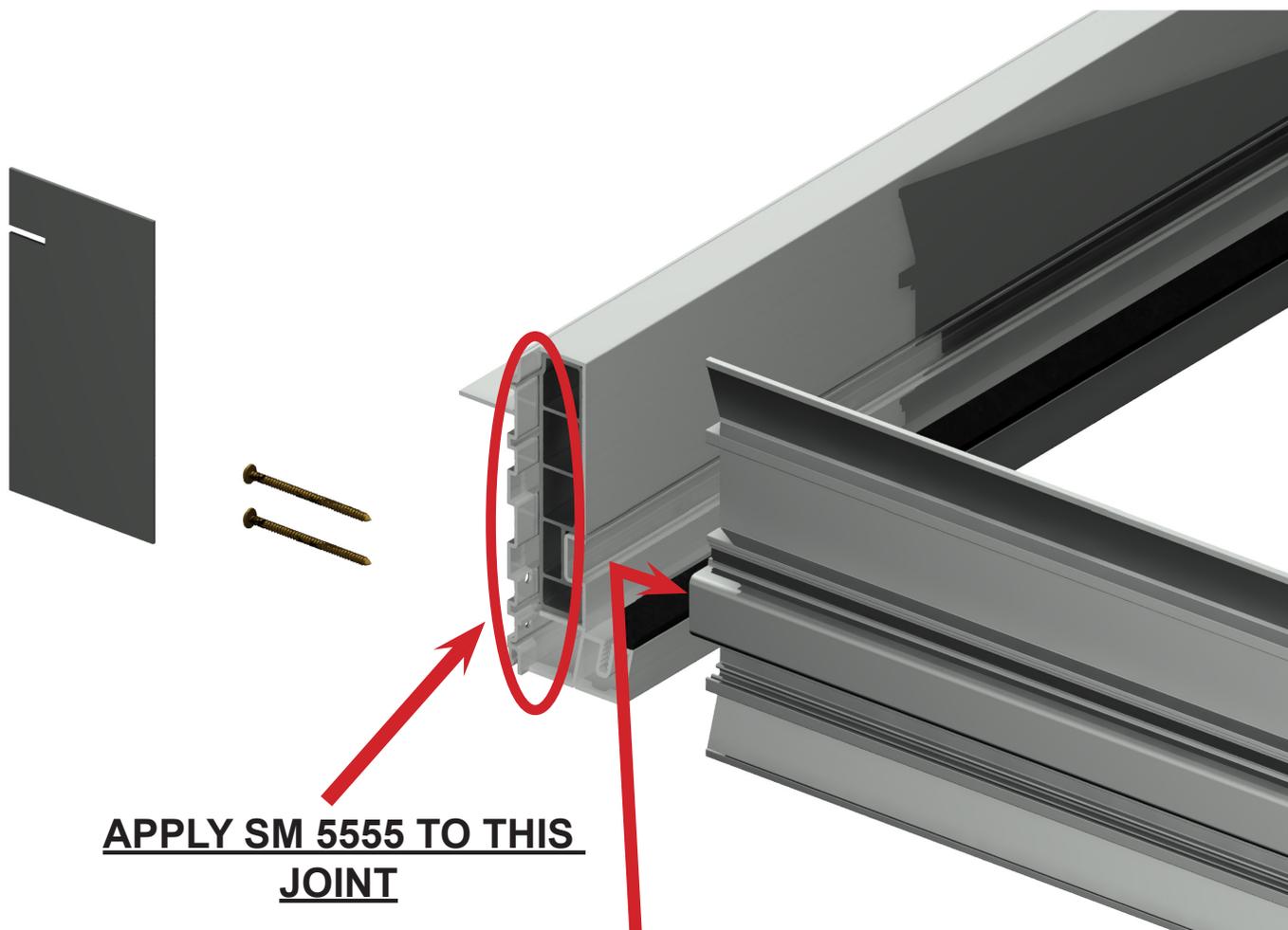
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ADA KNOCK DOWN FRAME BUILD

On ADA thresholds there is no jamb gasket for the sill to adhere to. The SM5555 caulking that is supplied must be used on the jamb to create a gasket for the sill to adhere to. Add a liberal amount to ensure that the sill will be in complete contact with the caulking and install the sill. There will only be two screws that will line up with the sill. It will only attach one way where both screw bosses will be lined up.



**APPLY SM 5555 TO THIS
JOINT**

BEFORE INSTALLING THE FRAME MAKE SURE TO FILL THE CHANNEL AT THE JAMBS CORNER WHERE THE ROLLER RIDES IN. THIS CHANNEL WILL SIT LOWER THAN THE JAMBS LEG AND NEEDS TO BE FILLED AT THE JOINT.

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GENERAL INSTALLATION INSTRUCTIONS

1. INSPECT PRODUCT AND CARE

- Carefully remove any shipping materials. (e.g. corner covers, shipping blocks, plastic wrap, etc.)
- Check for any cosmetic damages.
- Correct product. (size, color, handing, etc.)
- Use provided QC check list to make sure all parts are accounted for in the hardware box.

If any of the above conditions are a concern, contact your dealer or Distributer for recommendations prior to installation.

2. INSPECT THE ROUGH OPENING

- Verify the width and height of the opening for proper clearance.
- Verify the opening is square by measuring diagonally from one corner to the other on both sides.
- Verify the opening is level and plumb.

These steps are important to acquire a trouble-free installation. If these conditions are not met, you will need to adjust accordingly.



Proper steps must be taken when flashing and applying sealant to ensure proper waterproofing of the unit.



It is necessary to have assistance when carrying the unit as well as removing and installing the panels.

****FAILURE TO PROVIDE AN ADEQUATE PAN FOR THIS DOOR, ON ANY OPENING WITH A WOOD THRESHOLD, WILL VOID ITS WARRANTY.****

****FAILURE TO PROVIDE AN ADEQUATE PAN FOR A FOLDING WINDOW WILL VOID ITS WARRANTY.****

FOLDING DOOR

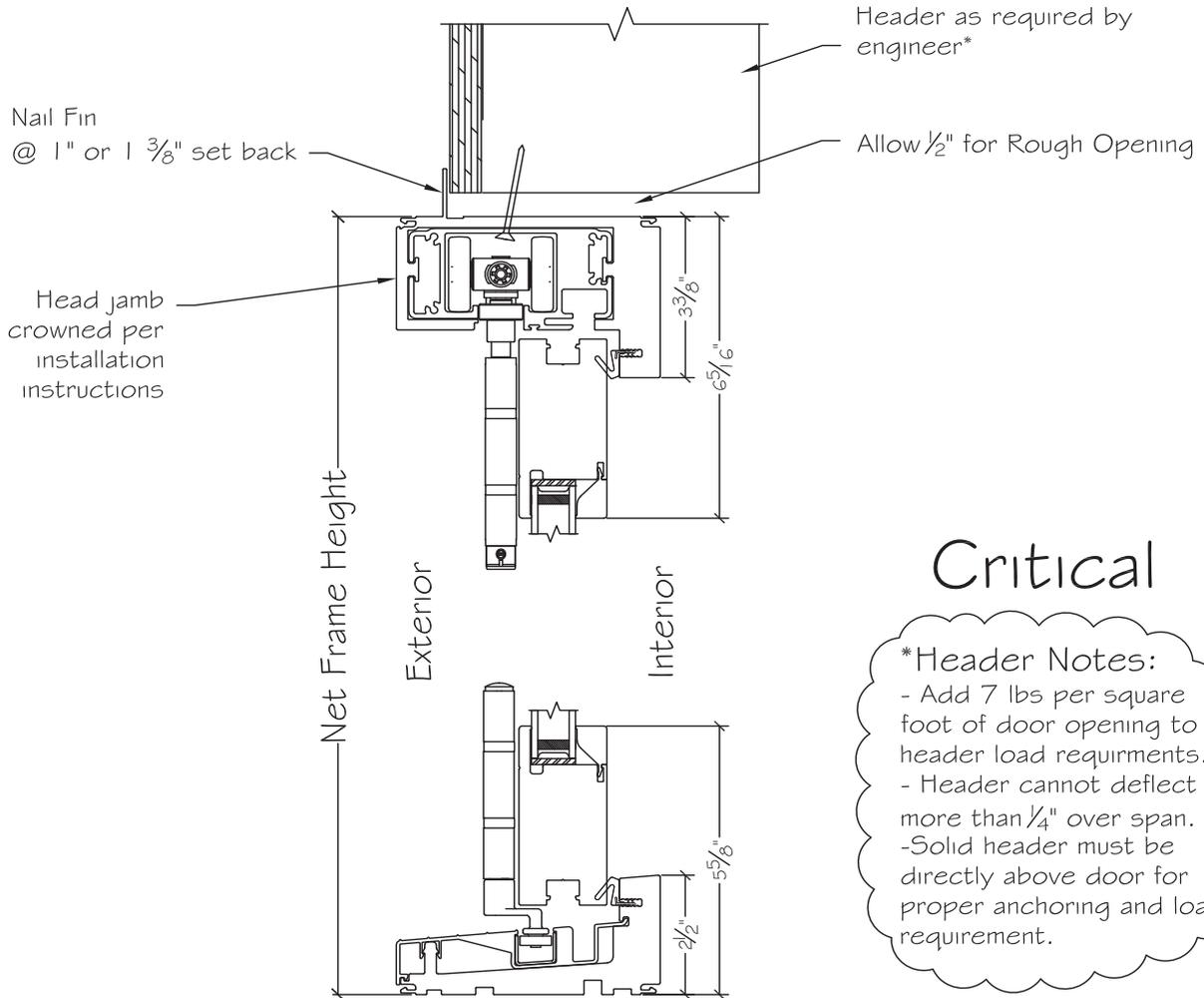
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HEADER AND LOAD VERIFICATION



Fully inspect the opening before you begin. Verify if the header is a solid beam or if there is any material furring down the opening. If there is lumber furring down the opening, make sure it is strapped down with something like ST22 type straps. Due to these doors being hung from the header of the frame, a furring strip just nailed will not hold the weight of the door and in time the furring strips will start to pull away and sag causing the door to be out of alignment and possibly drag across the threshold damaging it. These straps should go from the top of the header down the exterior face, under the header and furring material, then back up the opposite side and up the interior face to the top. Depending on the size of the door, position these straps in more than one location from the center working out towards the jambs.



Critical

***Header Notes:**

- Add 7 lbs per square foot of door opening to header load requirements.
- Header cannot deflect more than 1/4" over span.
- Solid header must be directly above door for proper anchoring and load requirement.

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FRAME INSTALLATION

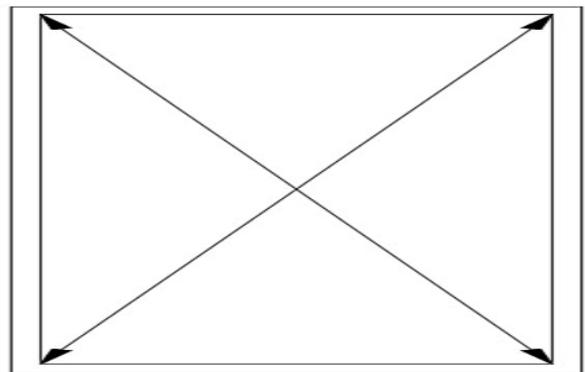
1. Clean and level the threshold thoroughly.
2. Flash the opening according to AAMA standards.
3. Apply sealant to the threshold and surrounding areas, as needed, according to industry standards.
4. Place the door frame into the opening and walk across the threshold enough to be certain the frame is firmly on the threshold, free of any humps due to the sealant under it.
5. With the frame screws provided **(Fig. A)**, secure the four corners and one in the middle of the header to eliminate sag and mis readings when cross taped for squareness. **(Fig. B)**
6. Cross tape your frame to make sure your frame is square. **(Fig. C)**
7. Place a level on the jamb to make sure it is plumb.
8. From the interior, pick one side of the frame and measure the daylight opening height near the jamb **(1)**. With that measurement, go to the center of the door and measure the daylight height **(2)**. Use that center screw from step 6 to lift the header to get the correct crown for your specific door. **(Fig. D)**



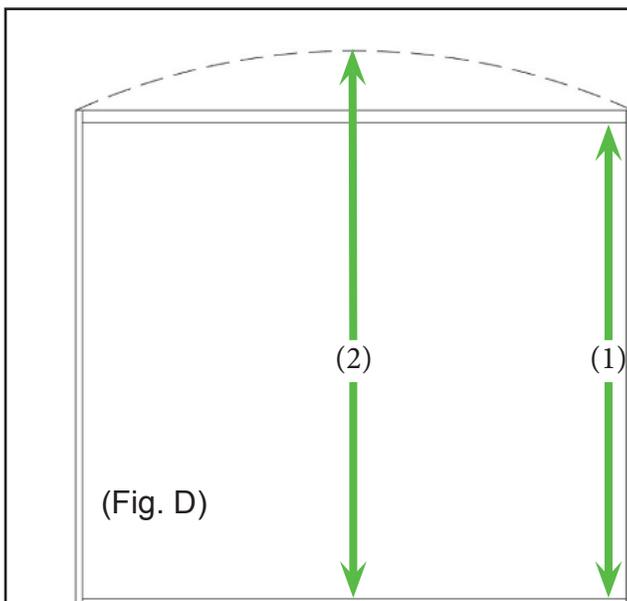
(Fig. A)



(Fig. B)



(Fig. C)



(Fig. D)

CROWNING GUIDELINES

There are 3 different measurements for crowning folding doors depending on the size of door being installed. Crowning the header of the folding door is a very important step, not done or done incorrectly can cause damage to the door and faulty operation.

- 8-10 foot door-----1/16 inch crown
- 10-12 foot door-----1/8 inch crown
- 12 foot and larger-----3/16 inch crown

FOLDING DOOR

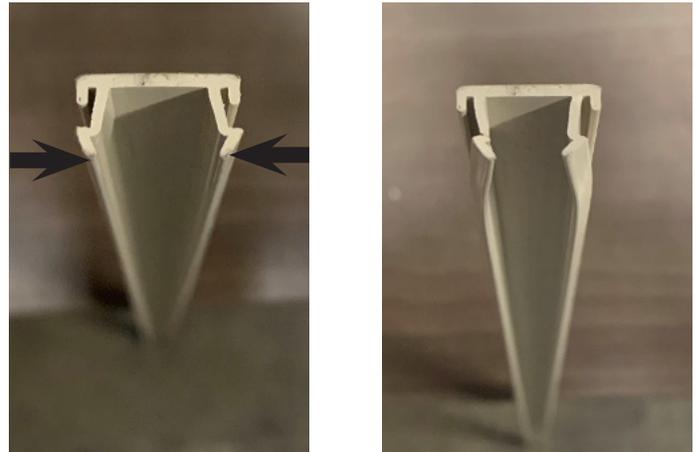
INSTALLATION INSTRUCTIONS

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FRAME INSTALLATION

9. Once the crown is at the appropriate height, finish securing the frame. All the holes in the header and jambs are pre-drilled for the frame screws and every hole must be used. Be sure to place a level on the jamb to make sure they are perfectly straight.
10. Install the Euro cap on the pivot side of the frame. Pinch the top of the legs in order to install the cap easily. **(Fig. E)** Do not install the strike side cap at this moment.

***With the frame installed, shim every 24in on the header and every 16in on the jambs.**



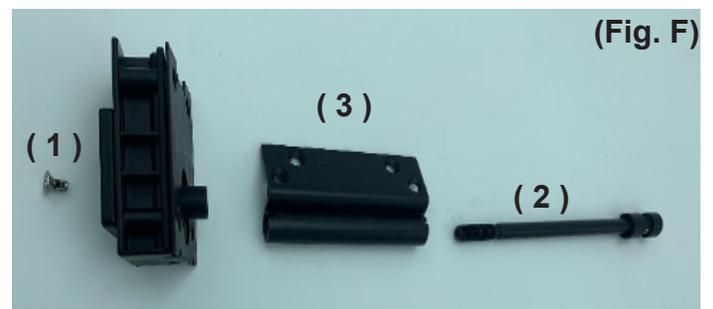
(Fig. E)

HARDWARE PREPARATION

Before hanging the hardware there are a few steps that MUST be done for the door to work properly and with proper clearance.

1. Using the hardware placement sheet provided in the hardware box, identify the pivot box of hardware. In every pivot box you will need to swap the operation of either the top or the bottom.
2. **Reversing the handing of the top block pivot.**(Fig. F) Remove the top set screw (1), unscrew the post completely off the block (2), then flip the leaf (3) and put it back together in the reverse order.
3. After the block is put back together it is necessary to back that top set screw out about 3/16 of an inch. This will allow you to lower the post enough for proper clearance. **(Fig. G)**

****Do not install the pivot hardware at this moment****



(Fig. F)



(Fig. G)

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HARDWARE PREPARATION

4. On the top block pivot, use the side to side adjustment screw to move the top portion of the block about 1/4 inch away from the blocks edge. This will give clearance to install the block into the opening of the frame. **(Fig. H)**
5. **Reversing the handing of the bottom pivot.** Unscrew the adjustment screw and place it on the opposite end of the post. **(Fig. I)**
6. Using the hardware placement sheet provided in your hardware box, identify the carrier set of hardware and back the top set screw out about 3/16 of an inch just as you did on the pivot block. Do the same to all the carrier sets of hardware. **(Fig. J)**
7. **Set the height on all pivots and carrier sets.** To do this, screw the post all the way up until it bottoms out **(Fig. K)**. Count 8 full rotations down or adjust enough so the top of the leaf is 1/2" down from the base. If the screws are backed out properly you should be able to get roughly 10 rotations down. Stop at the 8th full turn. This will allow proper clearance and ability to adjust up or down later on if needed.



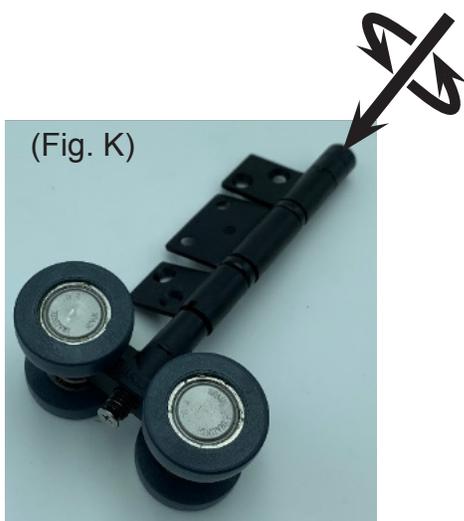
(Fig. H)



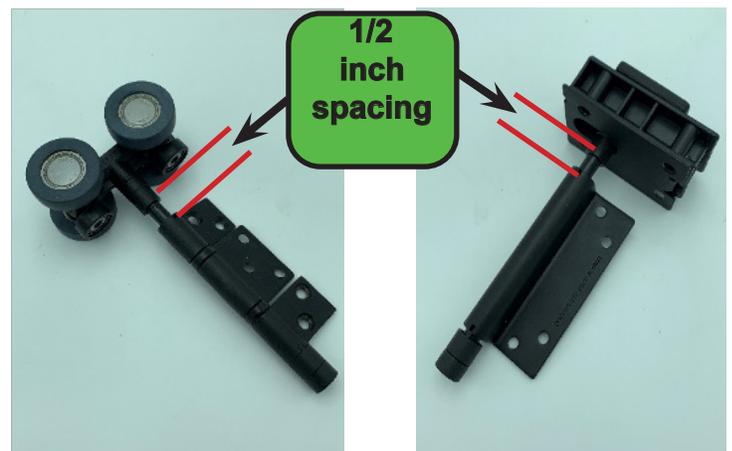
(Fig. I)



(Fig. J)



(Fig. K)



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FRAME HARDWARE SET UP

1. Thoroughly clean the top track to clear out any aluminum shavings that might have shaken loose in transport.
2. Install all the carrier rollers into the frame. The style of door you are installing will determine the order the hardware is put in. If the door set up has any group of panels ending on an even number there will be a directional carrier set of hardware. If so this roller will need to go in first. Install the roller into the hole routed out on the stacking side of the frame. The horizontal wheel side goes in first. **(Fig. L)** All the other intermediate carrier sets will be installed in the same routed out hole. **(Fig. M)**
3. Once all the carriers are in the top track, install the pivot hardware block. Slide the metal plate down and install the face with the side to side adjustment screw into the routed out hole first. **(Fig. N)**
4. There will be 4 screws bagged up with one silver pan head screw. The 4 screws will be used for the top block pivot. The silver pan head screw will be used for the bottom pivot. Make sure the pivot block is set in the track evenly and flat; use the plate screws to suck the block down into the grooves. The hinge post should be straight up and down and side to side. **(Fig. O)**

****Use the hardware placement sheet provided in the hardware box for the following steps on the next few pages.****



(Fig. L)



(Fig. M)



(Fig. N)



(Fig. O)

FOLDING DOOR

INSTALLATION INSTRUCTIONS

FRAME HARDWARE SET UP CONT.

5. The bottom pivot has 3 parts. The main post with the adjustment screw threaded into it, and a 2-piece pivot block which is bagged up with one silver pan head screw that's used to secure the bigger portion block. **(Fig. P)**
6. First install the larger portion of the bottom block into the bottom corner where the panels will stack. This block needs to be pushed completely against the jamb. Use a 9/64 drill bit; pre-drill both holes and fill the holes with the SM-5555 sealant (provided). Secure the block in place with the silver pan head screw that is in the bag with the 4 top pivot screws. Only secure the hole closest to the jamb, the other hole will be used in the next step. **(Fig. Q)**
7. Slide the back of the post into the block you have already secured to the frame **(Fig. R)**. Snap the smaller block over the adjustment screw. The back portion of the block should fit tight against the larger block. If it does not you may need to turn the adjustment screw in order to move the blocks together. Use the silver pan head screw that was provided in the bag with the bottom block to secure the bottom pivot into place



(Fig. P)



(Fig. Q)



(Fig. R)



WALL PIVOT

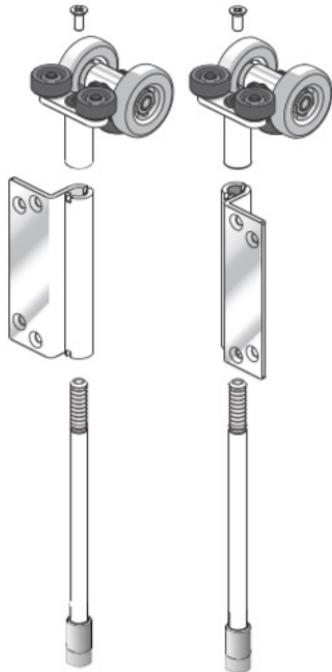
If the door is 90" or taller there will be a wall pivot. (1) Depending on how tight the framing is to the frame, it may be necessary to drill (3/4" bit) out the framing through the wall pivot hole. The sleeve on the wall pivot will extend 3/8" past the frame. Use the Hinge Screws provided to install the wall pivot sleeve in the frame. (2)



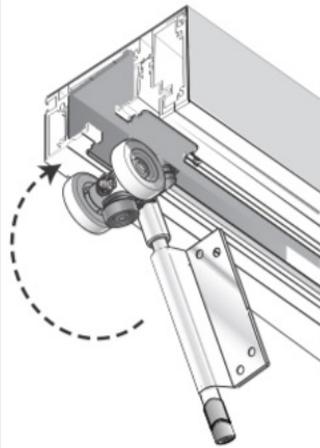
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HINGES



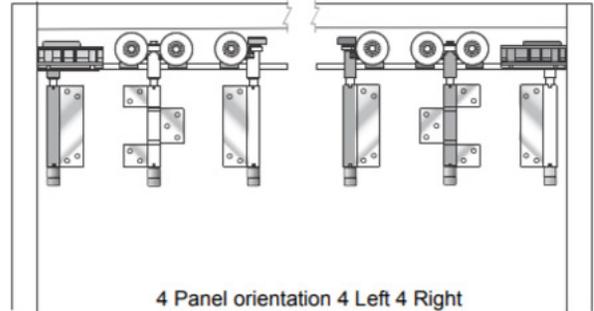
ASSEMBLY - REVERSIBLE



IMPORTANT
THOROUGHLY CLEAN
INSIDE OF TOP TRACK
BEFORE INSTALLING ROLLERS

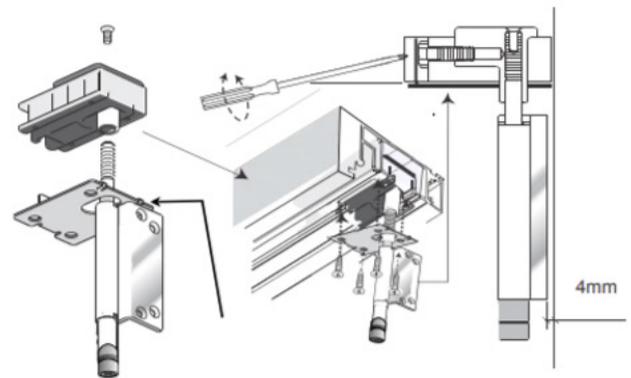
INSTALLATION

CARRIERS AND GUIDES



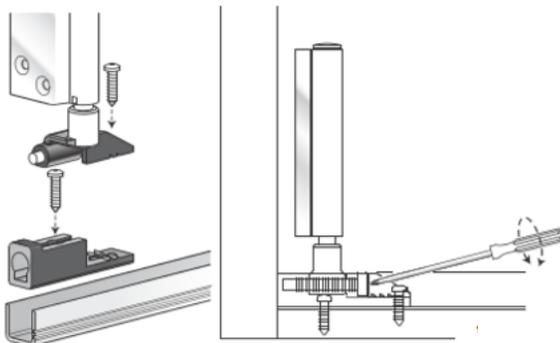
4 Panel orientation 4 Left 4 Right

HARDWARE ORIENTATION



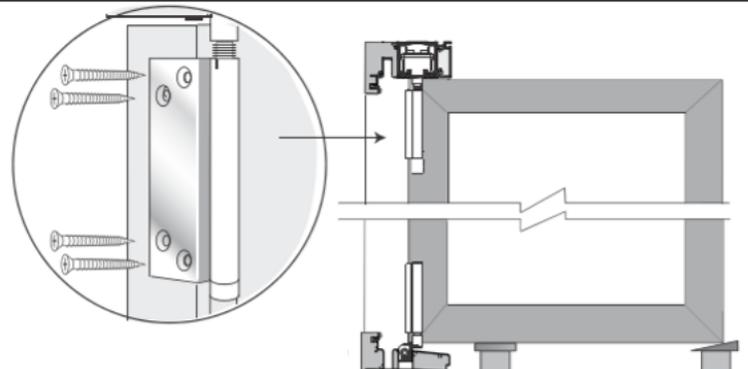
Top Pivot Block is installed in one piece
TOP PIVOT BLOCK

BOTTOM PIVOT BLOCK



* Pre drill hole for pivot block, apply sealant before fastening screw.

FITTING PIVOT PANEL



FOLDING DOOR

INSTALLATION INSTRUCTIONS



INSTALLING PANELS AND HINGE HARDWARE

Hinge screws are provided in the main box. **(Fig. T)**

Each panel comes with a Philips head alignment screw used to keep the center aluminum channel in place during shipping. These screws need to be removed prior to installing the hardware on each panel. These screws are located on the uppermost hinge holes. **(Fig. U)**

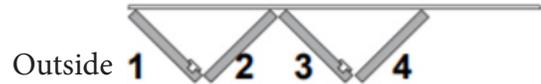
1. To make installing the panels easier its suggested to use some material roughly 5/8" to set your panels on while installing each panel. **(Fig. V)**
2. The only parts left in the pivot box should be the bottom leaf and the button plug. Identify which way the leaf will mount to your panel to see which side will be the top of the leaf. Using a mallet, hammer on the button plug to the top of the bottom leaf. **(Fig. W)**
3. Screw the bottom leaf to the bottom of your starting panel. **(Fig. X)**

IN THE MAIN BOX OF HARDWARE, YOU WILL BE SUPPLIED WITH A HANDING SHEET FOR YOUR PARTICULAR DOOR. THIS SHEET WILL INFORM YOU OF THE LOCATION OF EACH PIECE OF HINGE HARDWARE.



***Each panel will be numbered to help configure which panels go where. You will not always start hanging panels with the #1 panel. The panel you start with depends on what handing the door is.**

4.4.0 Inside



4.0.4 Inside

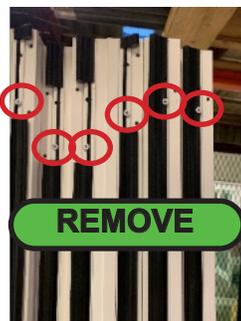


Panel numbering is always left to right.

***After the frame is installed correctly. Always start with the pivot side first. Do not open the hardware boxes arbitrarily as you may mix the hardware up.**



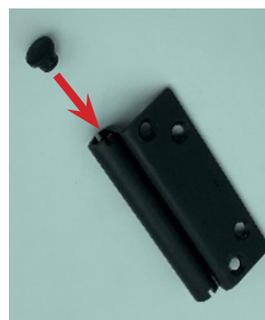
(Fig. T)



(Fig. U)



(Fig. V)



(Fig. W)



(Fig. X)

FOLDING DOOR

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IMPORTANT NOTES ON TALL DOORS

WALL PIVOT

If the door is 90" or larger there will be Wall Pivot hardware.

- On the stacking side jamb, there are some holes drilled out around the middle of the jamb. In this hole is where the sleeve of the wall pivot will be installed. Use the hinge screws provided to secure into place.
- Figure out what part of the leaf is the top. Using a mallet, hammer the button plug onto the top.
- Secure the leaf onto the middle section of the first installed panel.
- Slide the bottom leaf over the bottom pivot post.
- Stand the panel straight up as you slide the wall pivots L into the middle hinge and the other end of the L shaped post into the jamb sleeve.
- Secure that panel to the top pivot leaf.



EXTERNAL PULL HANDLE

On taller doors there will be an External Pull Handle. This is usually only needed on doors with 4 hing placements or windows, but not limited to. The pull handle should be mounted about 1" above the twin bolt handle. The placement will vary depending on where the hinges are placed on the panel from the manufacture. The handle will need to be drilled out on site. Use a #17 drill bit. **Use the 1" hinge screws supplied**



IMPORTANT NOTE ON DOOR HINGES LINED UP WITH THE TWIN BOLT



1" screws are needed if the door has a hinge positioned next to the twin bolt. There should be a pack of 1" hinge screws supplied with the external pull handle. These screws MUST be used on any hinge that is lined up with the twin bolt handle mounted on the same panel. Failure to do so will damage the Twin bolt mechanism.



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INSTALLING PANELS AND HINGE HARDWARE CONT.



BEFORE CONTINUING READ NOTES ON PREVIOUS PAGE ABOUT TALLER DOORS AND THE NEED TO USE 1" SCREWS ON HINGES PLACED NEXT TO THE TWIN BOLT HANDLE.

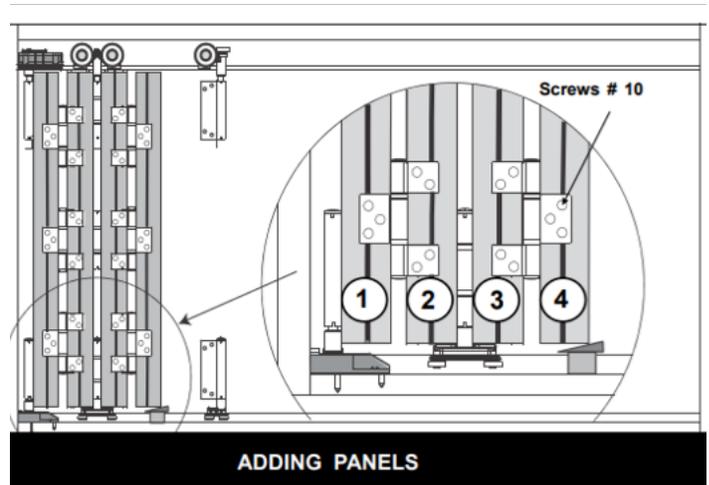
4. Install the first stacking panel by sliding the bottom leaf over the pivot post, rest the panel on the shim material. Keep the panel perpendicular to the frame and screw the top pivot block leaf into the panel. **(Fig. Y)**
5. Using the supplied hardware placement sheet, **(see page 15 for a sample sheet)** continue hanging the panels with the corresponding hinge sets.



(Fig. Y)



Keep in mind when stacking panels, the glazing bead will always face the interior when the door is closed. As each panel is installed keep the panels perpendicular to the frame and mirror the previous panel. Interior side to interior side, exterior side to exterior side.



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FOLDING WINDOW

There are a couple differences when it comes to a Folding Window and a Folding Door.

1. There will not be handle hardware with the deadbolt and multi point lock. Instead it is just a handle to engage a twin bolt that will lock the door.
2. There is Folding Window Jamb extender with euro cap (**Fig. Z**). This piece will need to be installed after the frame is completely installed but before the final adjustments are done on the door panels.

****There may be extra hinges not needed depending on the height of the door. Follow the Hardware placement sheet to make sure the correct hardware is in the proper place.****

Jamb Extender

Supplied with the window will be a jamb extender with euro cap. The purpose of this extender is to allow clearance for the handle to operate properly. This will be used on odd number panel windows stacking to one side.

- The extender should be mounted with the widest edge towards the jamb stop.
- It should be about 1/4" away from the jamb stop.
- Use the self tapping Strike Plate screws supplied. Place screws 3" from the top and bottom and every 16" between. (**Fig. AA**)
- Once installed, install the euro cap to cover the screws. Pinch the top of the legs in order to install the cap easily. (**Fig. BB**)



Fig. Z



Fig. AA

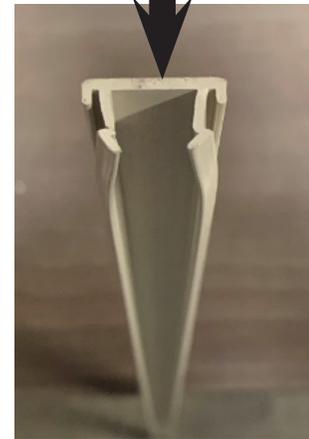
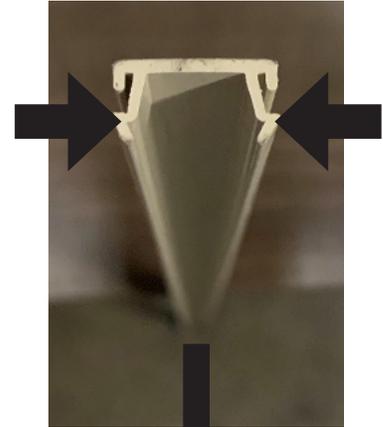


Fig. BB

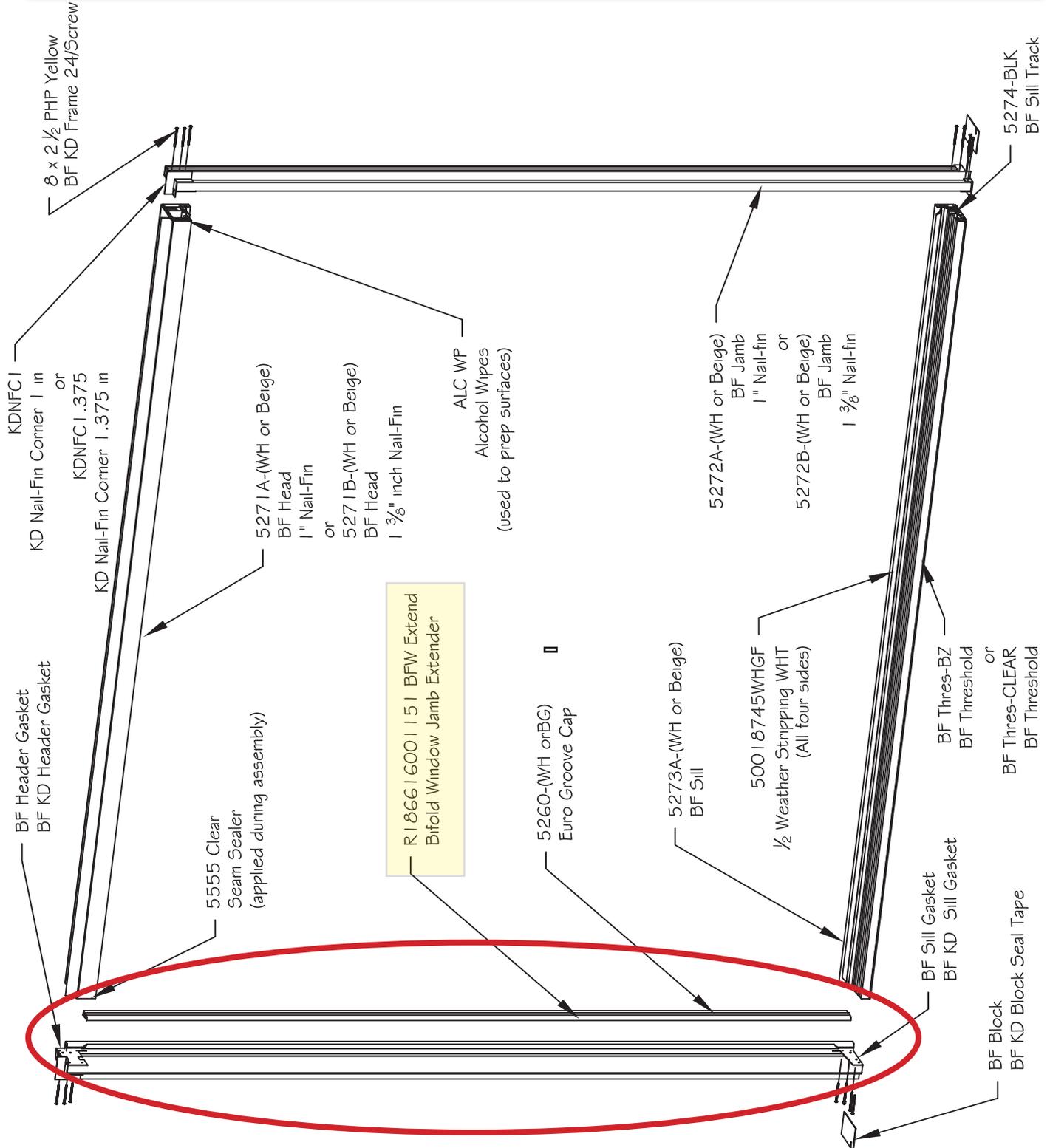


FOLDING DOOR

INSTALLATION INSTRUCTIONS



FOLDING WINDOW CONT.



FOLDING DOOR

INSTALLATION INSTRUCTIONS



ADA SILL INSTALLATION

The ADA sill is not able to withstand air & water intrusion like the weather resistant sill. This option has no weep or drainage incorporated into the track; therefore, an overhang and protection are important when using this sill.

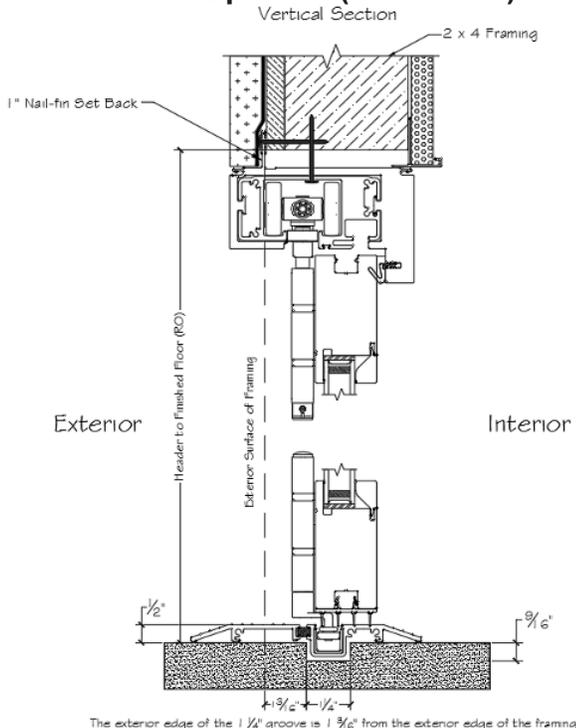
Finished Floor Option 1

It will be necessary to notch the flooring in order for the threshold to sit flat with a smooth transition. The guide track of the ADA threshold protrudes lower than the portion of the sill that will sit on the finished floor. The dimensions of this guide channel are 7/16" tall and 1" wide. Mark where this will sit and cut a notch in the finished floor. It's suggested to make the notch 9/16" deep and 1 1/4" wide.

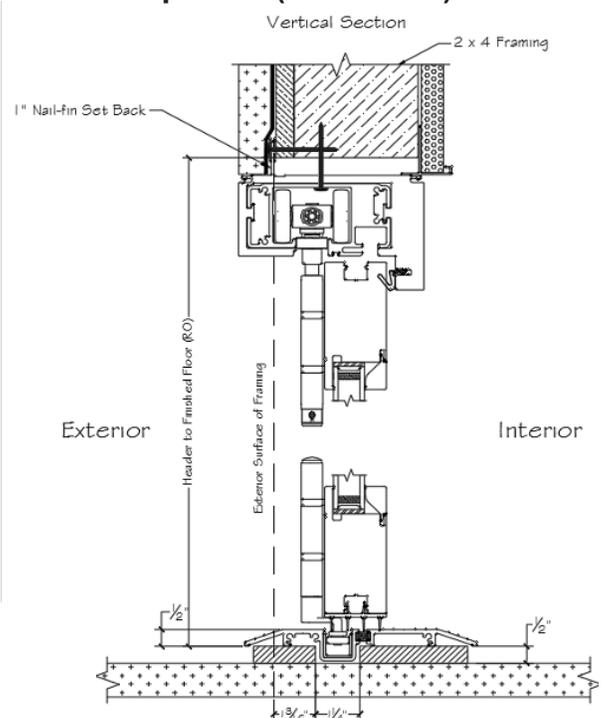
Unfinished Floor Option 2

The finished height of the flooring is needed before continuing. Once the height of the finished floor is obtained, determine if it's necessary to notch the threshold's substrate. Any finished floor that exceeds 1/2" will most likely not need any extra work on the threshold. In this case put some sort of furring strips, (**material that will be weather resistant and not rot**) the height of the proposed finished floor, under the floating interior and exterior edge of the threshold. This should leave enough room so the new flooring can be maneuvered partially under the ADA threshold creating a smooth transition, flooring to threshold. If the flooring is thinner than 1/2", you will need to follow the steps on the Finished Floor Option 1, but only at the difference of the overall guide depth minus the actual finished floor.

Option 1 (1" Nail Fin)



Option 2 (1" Nail Fin)



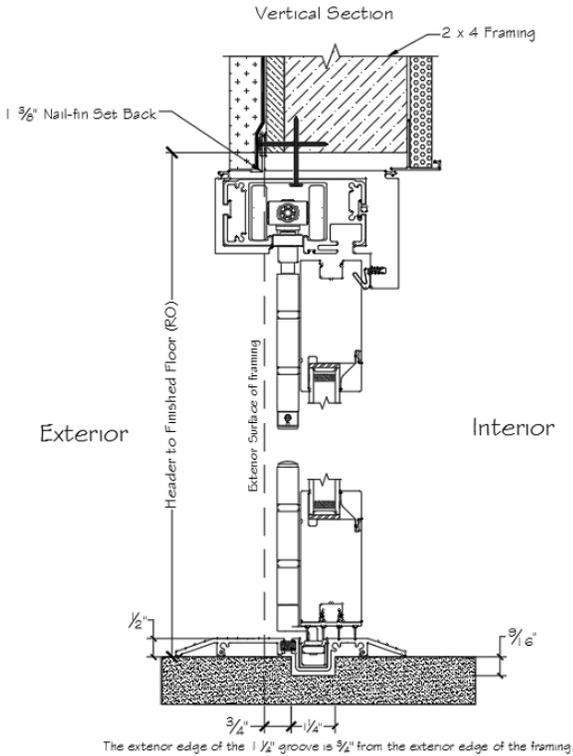
FOLDING DOOR

INSTALLATION INSTRUCTIONS

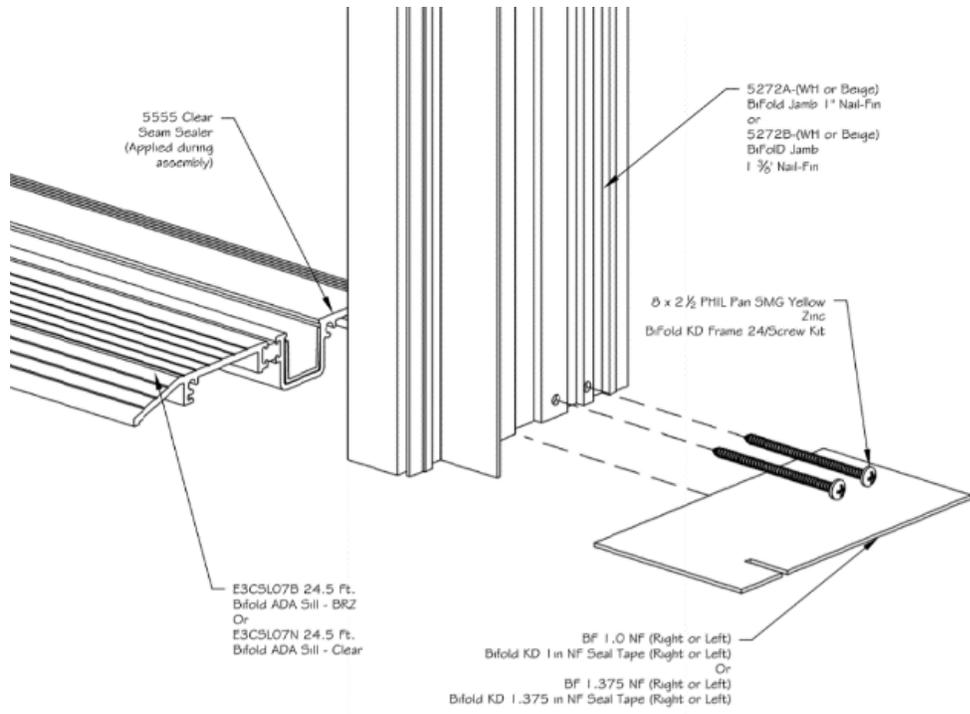
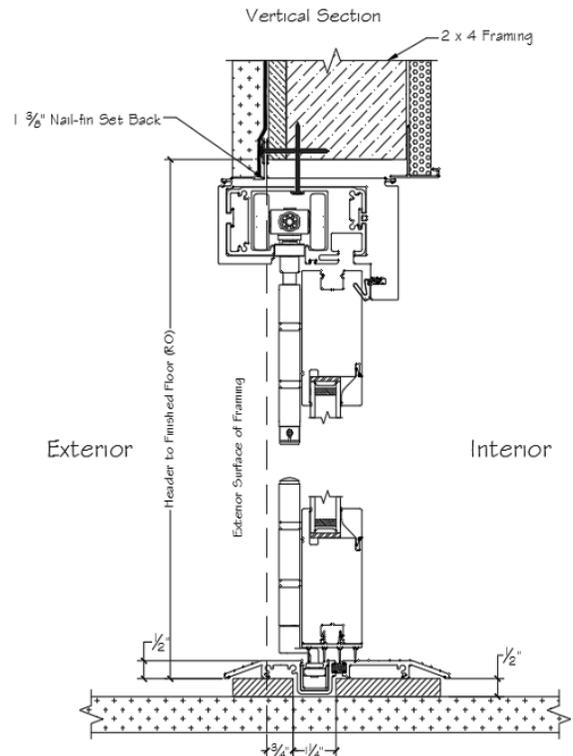


ADA SILL INSTALLATION CONT.

Option 1 (1 3/8" Nail Fin)



Option 2 (1 3/8" Nail Fin)



FOLDING DOOR

INSTALLATION INSTRUCTIONS

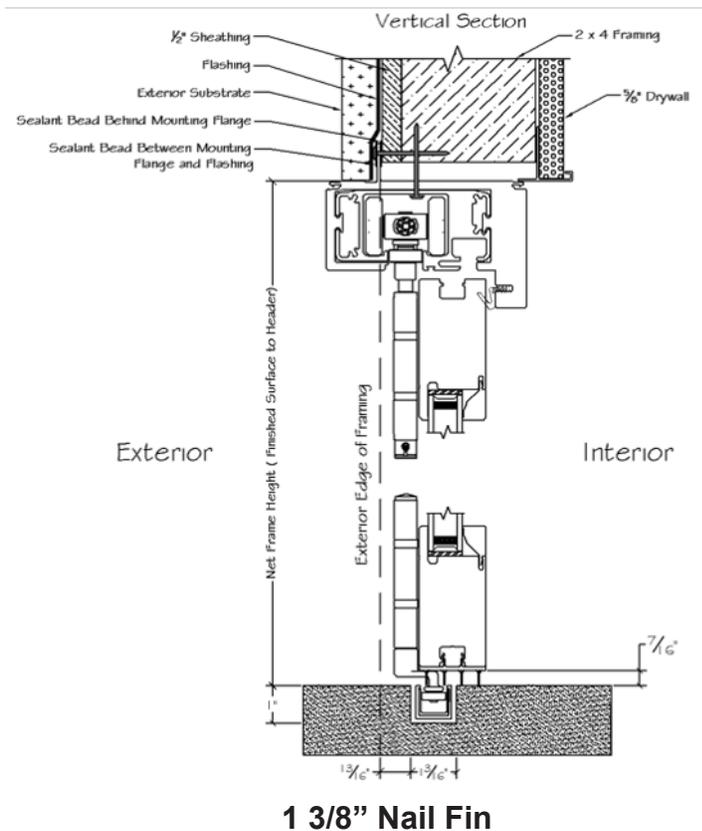
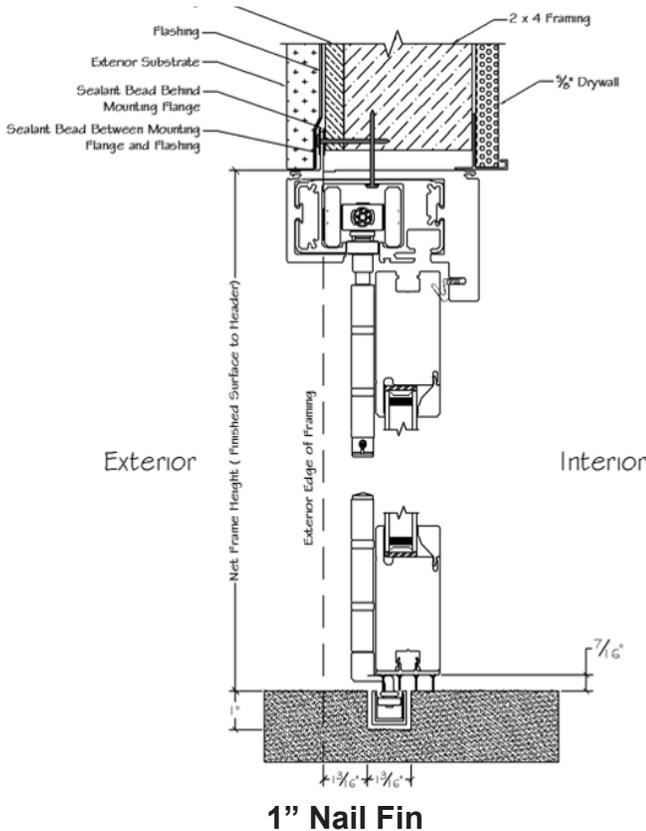


FLUSH SILL INSTALLATION

On a flush sill application, the frame will be 3-sided and with a U channel for the bottom (**do not cut the U channel**). This install requires knowing what the finished floor or counter top will be in order to determine where to set the height of the U channel.

Depending on the finished floor or counter, a notch may be needed to flush the sill to the level of the finished surface. Net size of the flush sill is 15/16" wide by 7/8" tall. If cutting a channel in a finished floor or counter, a 1/8" gap around the sill is recommended to allow it to be adjusted accordingly. ****The flush sill is not able to withstand air and water intrusion like the weather resistant sill. This option has no weep or drainage incorporated into the track, therefore overhang and protection is important when using this sill.****

1. The first step entails finding out where the U channel will sit. On a 1" nail fin your U channel will start 1 3/16" from the face of the framing. On a 1 3/8" nail fin your U channel will start 13/16" from the face of the framing.
2. On an unfinished opening the dimensions of the proposed finished floor or counter will be needed, set the U channel at the appropriate height. On a door it is likely that a notch will be necessary.
3. Flash the opening according to AAMA standards.
4. Set the U channel in the appropriate location.
5. Install your frame. Your frame will sit on top of the U channel.
6. Continue on with the frame and panel install on pages 8-18.



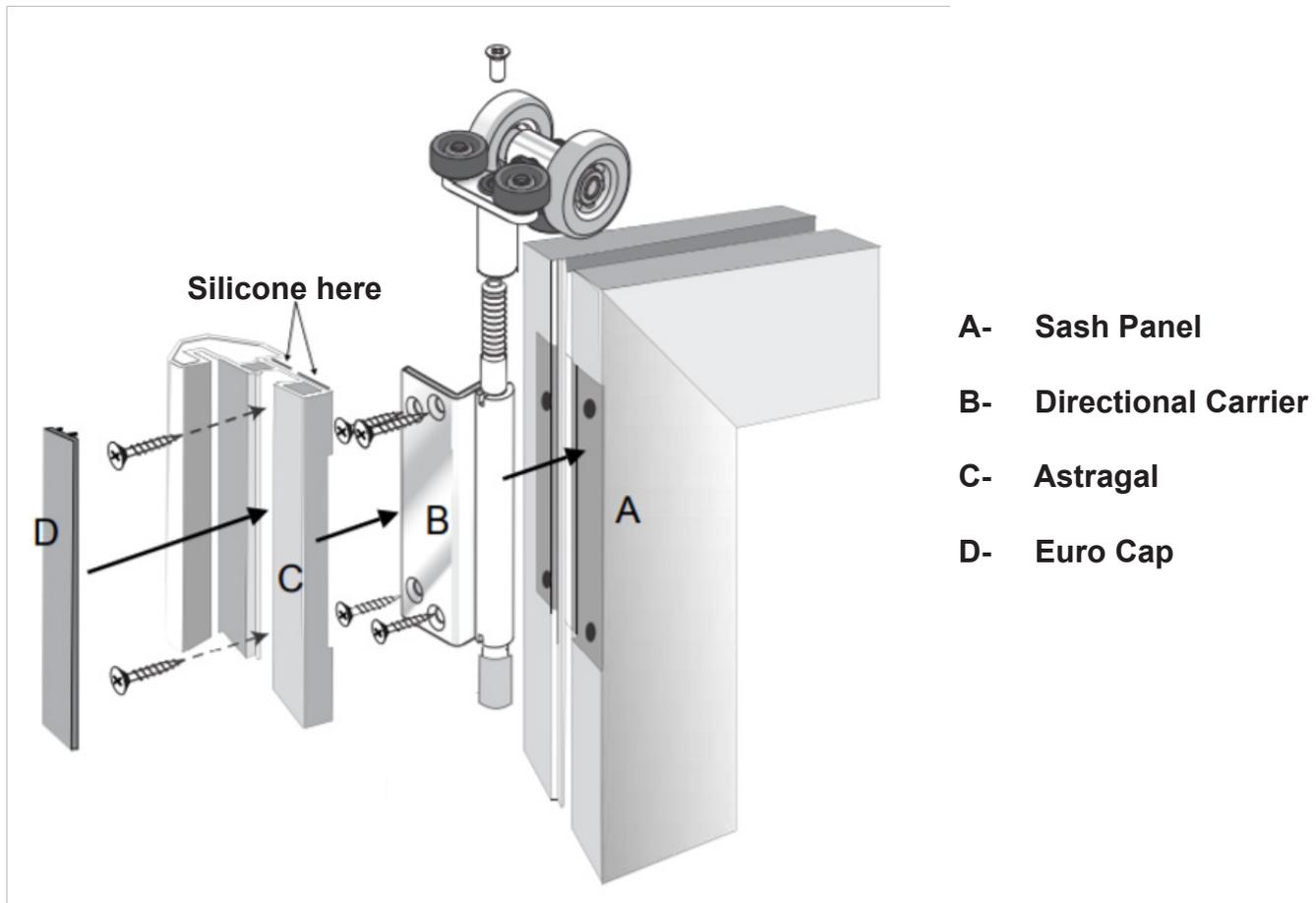
FOLDING DOOR

INSTALLATION INSTRUCTIONS

ASTRAGAL AND DIRECTIONAL CARRIER ASSEMBLY INSTALLATION

Doors that have a stack of an even number of panels, with an astragal mounted to the panel, will require a few extra steps to install the directional carrier hardware.

1. Remove the strike plates if any are installed on the astragal.
2. Carefully remove the Euro caps that are between the strike plates. **Make sure to mark which one goes where. These mount in specific places.**
3. **Remove all the screws you see behind those caps.**
4. Set the astragal aside.
5. Line up the directional carrier set and screw the top and bottom hinges in place.
6. Before applying the astragal to the sash panel, make sure the sash is adjusted properly. Once the adjustment is made, dry fit the astragal over the edge of the sash making sure the slot on the astragal lines up with the carrier. **It may be necessary to modify the astragal.**
7. After dry fitting, apply silicone to the face of the astragal that will mate up with the panel.
8. Re-screw the astragal on, just as it was taken off.
9. Screw in place the 3 strike plates if they were originally installed.
10. Snap in the Euro caps in the correct spots.



FOLDING DOOR

INSTALLATION INSTRUCTIONS

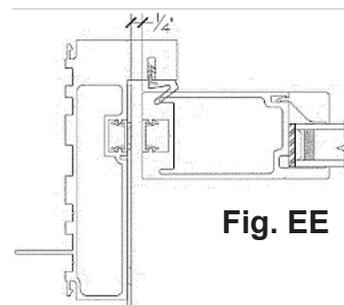
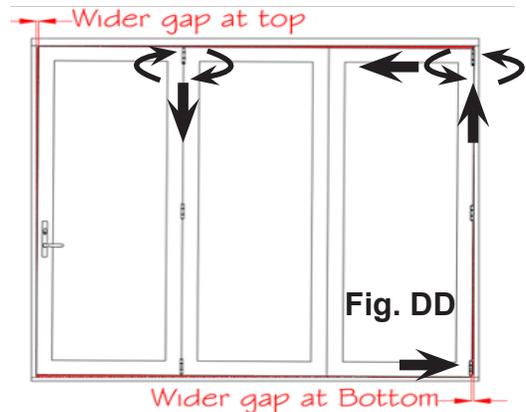
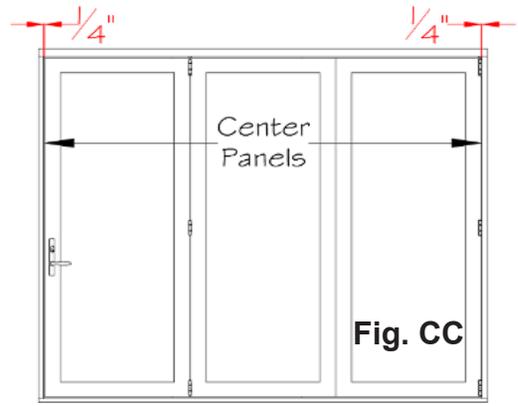
CASCADE
WINDOWS

PANEL ADJUSTMENTS

Once your panels are set, look at your reveals and adjust the panels if needed.

1. Completely shut the entire door. Check the jamb reveal on the pivot side, then check the strike side jamb reveal. Center the group of panels in the frame. **(Fig. CC)** Take a look at the top header to panel reveals. This should be set just right if not extremely close, if the hardware preparation section was followed correctly. There should be an even space across the length of it, with a slightly larger gap in the middle due to the crowning of the header.
2. If the header reveal is off as well as the jamb reveal, raise or lower a carrier roller or pivot and/or adjust the 2 pivot side to side adjustments. **(Fig. DD)**
3. The most important reveal is the strike side. If this is too small the panel will knock and if the gap is too wide then the latches won't engage properly. An optimal gap would be 1/4 inch. **(Fig. EE)**
4. To adjust the side to side adjustments, open the door completely and use a Philips hand screwdriver. The adjustments will be in both the top pivot block and the bottom pivot block. **(Fig. FF-next page)**
5. Install the handle hardware on the main active panel. **(see folding door handle hardware page. P. 32, 33)**

 3/8" gap on each side of the panel to frame is acceptable. The weather stripping will still have sufficient contact with the panel. If on any door your jamb side gaps exceed 3/8" then it is necessary to use the provided hinge leaf shims. **(see hinge shimming section p. 27)**

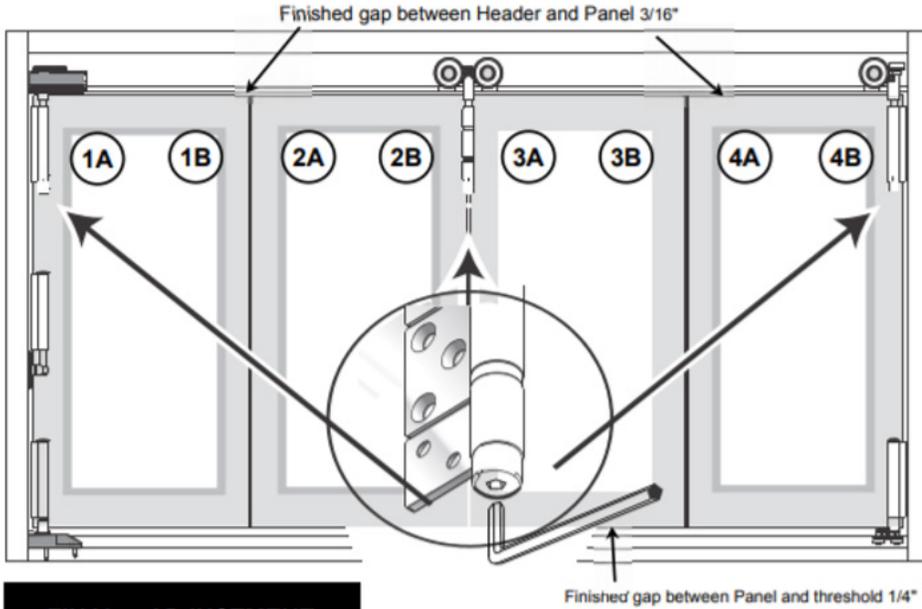


There is a possibility the locking bar tongue will need to be reversed. To do so, pull the tongue outwards from the housing and simply twist it to face the opposite direction. It may be easier to use a pair of pliers with the use of a rag or something to protect the tongue from the teeth on the pliers.

FOLDING DOOR

INSTALLATION INSTRUCTIONS

PANEL ADJUSTMENTS CONT.



FINAL ADJUSTMENT

FINAL ADJUSTMENT

Surelock 5 Upgrade

ADJUSTMENT



Centor's new Surelock 5 technology ensures folding doors running on E3 hardware can be adjusted simply with an Allen key. Offering seven upgrades from the original version, the new Surelock 5:

1. Ensures adjustment is self evident with insertion of an 5/16" (8mm) Allen key into the end of the pin – now you can explain adjustment over the phone to your customers.
2. Removes the problematic yellow shipping clip found at the bottom of the pin – it can't be left in place after adjustment is finalized at installation.
3. Use of the Allen key provides more torque so the panel no longer needs to be 'unweighted' during adjustment.
4. Eliminates the locking wafer which had possibility of shifting off-center and scratching the panel during adjustment.
5. Allows for one-handed adjustment with the Allen key.
6. Allows you to use an extended Allen key to adjust the door from ground level – a ladder or stool is no longer required making it safer for employees.
7. Looks great, thanks to the simplified design of the pin.

Panel Adjustment

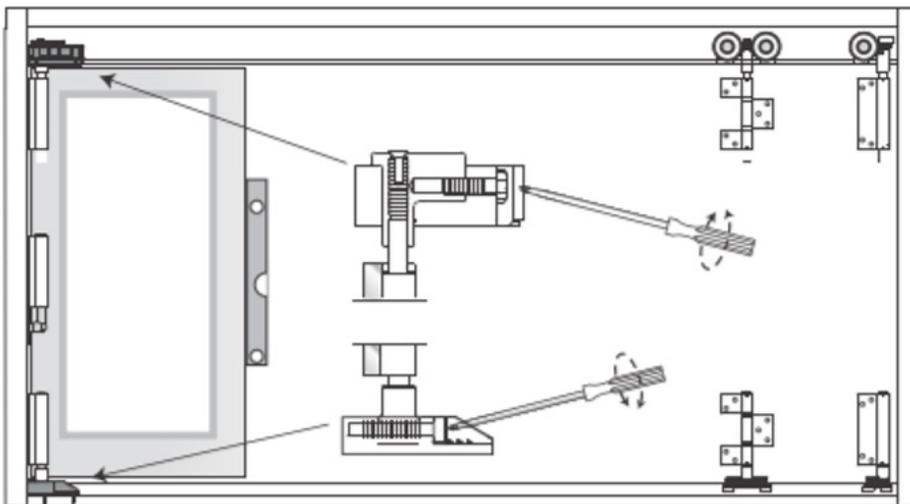


Fig. FF

FOLDING DOOR

INSTALLATION INSTRUCTIONS

CASCADE
WINDOWS

STRIKE PLATE INSTALLATION

In the hardware box you should have 3 keeper plates; 1 large for the strike and deadbolt and 2 for the hook locks. (Fig. GG)

A 9/64 drill bit is needed to pre-drill the holes for the strike plates.

***See next page for a step by step photo illustration of installing the keepers.**

1. Close the main active panel that has the handle hardware on it. Lift the handle to engage the hook locks and dead bolt.
2. With a pencil, mark the bottom most point of where the top hook lock stops when engaged.
3. With a pencil, mark the top and bottom of where the dead bolt engages in the jamb.
4. With a pencil, mark the top most point of where the bottom hook lock stops when engaged.
5. Install the top hook lock plate with the bottom edge of the opening about 1/8in below the pencil mark. Using a 9/64 drill bit, pre-drill the two holes and secure the hook plate.
6. Place the main strike plate on the jamb where the top and bottom marks of the deadbolt are visible through the deadbolt hole on the strike plate. Holding the strike plate in place, mark the top edge of the plate. Using that line for the placement of the strike plate, slide the plate towards the stop till the holes are flush with the routed out holes. The holes for the

tongue and dead bolts exterior edge should be about flush with the routed out vinyl. With the plate lined up with the top line and holes flush with the routed out vinyl, mark where to pre-drill for your holes. Pre-drill the holes with a 9/64 bit and secure the plate.

7. Install the bottom hook lock plate with the top edge of the opening about 1/8 inch above your pencil mark. Using a 9/64 drill bit, pre-drill the two holes and secure the hook plate.
8. Now close the panel and engage every lock. Open and close all the panels to ensure they are working properly and smoothly as well as engage all the locking points multiple times to make sure everything is lined up properly and every lock engages smoothly.

Once all the locks are working properly and are completely screwed in and secured, make sure to put shims behind every keeper to eliminate any movement from the operation of the door.



Fig. GG

FOLDING DOOR

INSTALLATION INSTRUCTIONS

CASCADE
W I N D O W S

ENGAGE THE DOOR LOCKS TO MARK THE LOCKED POSITIONS.



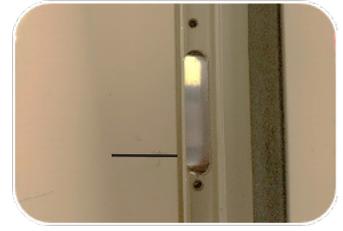
MARK THE END POINT OF THE TOP LOCK.



MARK THE END POINT OF THE BOTTOM LOCK.



LINE UP THE TOP HOOK KEEPER ALLOWING 1/8 INCH GAP FROM YOUR LINE TO THE BOTTOM & MARK THE HOLES.



PRE-DRILL THE HOLES.



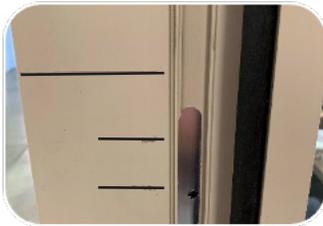
MARK THE TOP AND BOTTOM OF THE DEAD BOLT.



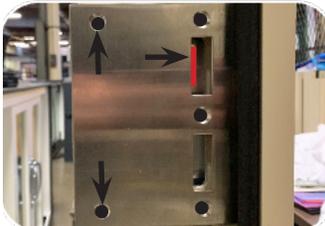
ALIGN THE STRIKE PLATE WITH THE DEADBOLT MARKS. MARK THE TOP OF THE PLATE.



SECURE THE HOOK KEEPER TO THE JAMB.



THE TOP LINE WILL BE USED AS A REFERENCE POINT.



LINE UP WITH THE TOP LINE AND SLIDE BACK SO THE DEADBOLT SLOT IS FLUSH WITH THE EXTERIOR EDGE OF THE CUT OUT HOLE. MARK THE HOLES FOR THE SCREWS.



LINE UP THE BOTTOM KEEPER ALLOWING 1/8 INCH GAP FROM YOUR LINE TO THE TOP & MARK THE HOLES.



PRE-DRILL THE HOLES.



REMOVE THE PLATE AND PRE-DRILL THE MARKED HOLES WITH A 9/64 BIT.



SECURE THE PLATE TO THE JAMB.



SECURE THE HOOK KEEPER TO THE JAMB.

FOLDING DOOR

INSTALLATION INSTRUCTIONS

STRIKE SIDE CAP INSTALLATION

1. Back out every screw on every keeper.
2. Place the jamb cap where it will be installed and mark on it where each screw begins; a hair above the top screw of the keeper and a hair below the bottom screw of the keeper. **(Fig. HH)**
3. Cut the cap at each mark. Trash the pieces that would have been covered by the keeper.
4. Pinch the corners of the top and bottom of each piece needed, this will help install the caps easier. **(Fig. II)**
5. Install each piece in the appropriate location on the jamb tucking it behind the keepers.
6. Tighten each keeper screw back down securing your keepers back in place.

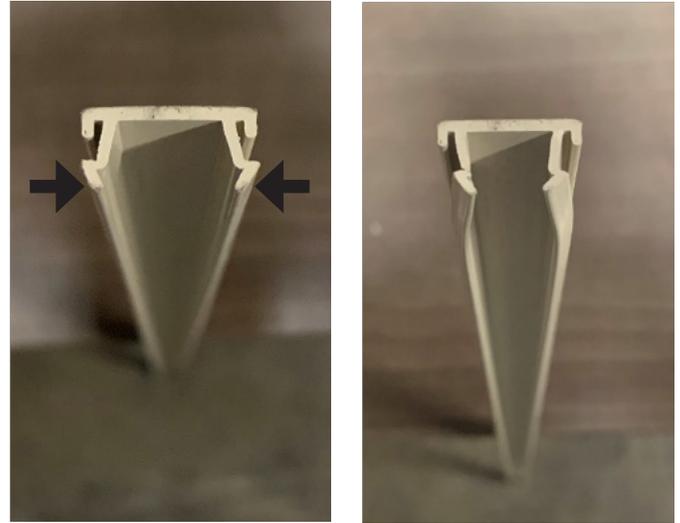


Fig. II



Fig. JJ

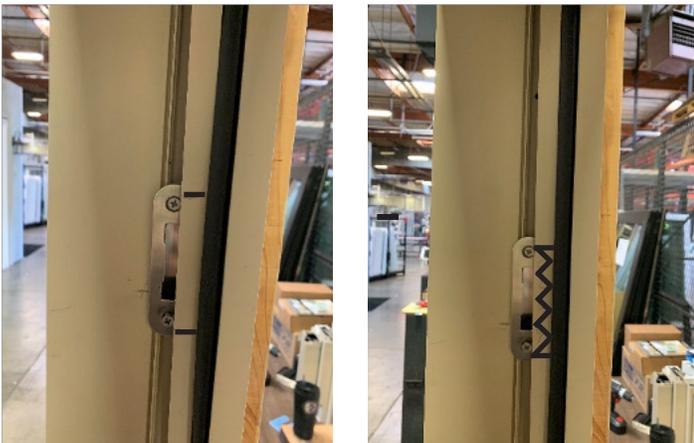


Fig. HH



FOLDING DOOR

INSTALLATION INSTRUCTIONS

MAGNET INSTALLATION

1. On the primary active panel, near the jamb, place a square on the bottom of the panel to where the edge of the square is lined up with the edge of the glass and trace that line down. **(Fig. KK)**
2. Place the housing (angled side of the housing facing down) of the magnet along the line drawn on the panel, with the housing located under the glass section and flush with the bottom of the panel. Pre-drill the holes with a 9/64 bit.
3. Remove the housing, place the magnet inside the housing and put the springs in the slots on the back. **(Fig. LL)**
4. Compress the housing back in the same spot and secure the unit in place. **(Fig. MM)**
5. On the next panel, opposite leg; repeat steps 1-4.
6. Install the metal covers over the magnet housings. **(Fig. NN)**



Fig. LL



Fig. KK



Fig. MM



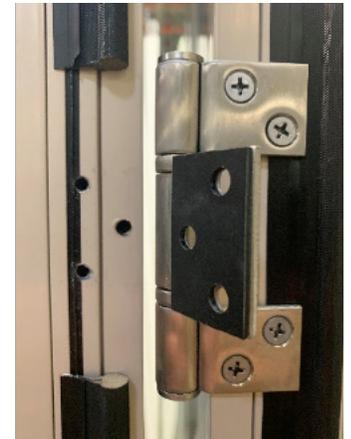
Fig. NN

FOLDING DOOR

INSTALLATION INSTRUCTIONS

HINGE SHIM INSTALLATION

To make your Folding Door installation easier, we have included hinge shims *if needed*. The hinge shim is an easy and reliable tool, to help overcome variations in sizing that can change in the welding process. *Before applying any hinge shim make sure all proper spacing and alignments have been made to your Folding Door.*

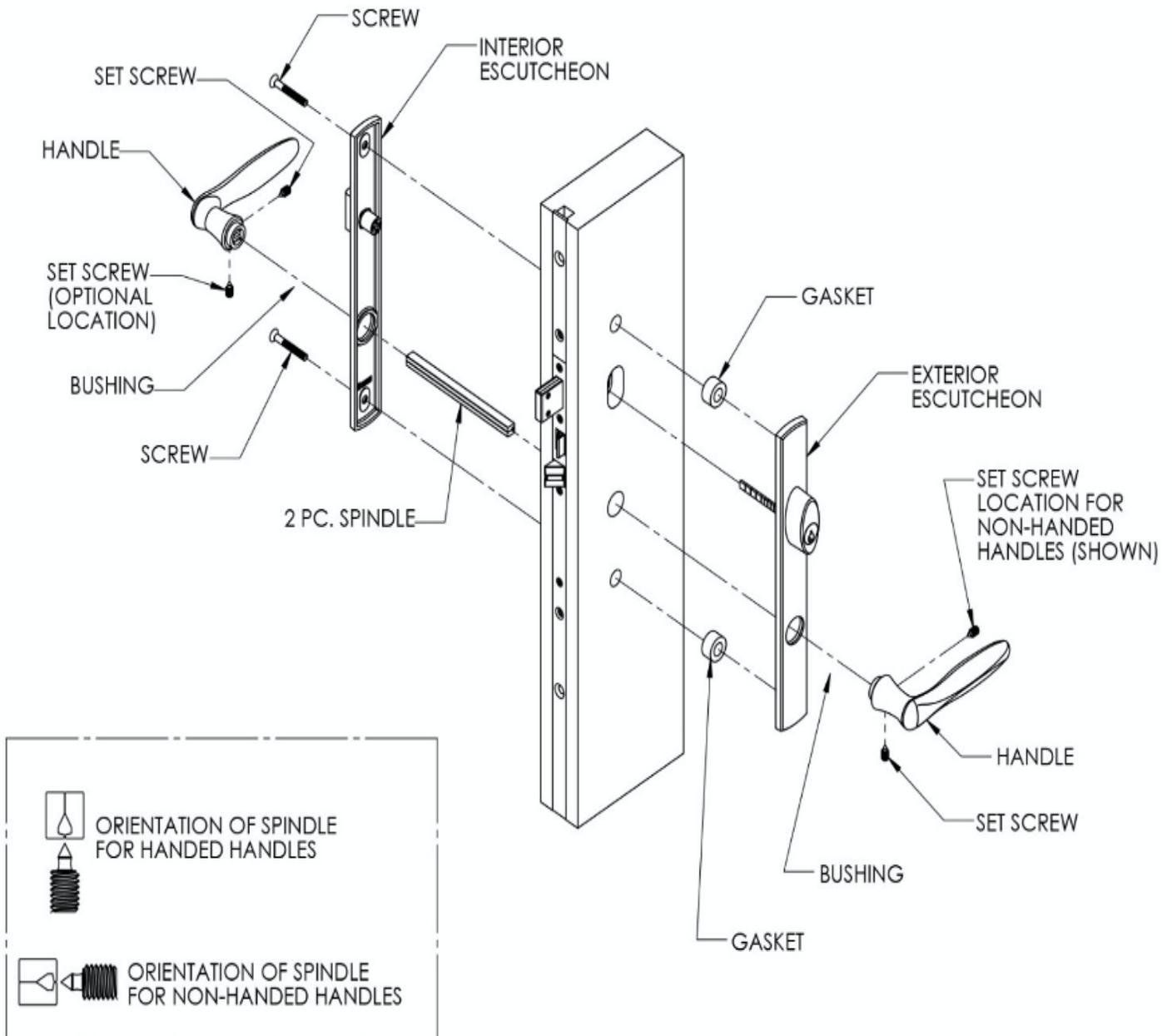


FOLDING DOOR

INSTALLATION INSTRUCTIONS

CASCADE
WINDOWS

HARDWARE WITH KEY LOCK

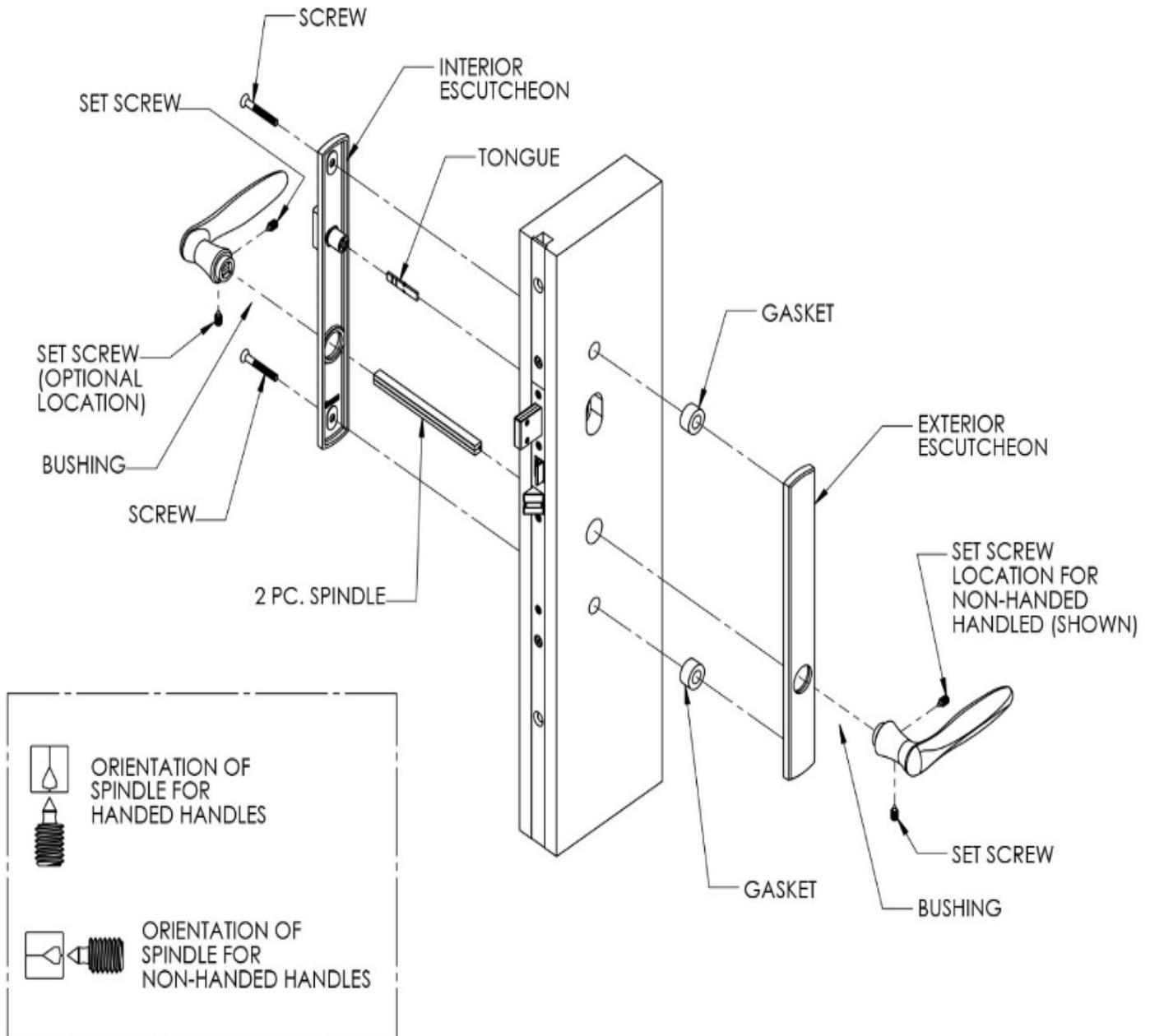


FOLDING DOOR

INSTALLATION INSTRUCTIONS

CASCADE
WINDOWS

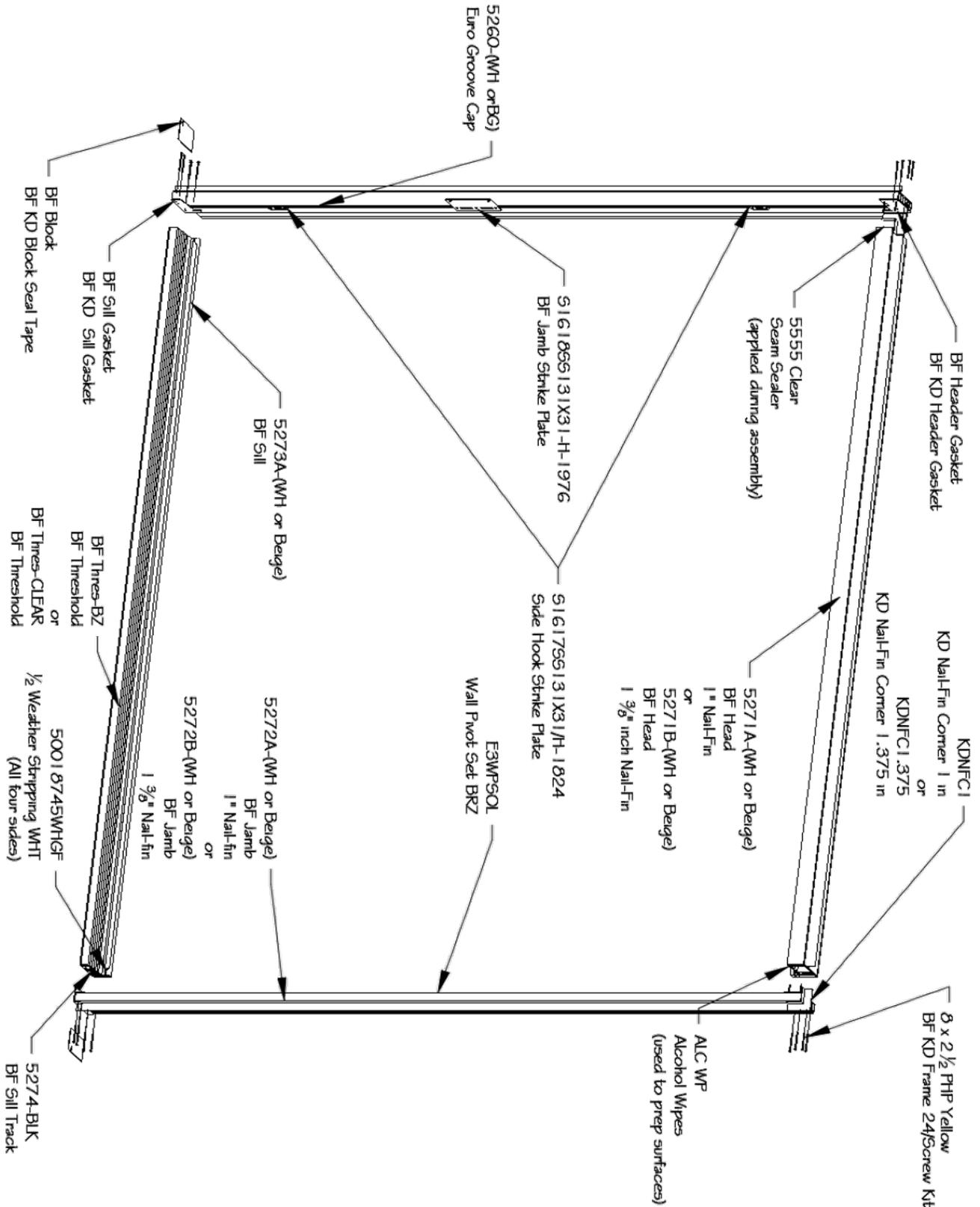
HARDWARE W/O KEY LOCK



FOLDING DOOR

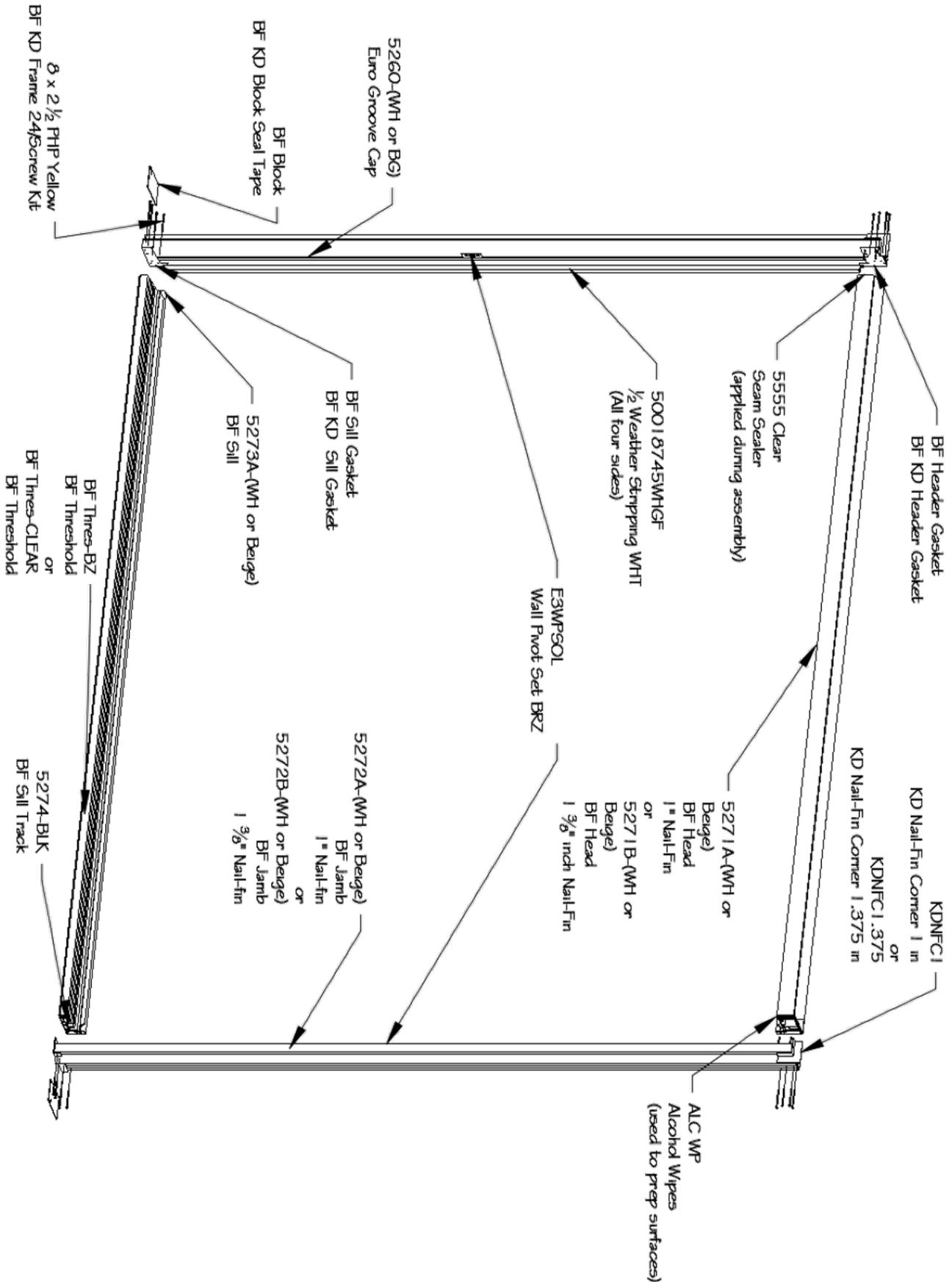
INSTALLATION INSTRUCTIONS

EXPLODED VIEWS



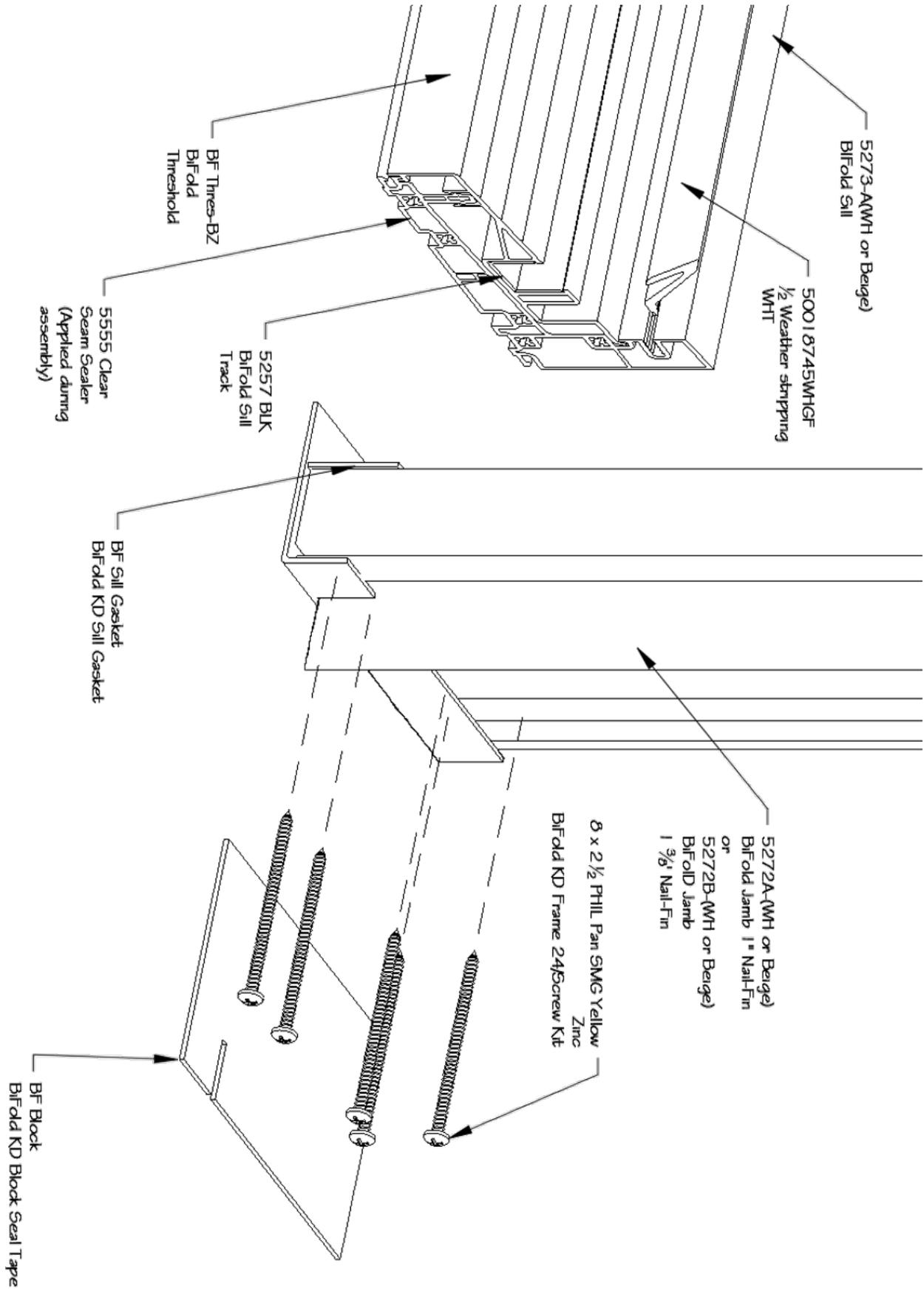
FOLDING DOOR

INSTALLATION INSTRUCTIONS



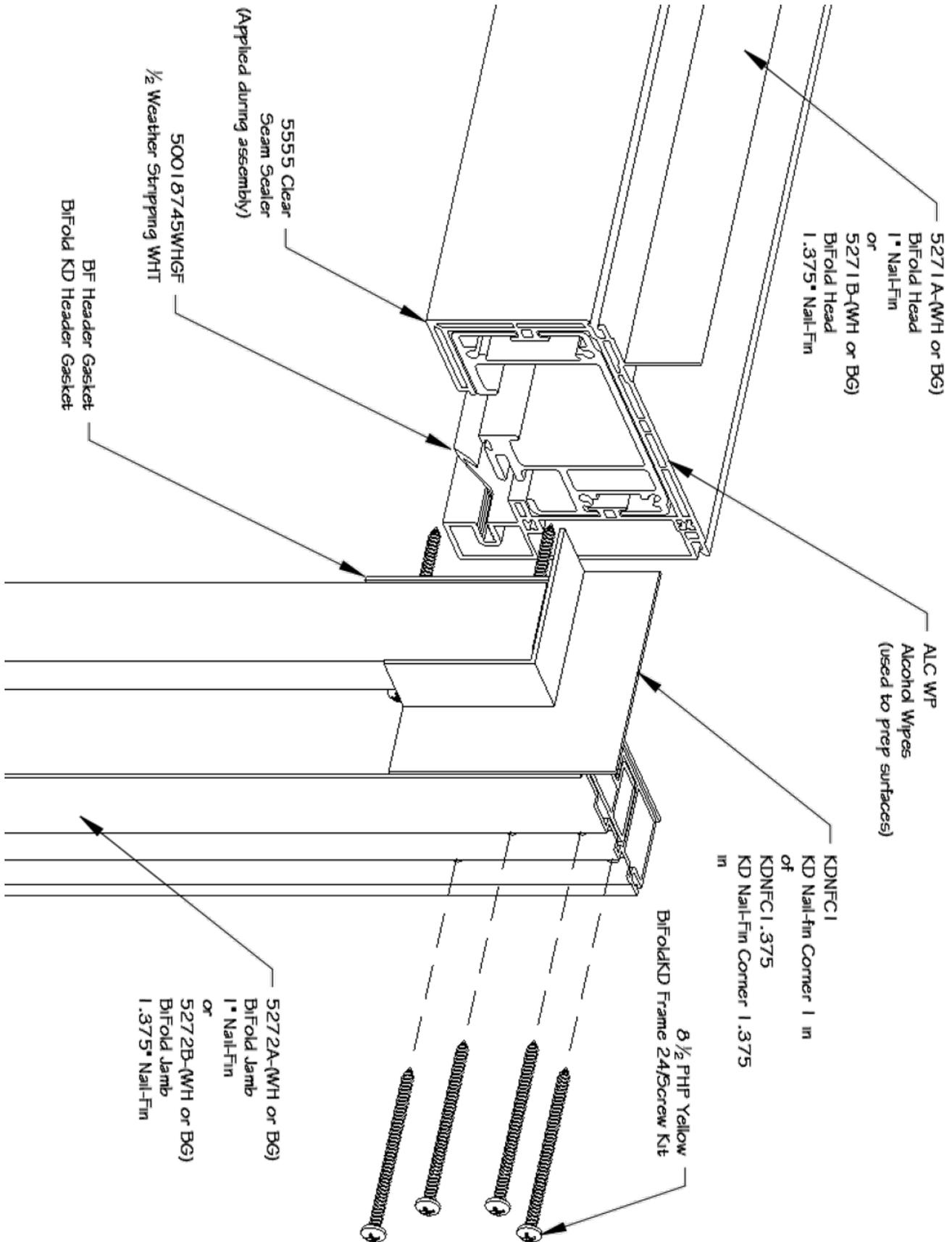
FOLDING DOOR

INSTALLATION INSTRUCTIONS



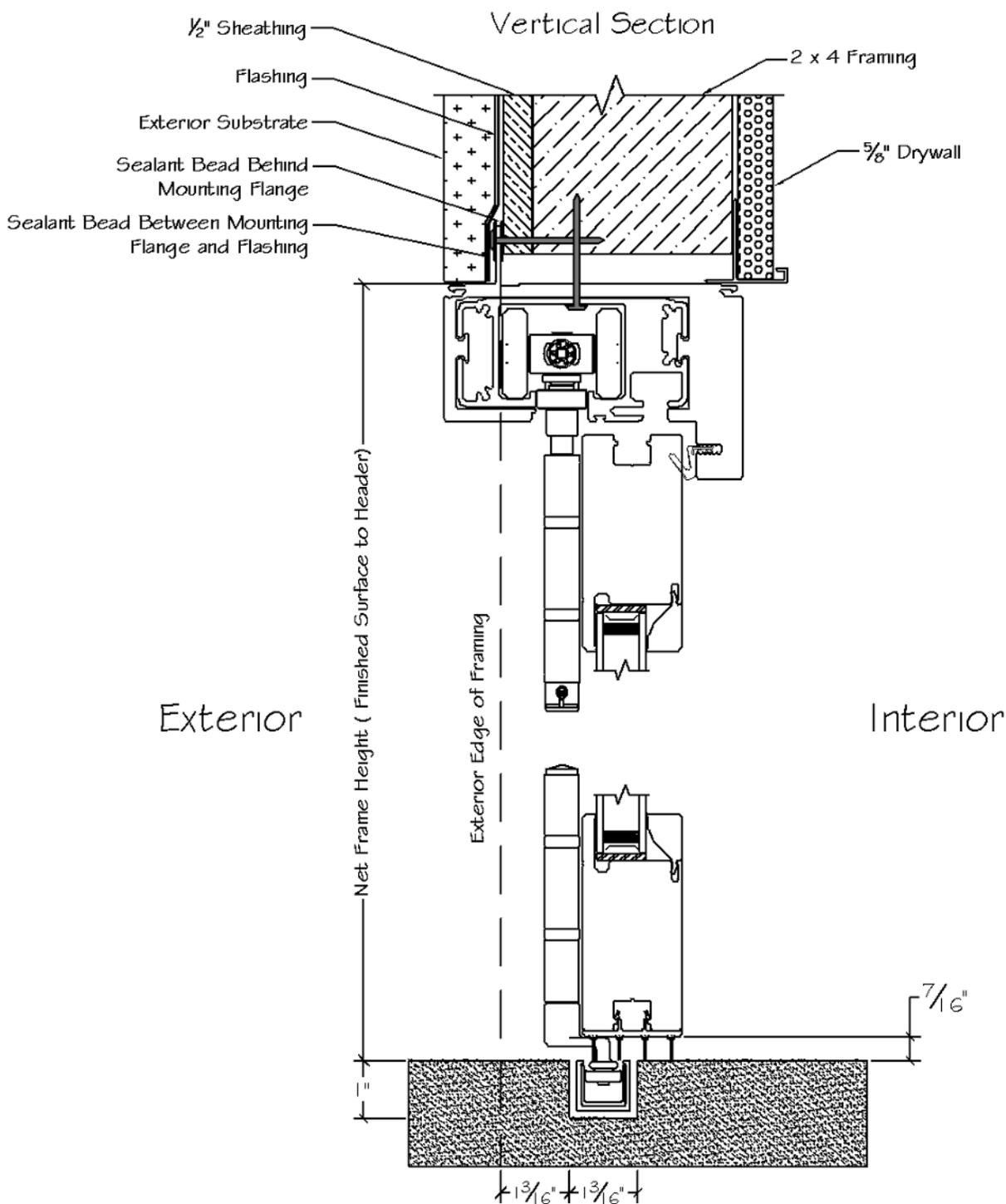
FOLDING DOOR

INSTALLATION INSTRUCTIONS



FOLDING DOOR

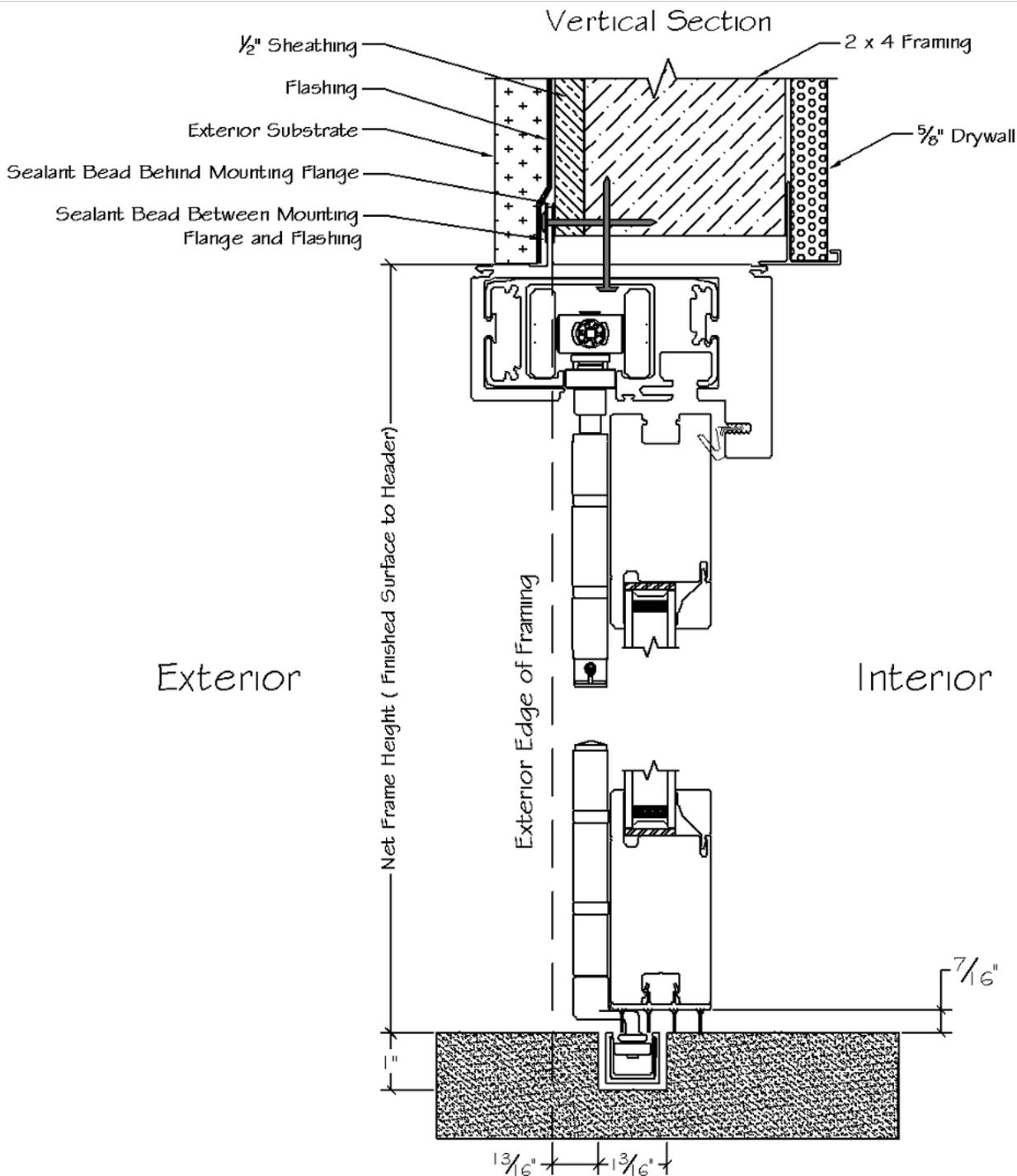
INSTALLATION INSTRUCTIONS



A 1 3/16" x 1" notch needs to be created in the floor. This allows the flush sill to be flushed to the level of the finished surface. Net size of the flush sill is 1 5/16" wide by 7/8" tall. This drawing shows an 1/8" gap around the sill to allow it to be adjusted accordingly. Drawing does not take into account: pans, membranes & sealant provided by others. The flush sill are not able to withstand air & water intrusion like the weather resistant sill. This option has no weep or drainage incorporated into the track, therefore overhang and protection is important when using this sill. It is important that you include a mop zone adjacent to these doors when choosing this option.

FOLDING DOOR

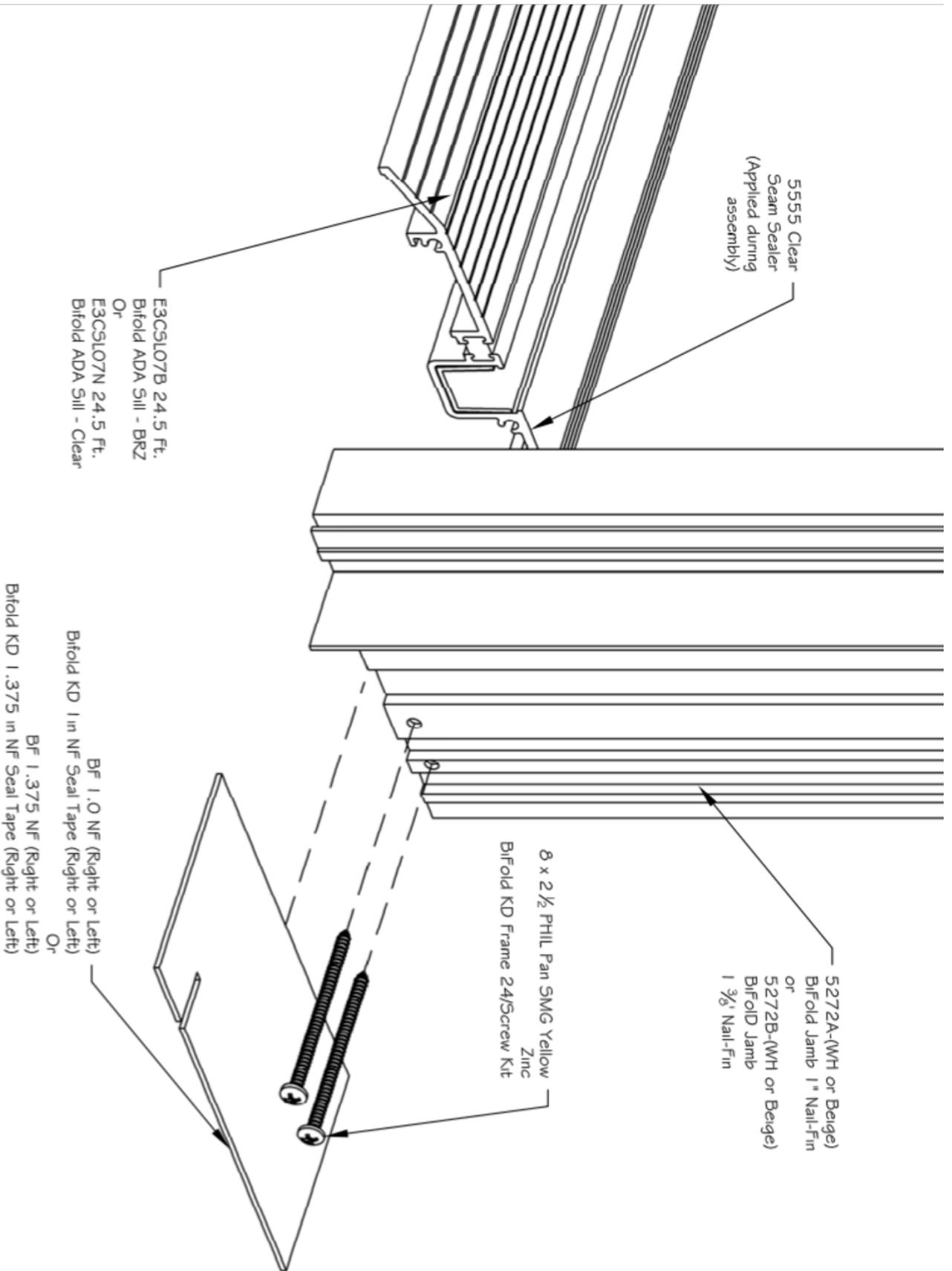
INSTALLATION INSTRUCTIONS



A 1 3/16" x 1" notch needs to be created in the floor. This allows the flush sill to be flushed to the level of the finished surface. Net size of the flush sill is 1 3/16" wide by 7/16" tall. This drawing shows an 1/8" + gap around the sill to allow it to be adjusted accordingly. Drawing does not take into account: pans, membranes & sealant provided by others. The flush sill are not able to withstand air & water intrusion like the weather resistant sill. This option has no weep or drainage incorporated into the track, therefore overhang and protection is important when using this sill. It is important that you include a mop zone adjacent to these doors when choosing this option.

FOLDING DOOR

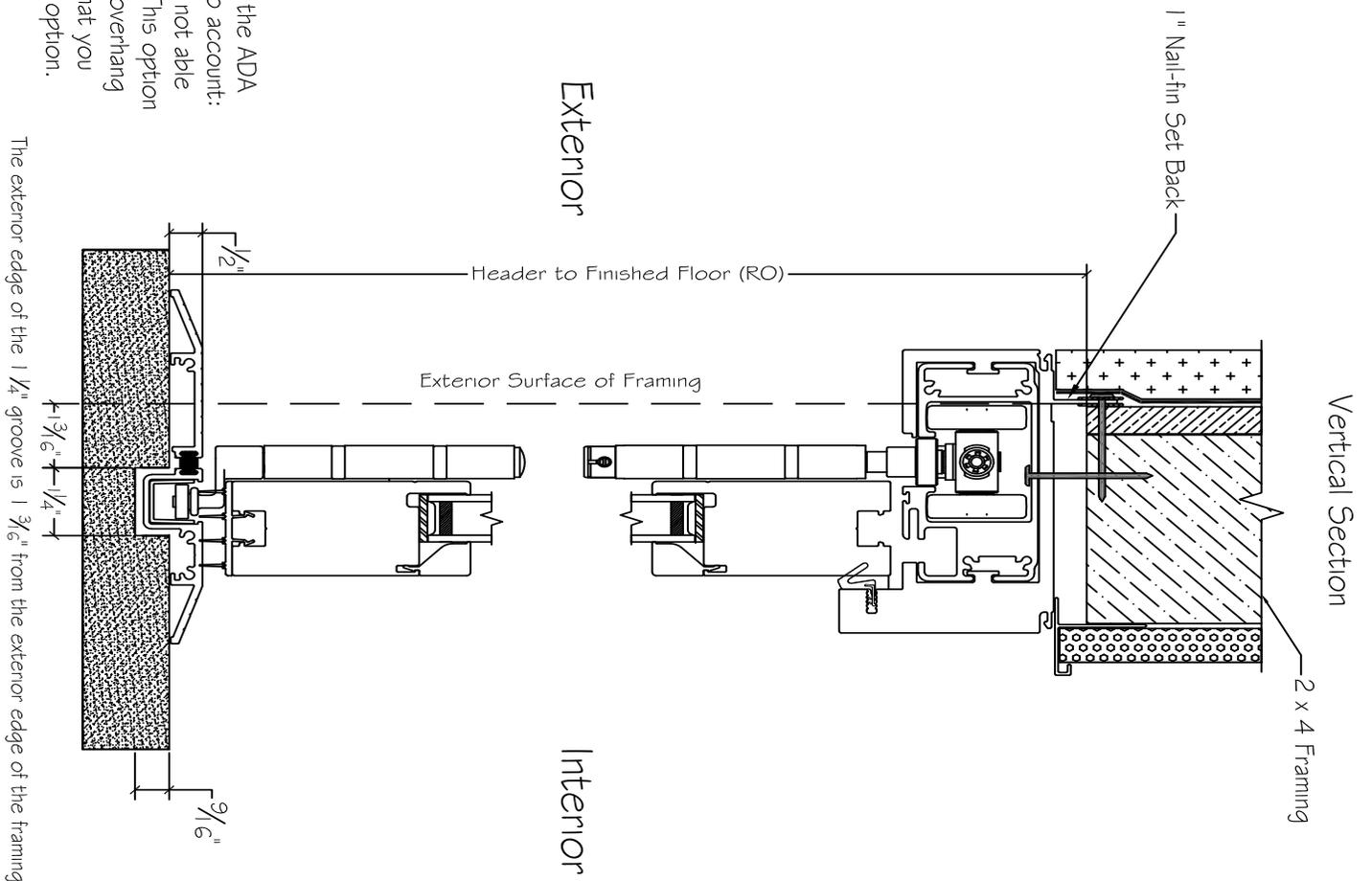
INSTALLATION INSTRUCTIONS



FOLDING DOOR

INSTALLATION INSTRUCTIONS

A 1/4" x 3/6" notch needs to be created in the floor. This allows the ADA sill to sit on the finished surface. This drawing does not take into account: pans, membranes & sealant provided by others. The ADA sill are not able to withstand air & water intrusion like the weather resistant sill. This option has no weep or drainage incorporated into the track, therefore overhang and protection is important when using this sill. It is important that you include a mop zone adjacent to these doors when choosing this option. Sweep (included) is field applied.



FOLDING DOOR

INSTALLATION INSTRUCTIONS



A $1/4" \times 3/16"$ notch needs to be created into the floor. This allows the ADA sill to sit on the finished surface. This Drawing does not take into account: pans, membranes & sealant provided by others. The ADA sill are not able to withstand air & water intrusion like the weather resistant sill. This option has no weep or drainage incorporated into the track, therefore overhang and protection is important when using this sill. It is important that you include a mop zone adjacent to these doors when choosing this option. Sweep (included) is field applied.

