

INSTALLATION INSTRUCTIONS

# ES-BF5010T



# HSEQ REGULATIONS

Read all instructions carefully before attempting this procedure. If you have any questions about your ability to complete this procedure, contact ESWINDOWS for further direction.

If swing stages are required for installation, the HSEQ inspector must approve the permissions.

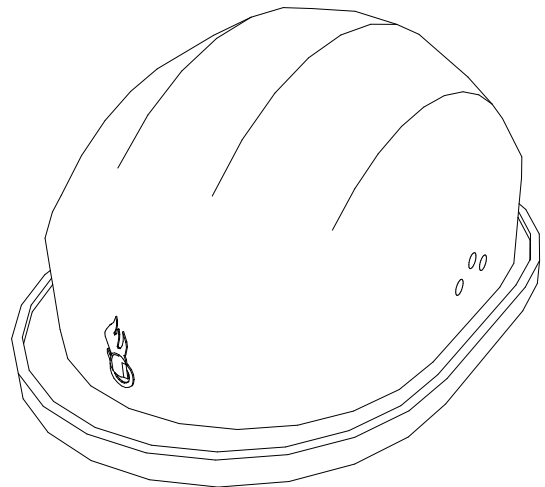
- Wear the necessary personal protective equipment for product installation.
- Take safety precautions when performing the activity.
- Please follow the steps and make sure you have appropriate personal protective equipment and follow the rules established by the guidance for working at height, if required to do so.

# INTRODUCTION

ES-BF5010T is a folding door system.

This guide illustrates step by step the correct way to install the system.

Prior to installation check that all parts, glass and materials are in right conditions, verify that the quantities and descriptions match production planes.



# INSTALLATION INSTRUCTIONS

TOOLS AND SUPPLIES REQUIRED FOR INSTALLATION..... Page. 2

PARTS REQUIRED FOR INSTALLATION..... Page. 3-5

STEPS

STEP 1  
Inspection and verification.....Page. 6

STEP 2  
Frame assembly.....Page. 7

Step 3  
Frame installation.....Page. 8

Step 4  
Installation of accesories.....Page. 9-11

Step 5  
Installation of panels.....Page. 12-15

Step 6  
Installation of bolt keeper and pile pads.....Page. 16-17

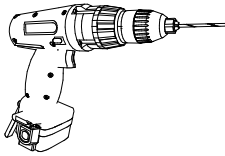

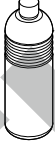
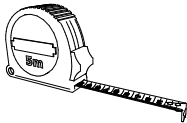

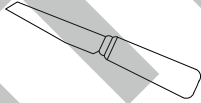
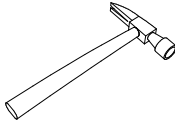
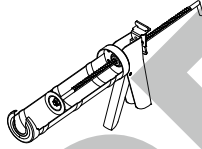
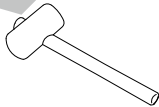
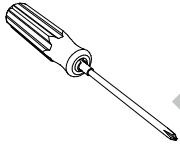
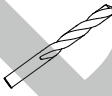
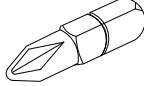
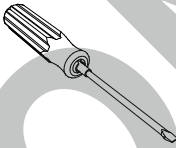
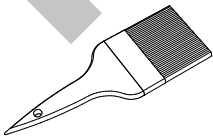
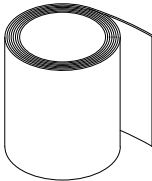
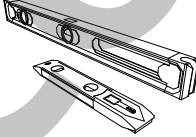
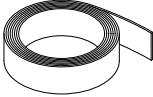
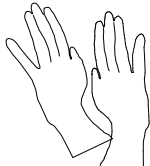
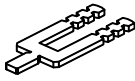
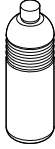
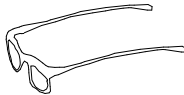
Step 6  
Installation of handles.....Page. 18

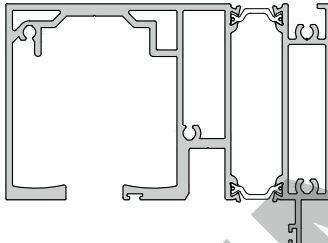
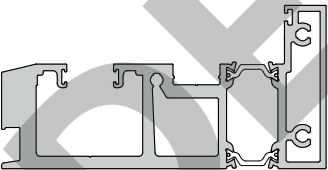
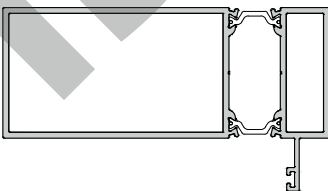
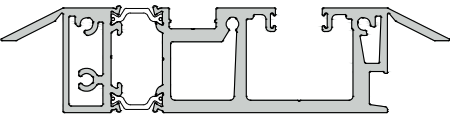

Step 7  
Bumper installation.....Page. 19

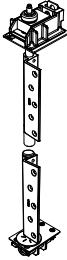
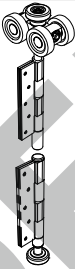
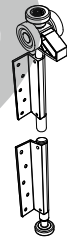
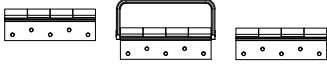



Step 8  
Perimeter Seal.....Page. 21

REVIEW

## TOOLS AND SUPPLIES REQUIRED FOR INSTALLATION

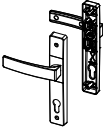


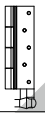

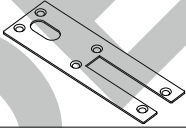
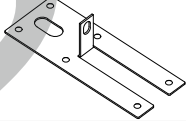


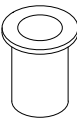

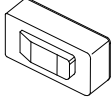
DETAIL	DESCRIPTION	DETAIL	DESCRIPTION	DETAIL	DESCRIPTION
	Drill		Plumb		Thinner
	Tape Measure		Thread		Knife
	Hammer		Silicone Gun		Rubber Hammer
	Phillips Screwdriver		Bits for Concrete		Points
	Slot Screwdriver		Brush		Clean rag
	Level		Masking tape		Gloves
	High impact plastic shims		Isopropyl Alcohol		Safety Glasses

PARTS REQUIRED FOR INSTALLATION		
PART	DETAIL	DESCRIPTION
ES-BF5010T-501		HEAD
ES-BF5010T-502		SILL
ES-BF5010T-503		JAMB
ES-BF5010T-507		SILL (ADA)
ES-6011		SILL SCREW COVER

<b>PARTS REQUIRED FOR INSTALLATION</b>		
PART	DETAIL	DESCRIPTION
E4PSS		PIVOT SET
E4ICSS		INTERMEDIATE CARRIER SET
E4OCSS		OFFSET CARRIER SET
E4HSS		HINGE SET
E4HSS		STRAIGHT HINGE
E4HHSS		HINGE
E4HHNHS		SINGLE HINGE

# INSTALLATION INSTRUCTIONS

**ES-BF5010T**  
**FOLDING DOOR**  
**VERSION. 4**  
**I-DD-99**

DL01-6160		3 POINT LOCK
FB01-6514		FLUSH HANDLE
DL01-4025 /4026		LCL 2 1/4" STRIKE PLATE RH/LH
E4WPS		WALL PIVOT SET
TBD		EXTENDED FLANGE STRIKE @ JAMB
BF-5010T-PL1		BOTTOM STEEL PLATE
BF-5010T-PL2		TOP STEEL PLATE
#12 X 1 1/2" P.H.		TO FRAME
#12 X 1" F.H.		FOR PIVOT PLATE
ES-BF5010T-P01		FLUSH BOLT KEEPER
P 3802 AFK		ADHESIVE PILE PAD
DCA DOOR CATCH		BUMPER

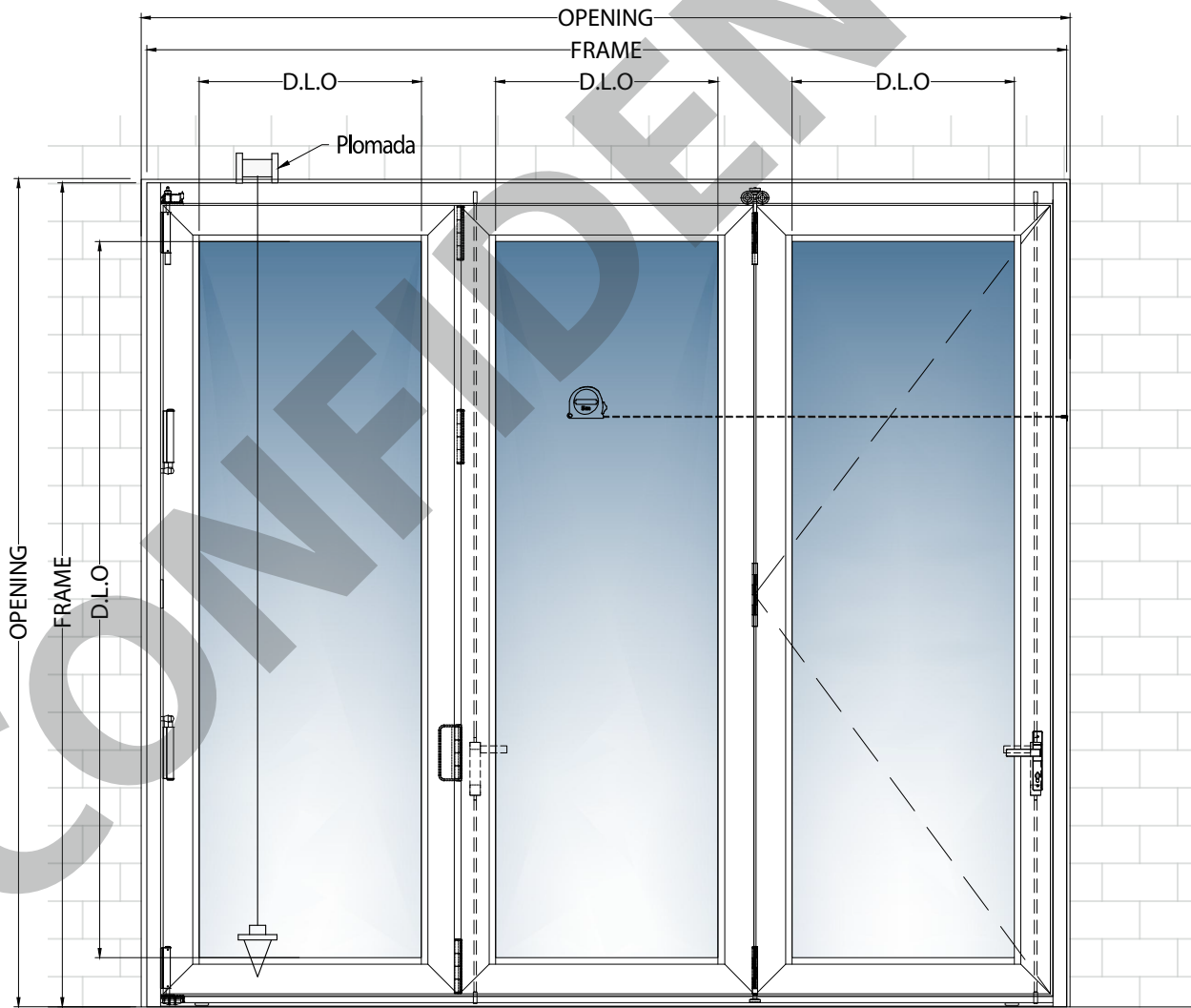


Check the technical manuals and guides by sealant manufacturers to apply silicone correctly.

# STEP 1

## INSPECTION AND VERIFICATION:

- 1.1. Check the opening for the correct size as determined by dimensions listed in the architectural specifications and the shop drawings.
- 1.2. Check all the material upon arrival for quantity and damages.
- 1.3. Remove debris that interfere with the proper installation of the unit.
- 1.4. If any irregularities are detected notify the general contractor.





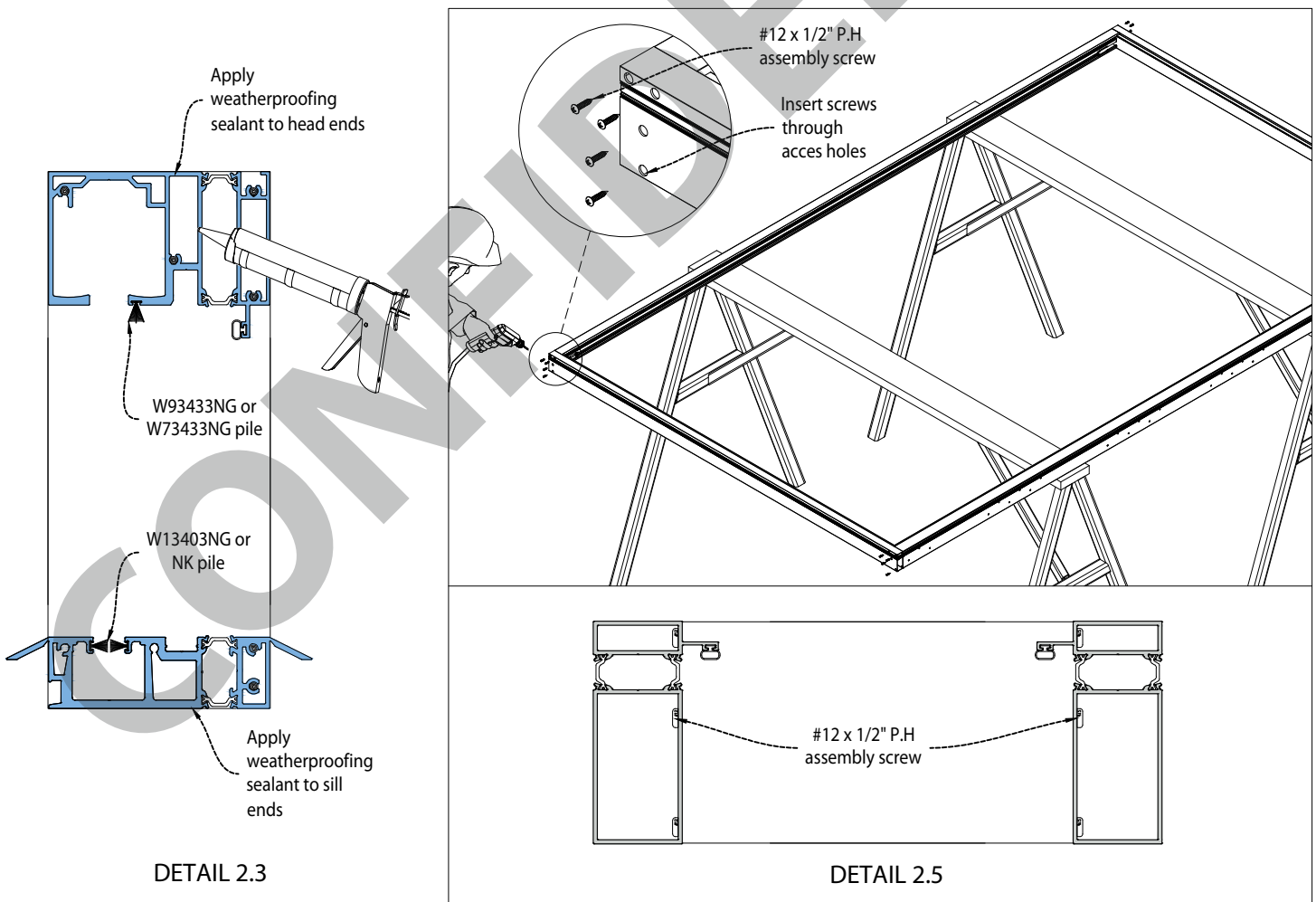
# STEP 2

FRAME ASSEMBLY:



Make sure to locate the jamb with the handle keeper fabrications as required in shop drawings.

- 2.1. Clean all aluminum surfaces to be in contact with sealant.
- 2.2. Verify shop drawings to locate the frame parts properly. Place head, sill and jambs on a workshop table or sawhorse for assembly.
- 2.3. Verify that piles were properly installed in the sill as shown. Apply sealant onto head and sill end faces as shown in detail.
- 2.4. Assemble the frame with #12 x 1/2" P.H screws. Tool sealant into joints and apply weatherproofing sealant to screw heads and bodies.



# STEP 3



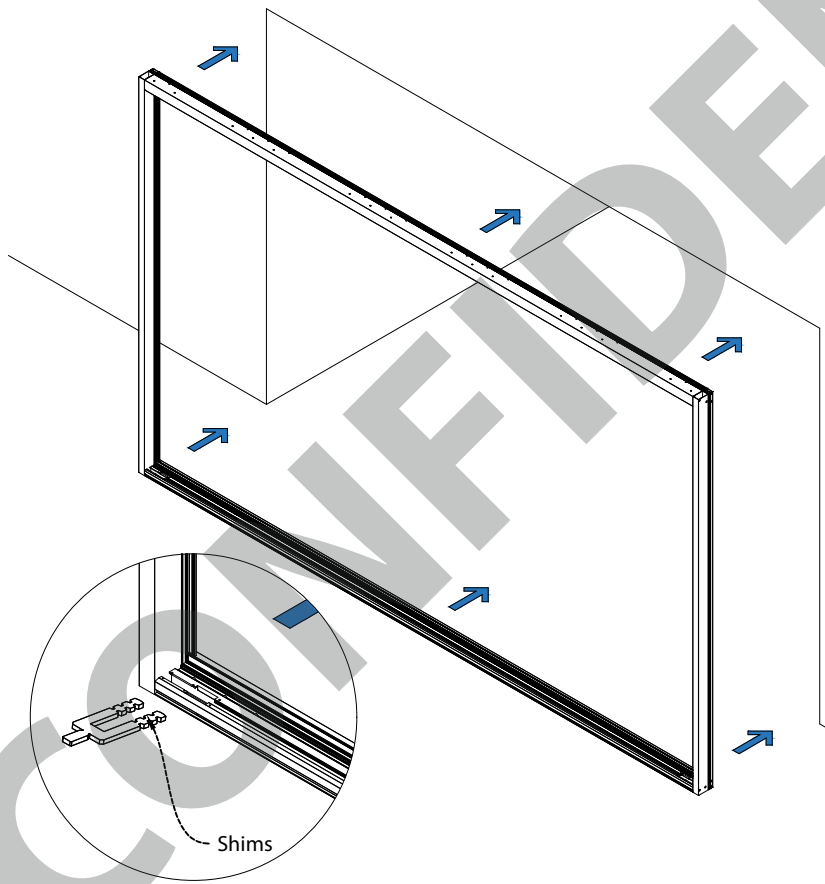
Level frame only with plastic shims.



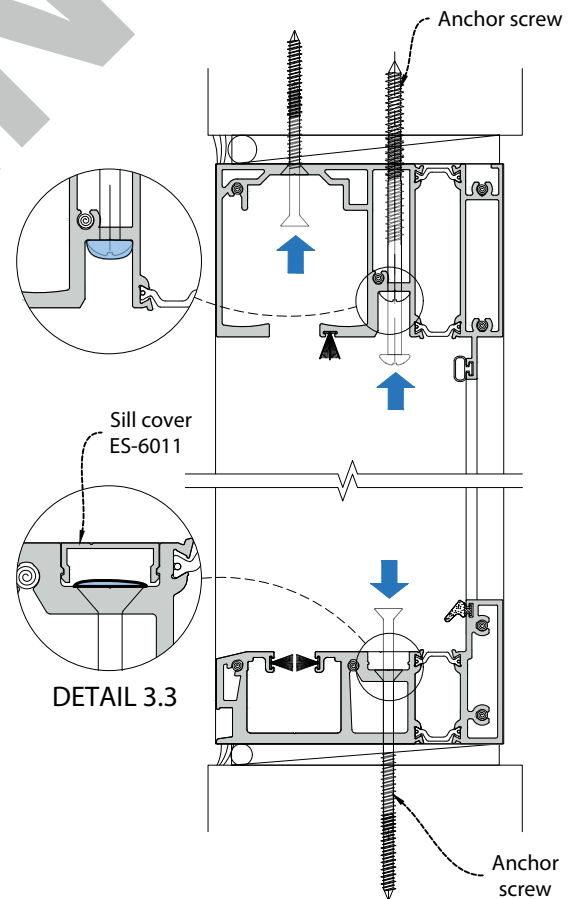
Verify shop drawings for anchor screws specifications.

## FRAME INSTALLATION:

- 3.1. Place the frame in the opening and shim frame as required.
- 3.2. Use frame holes as a guide to drill and install.
- 3.3. Seal screw heads and install sill cover as shown in detail 3.3.



DETAIL 3.1



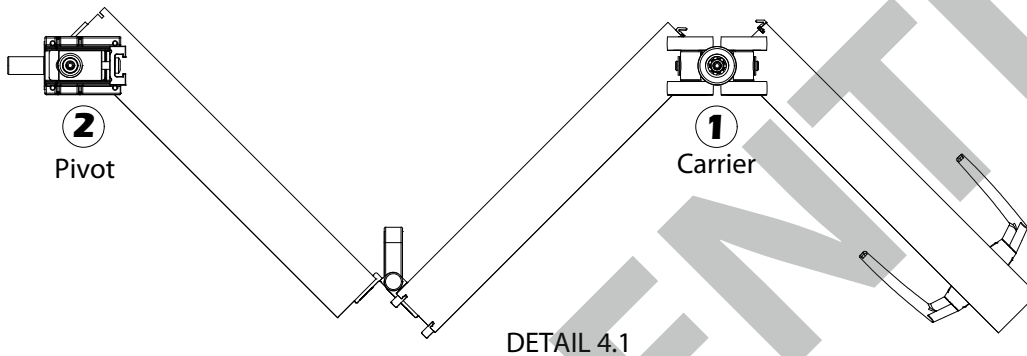
DETAIL 3.2

# STEP 4

INSTALLATION OF ACCESSORIES:

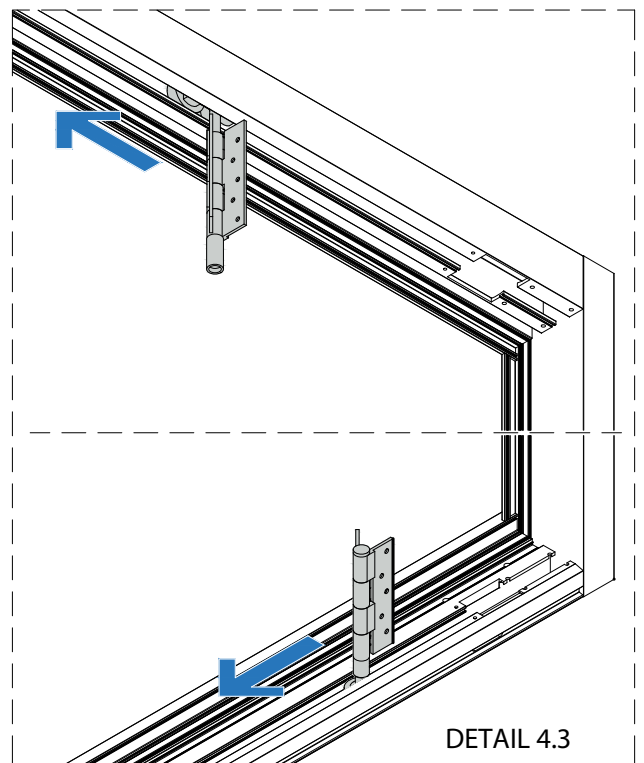
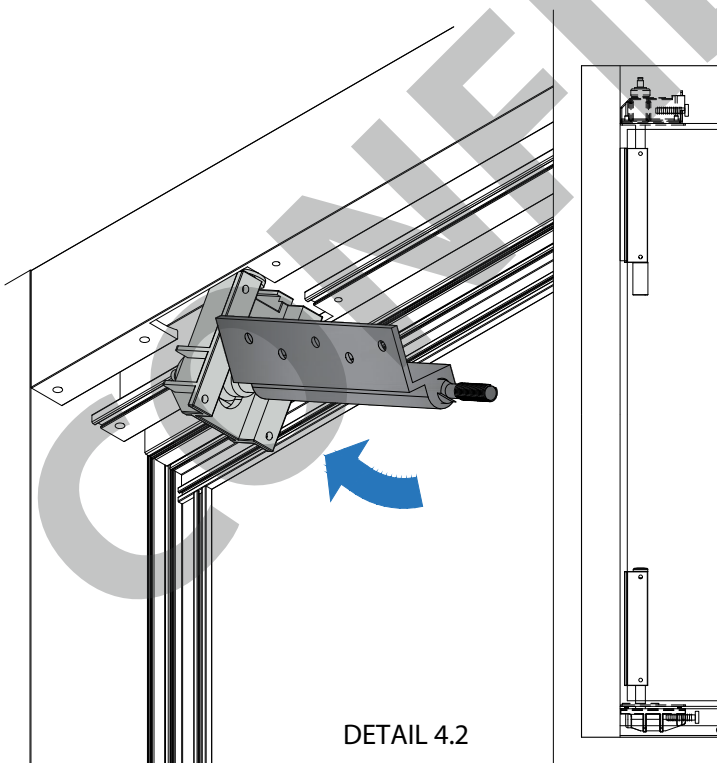
4.1. Verify shop drawings to identify where to install carriers and pivots in the frame according to each door configuration.

**INSTALLATION SEQUENCE EXAMPLE**



4.2. First install center carriers, then continue with pivots. Install by inserting them on the sill and head as shown in detail. Bottom pivot must be installed without hinges.

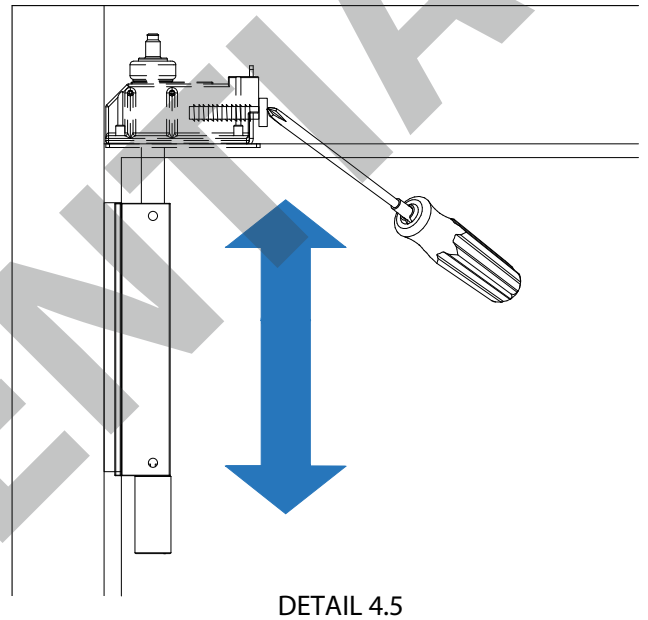
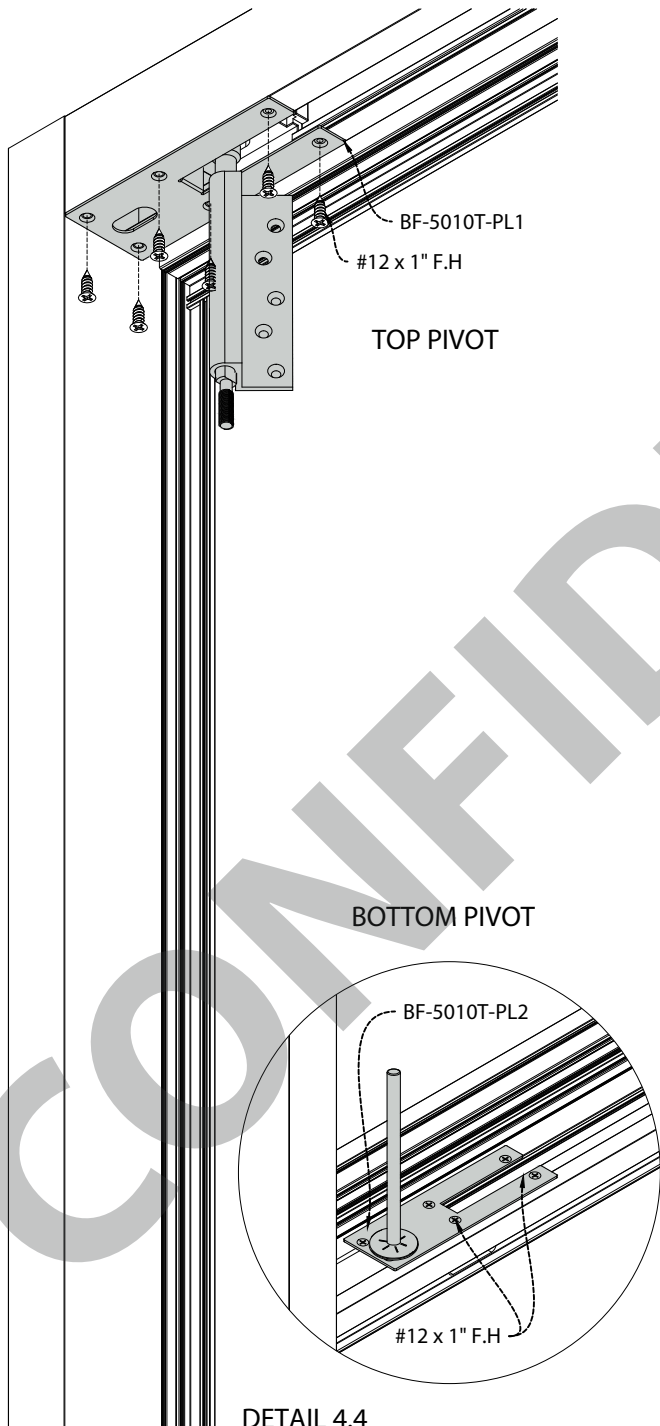
4.3. Place carriers in their final positions by sliding it in the sill and head raceways (Verify shop drawings).



# INSTALLATION INSTRUCTIONS

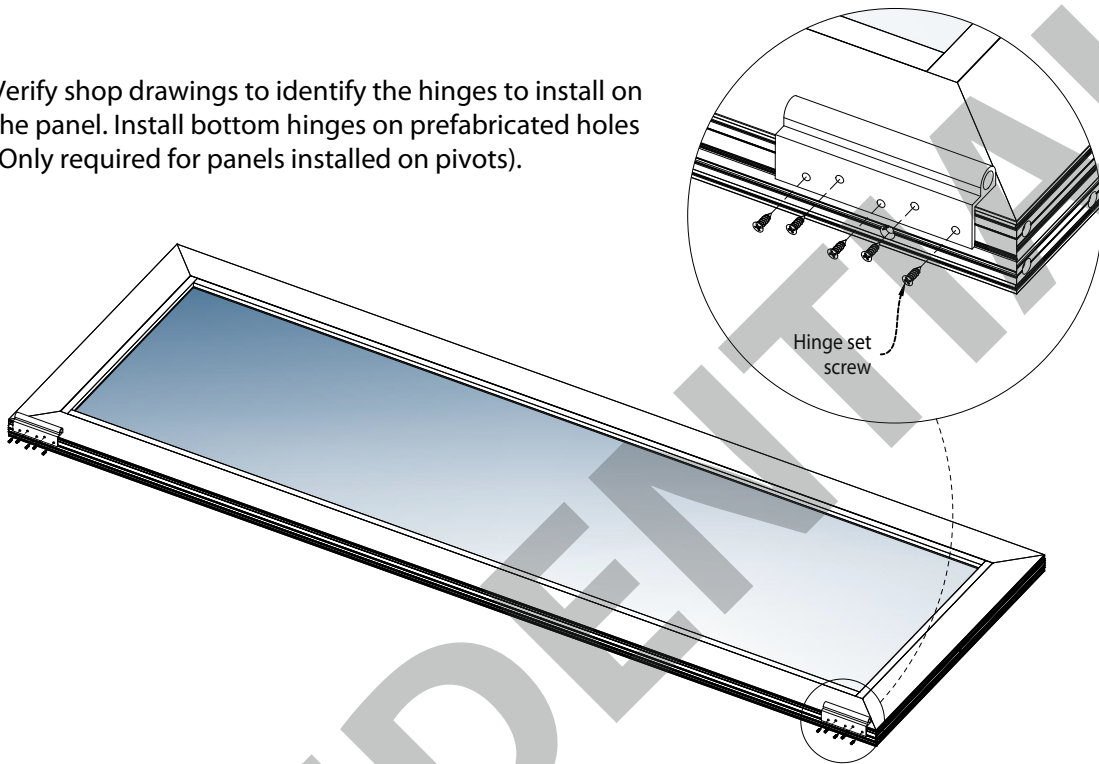
4.4. Proceed with the installation of the top and bottom aluminum plates for the pivot E4PSS.

4.5. Adjust carriers if required to level the hinges.

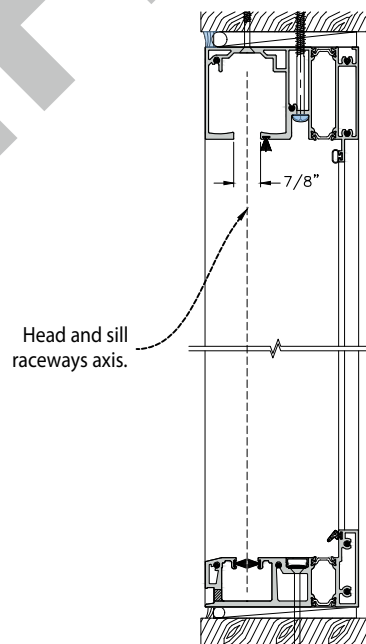


## INSTALLATION OF HINGES:

- 4.6. Verify shop drawings to identify the hinges to install on the panel. Install bottom hinges on prefabricated holes (Only required for panels installed on pivots).



- 4.7. Prior to panels installation verify shop drawing to identify if jamb hinges are required. For jamb hinges mark in the jambs a reference line of the sill and head raceways axis; where jamb hinges will be installed.

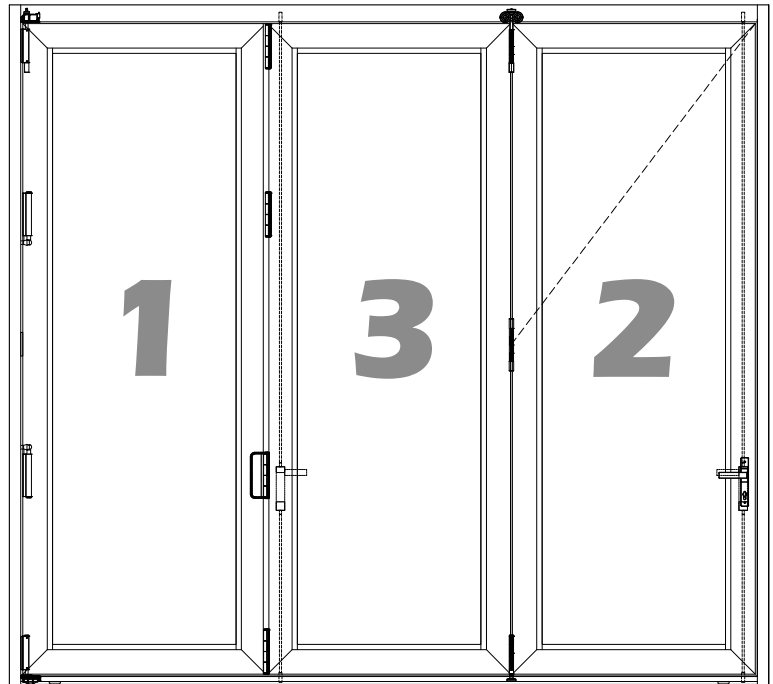


# STEP 5

## INSTALLATION OF PANELS:

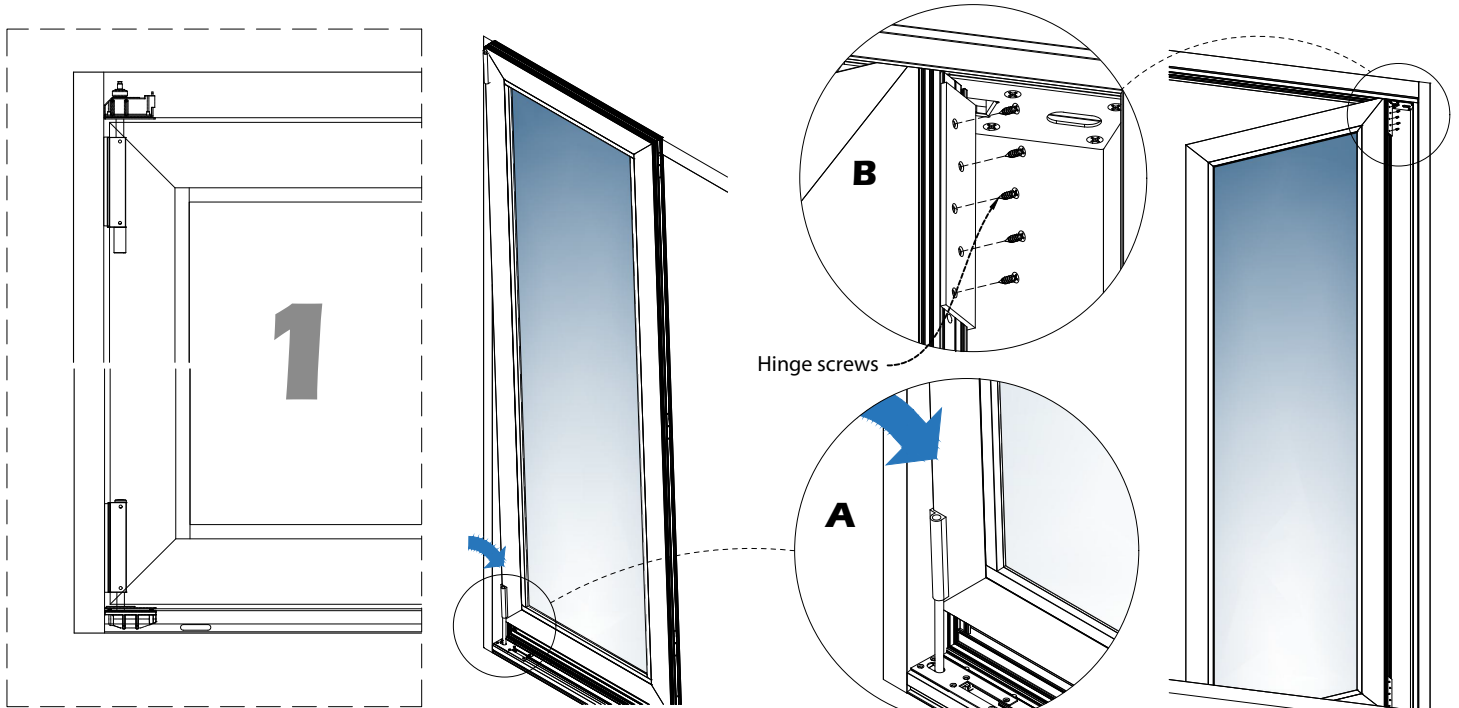
- 5.1. Identify where to install each panel in the frame according to the shop drawings.

Begin with the installation of the panels on the carriers and pivots, then install center panels attaching them to the hinges.



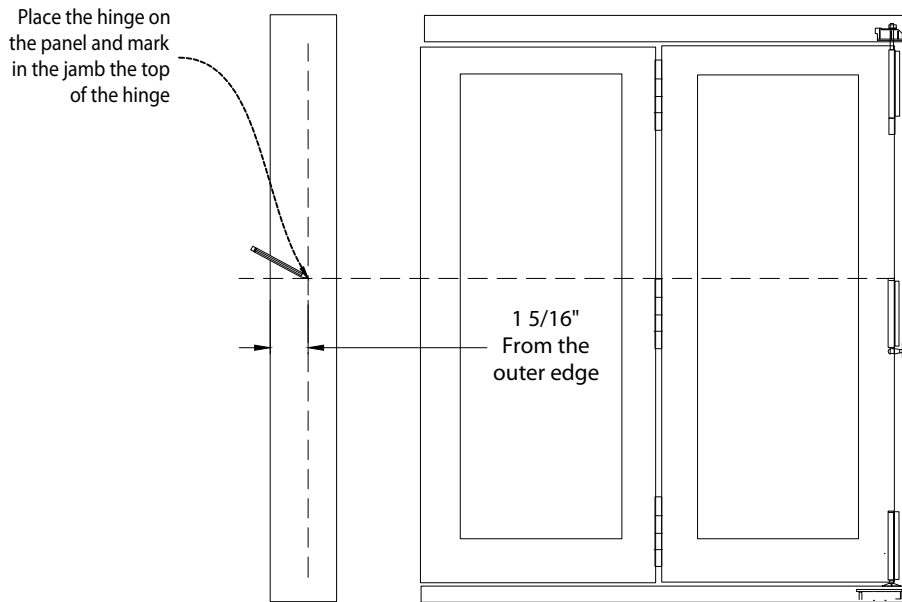
DETAIL 5.1.

- 5.2. 1. Installation of panels on pivots: Fit in the bottom hinge of the panel on the bottom pivot (A), then rest the panel on the top pivot and install hinge screws as shown in detail (B).

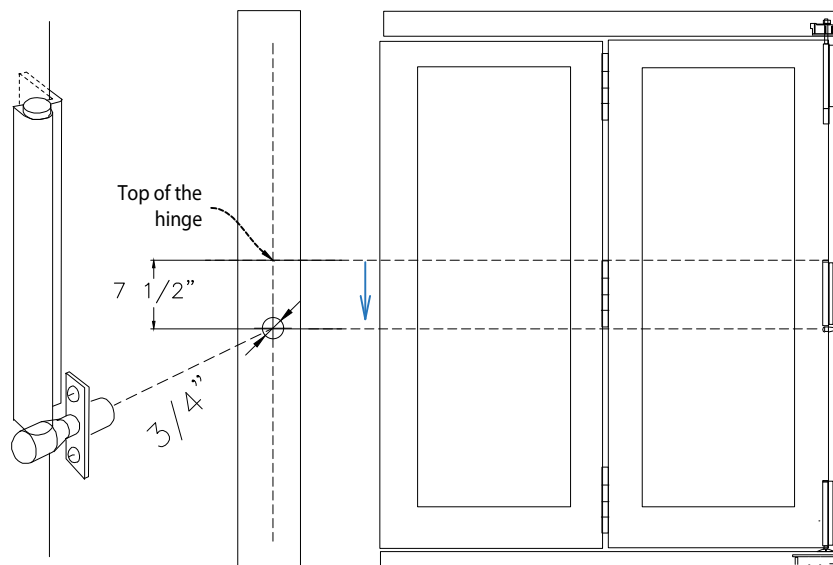


DETAIL 5.2.

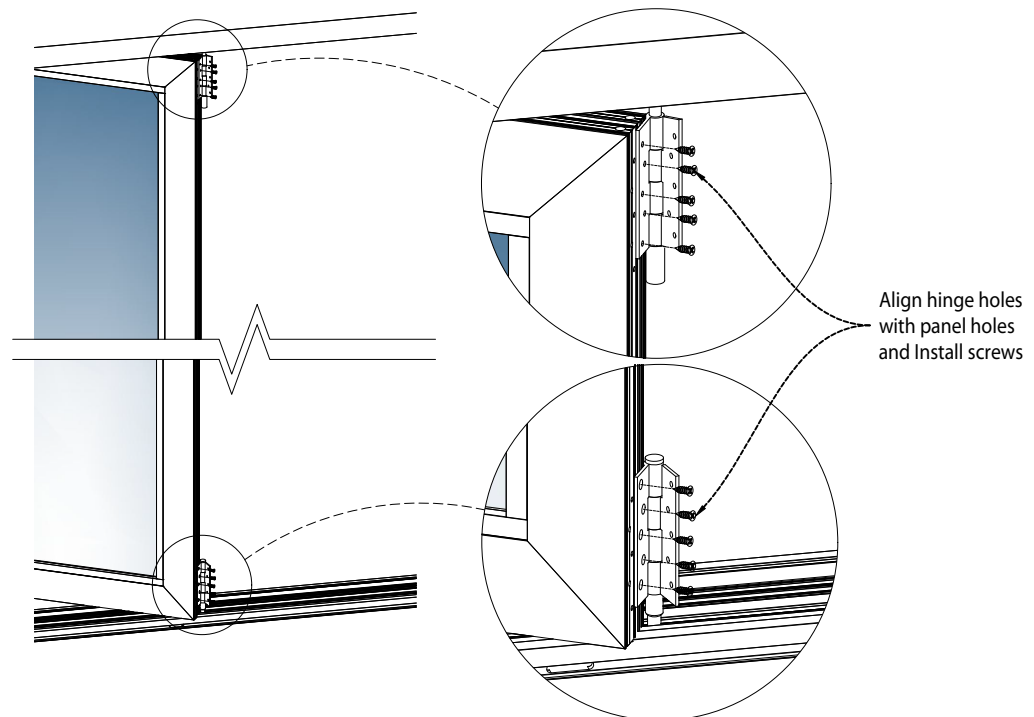
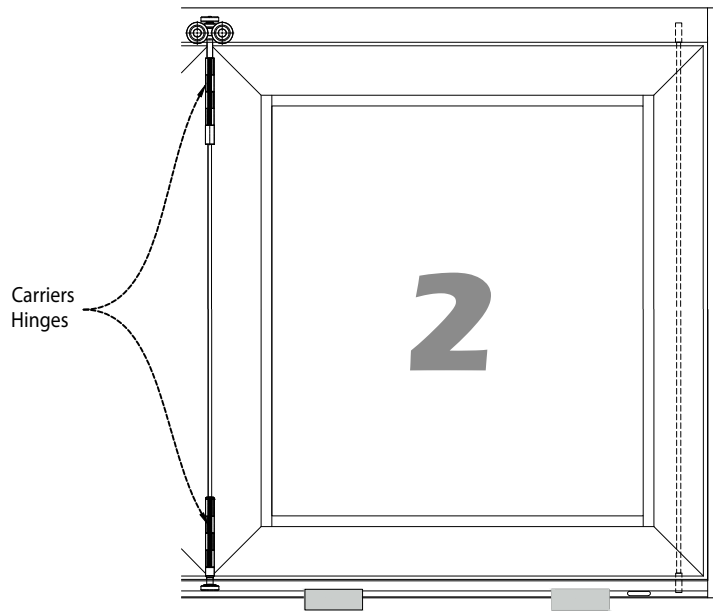
- 5.3. Proceed with the installation of the jamb hinges (only if required on shop drawings). Match hinge and panel perforations. Mark a reference line in the jamb of the hinge top.



- 5.4. Mark the center of the hole where the hinge will be inserted 7 1/2" from the top of the hinge and drill a 3/4" hole. Install hinge and attach panel with the screws.

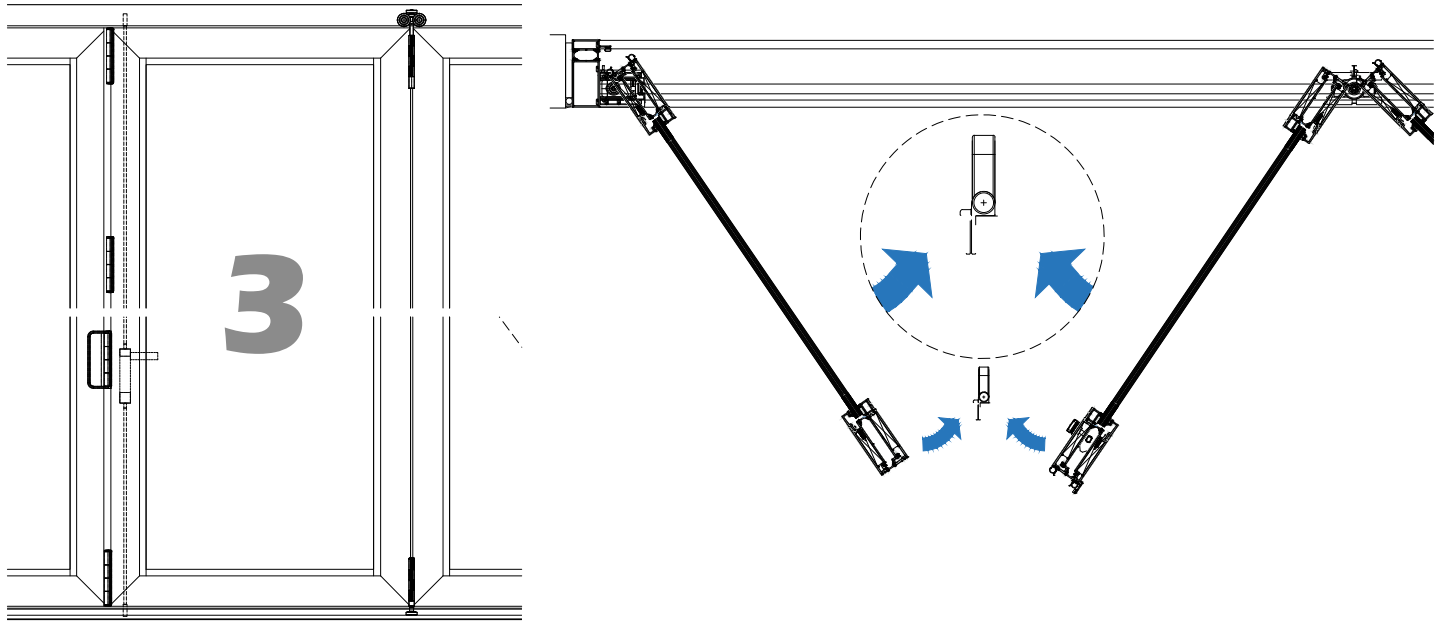


**5.5. Installation of panels with carriers:** Place the panel on the frame, use a base to rest the panel while installing hinge screws.

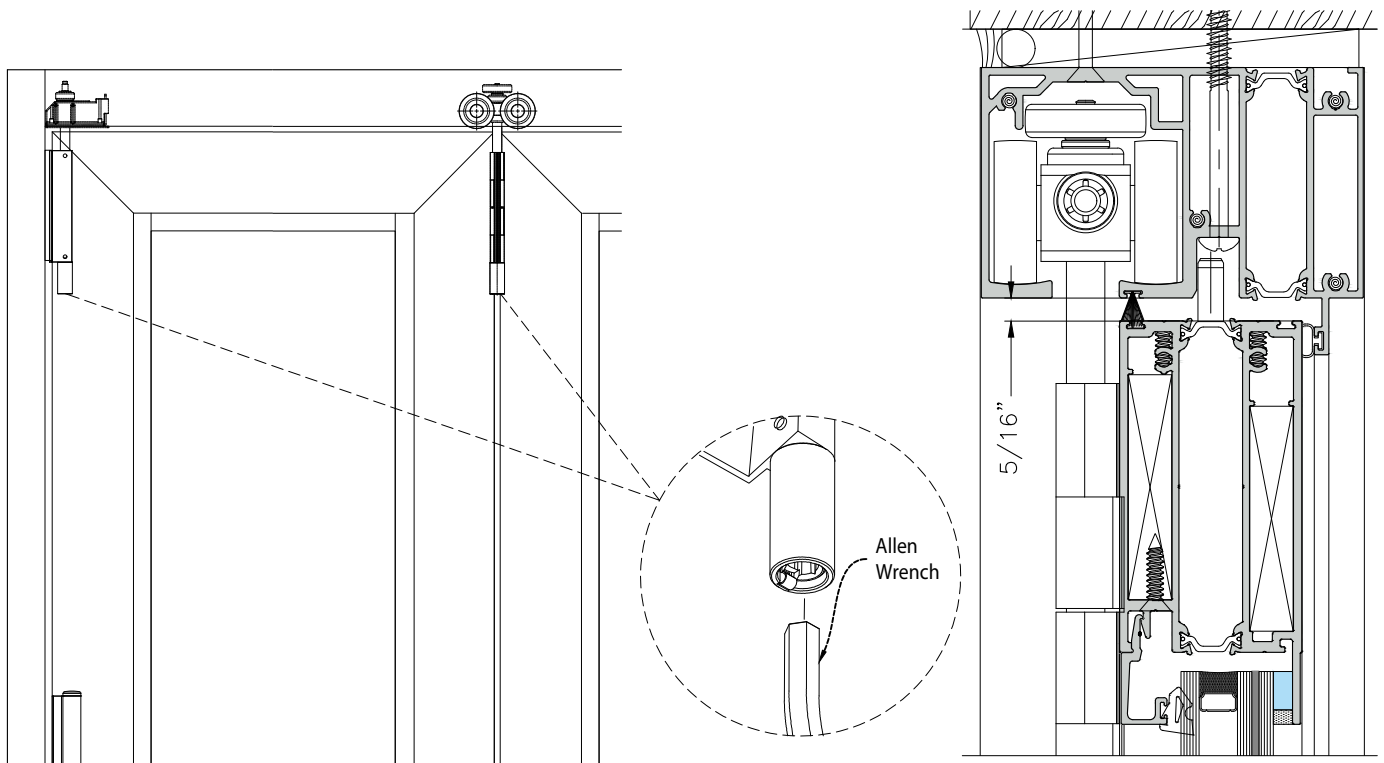




**5.6. Installation of panel with hinges:** Verify shop drawings for the location of hinges. Assemble the panels with the hinges and the screws.



**5.7. Adjust carriers with the help of an Allen wrench to guarantee the tolerance between the frame and the panel.**

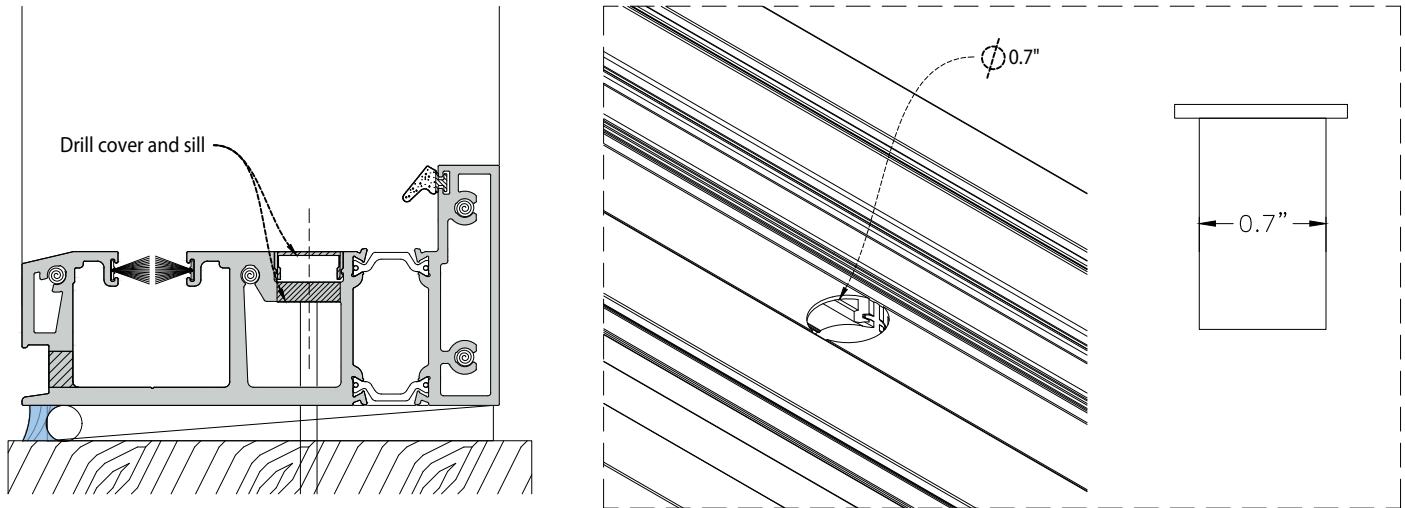


# STEP 6

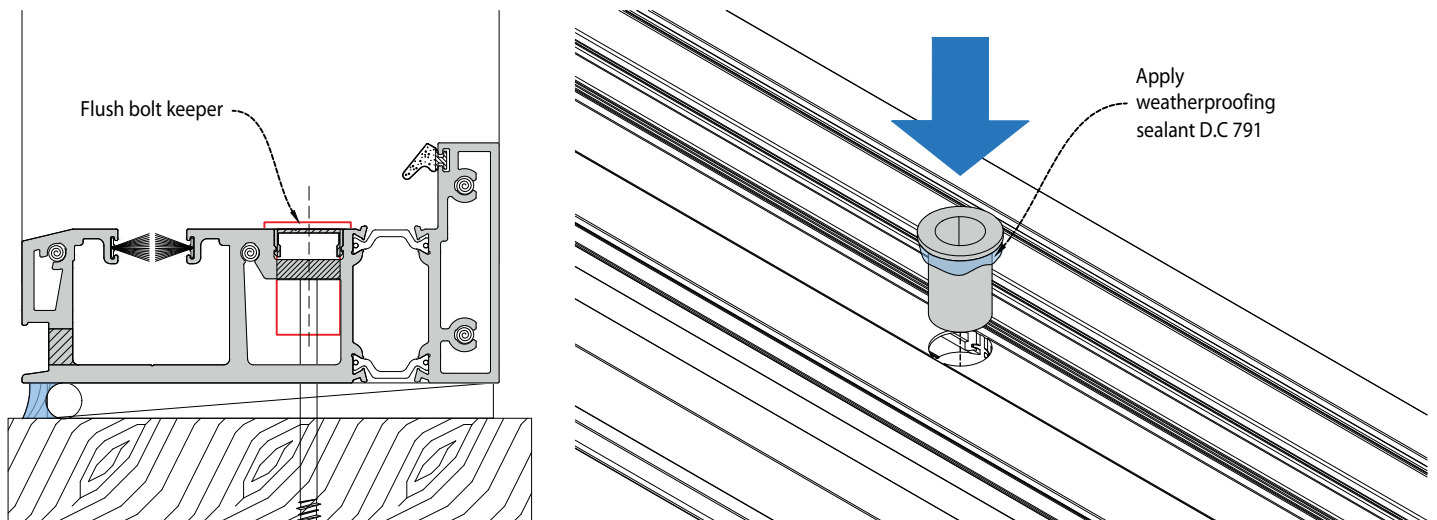
## INSTALLATION OF BOLT KEEPER AND PILE PADS:

### Installation of flush bolt keeper:

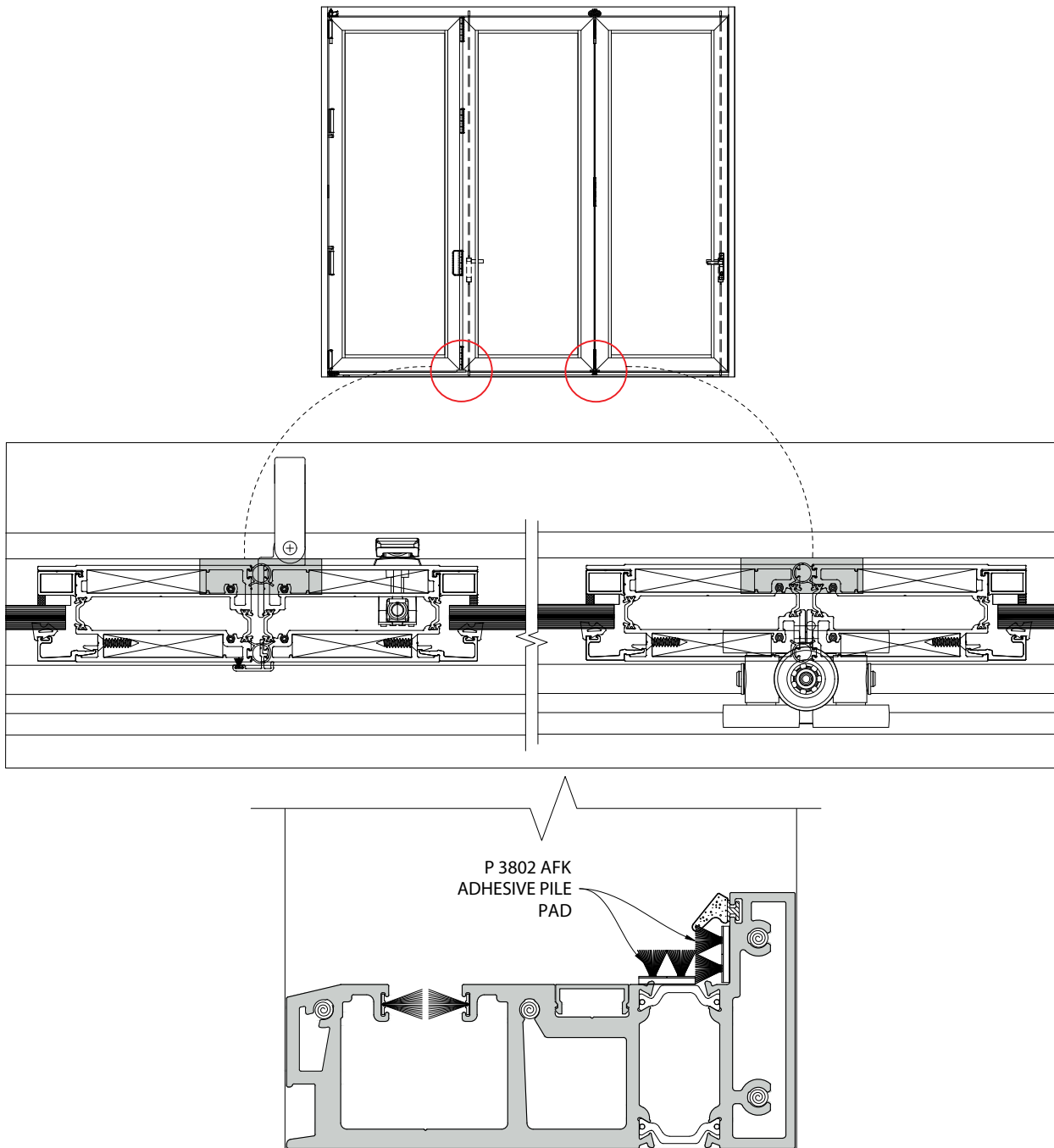
- 6.1. Identify the location of the flush bolt keeper, this must be located in the sill cover to receive handle flush bolts, make a mark in the sill and cover. Make a 0.7" hole perforation in the cover and sill.



- 6.2. Apply sealant to the flush bolt keeper and install as shown in detail below.



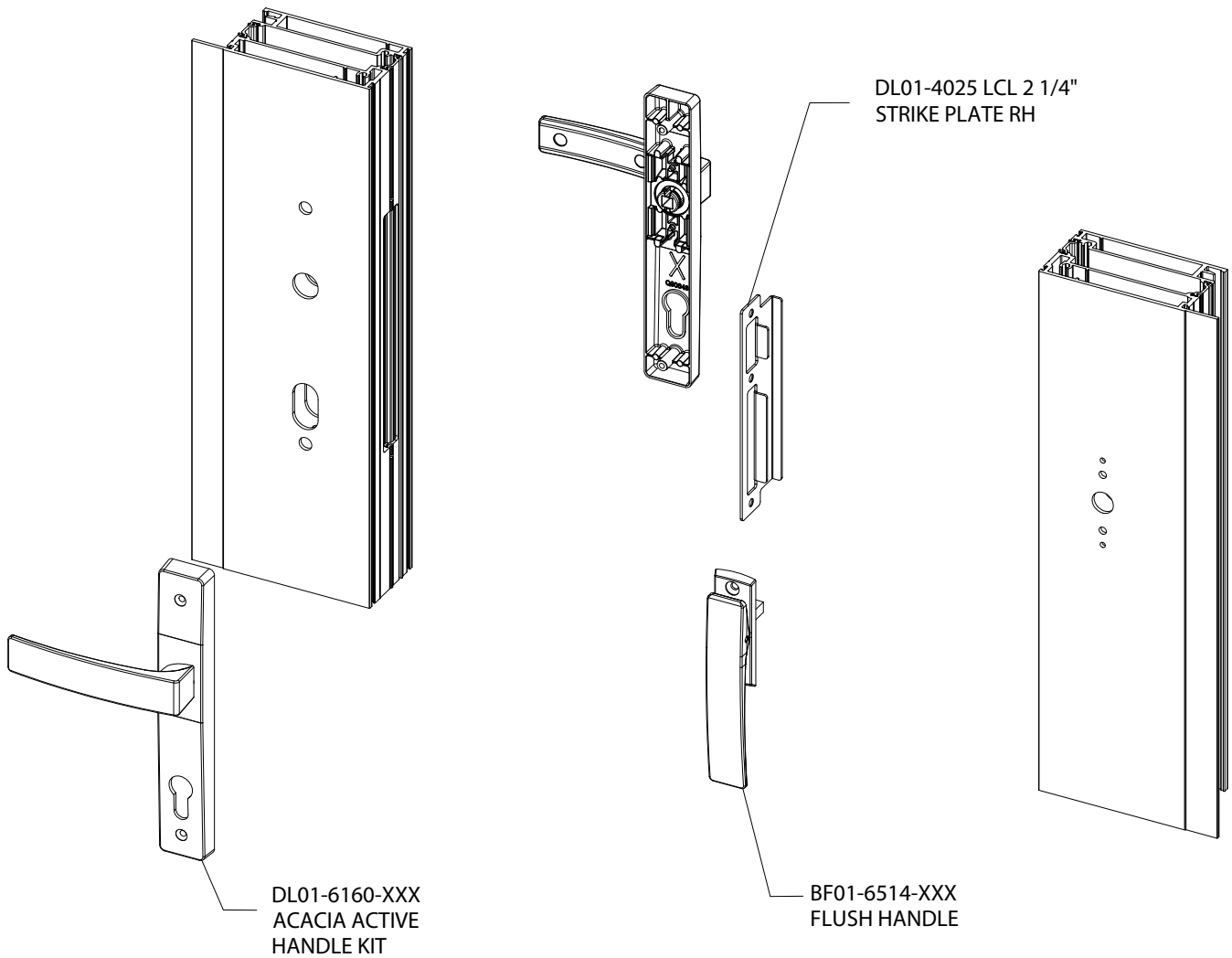
**6.3. Installation of adhesive pile pads:** Install adhesive pile pads (P 3802 AFK) at the sill, under panel joints or under meeting points as shown in detail bellow.



# STEP 7

## INSTALLATION OF HANDLES:

7.1. Verify shop drawings to identify the location of the handles. Install handles as shown in detail.



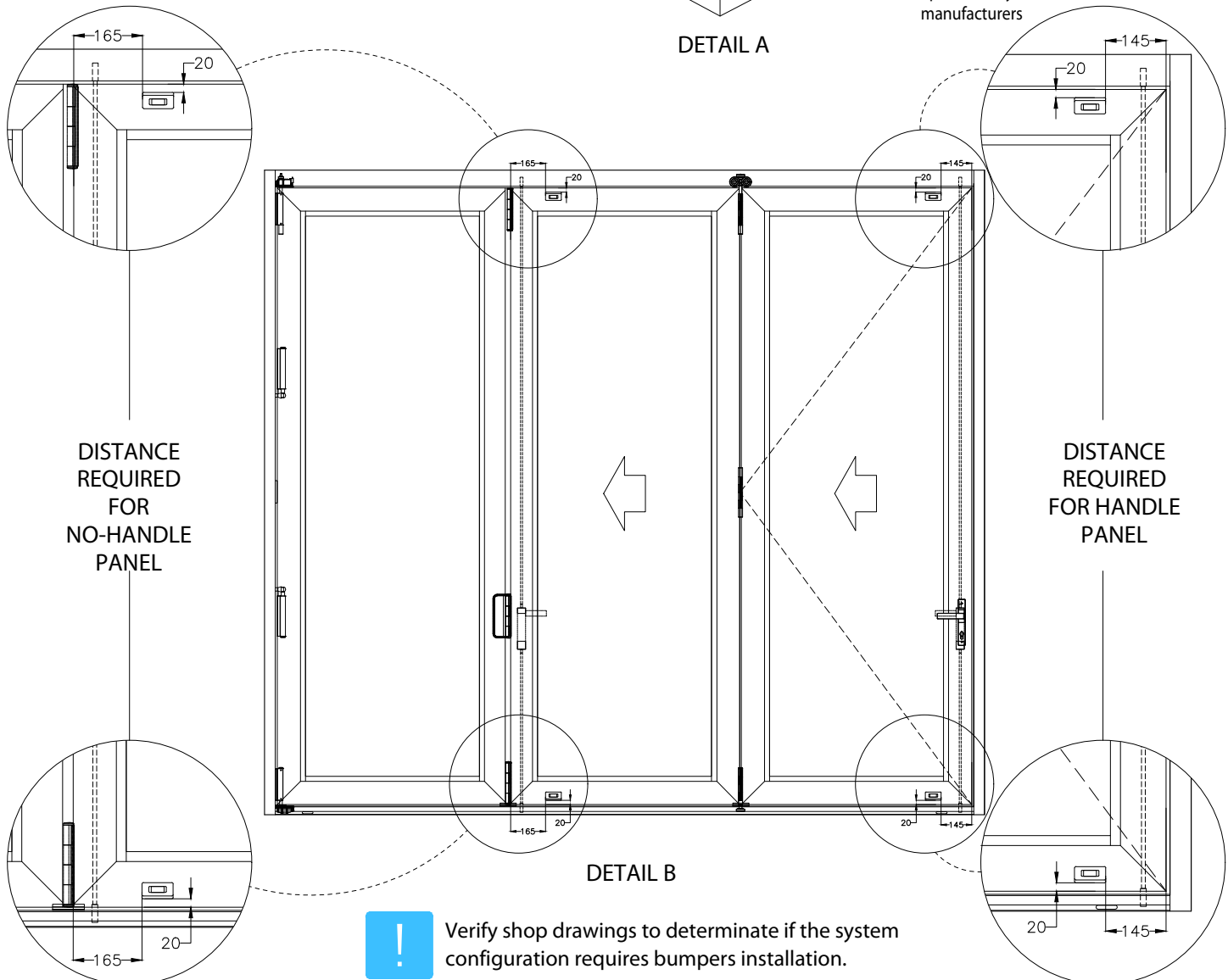
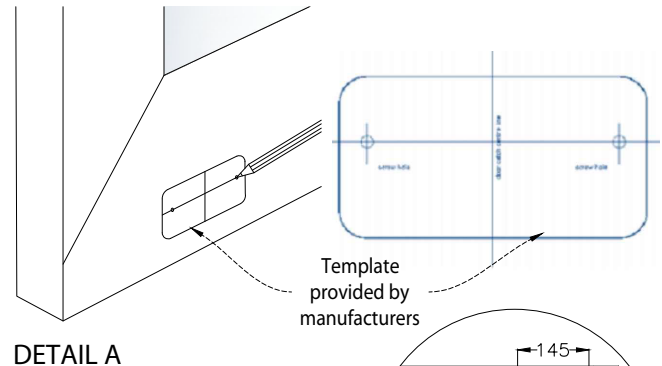
# STEP 8

## BUMPER INSTALLATION:

- 8.1. Verify shop drawings to identify the bumpers location.
- 8.2. Mark bumpers location using template provided by manufacturers(A) and pre-drill required perforations per bumper according to shop drawings details in the panels leaving the distance shown at detail (B).

Bumpers for panels located on the inner rails must be located at 165 mm from the panel edge. For panels located on the outer rail locate bumpers 145mm from panel edge.

**!** Make sure to use the template provided by bumper manufacturer during the process.

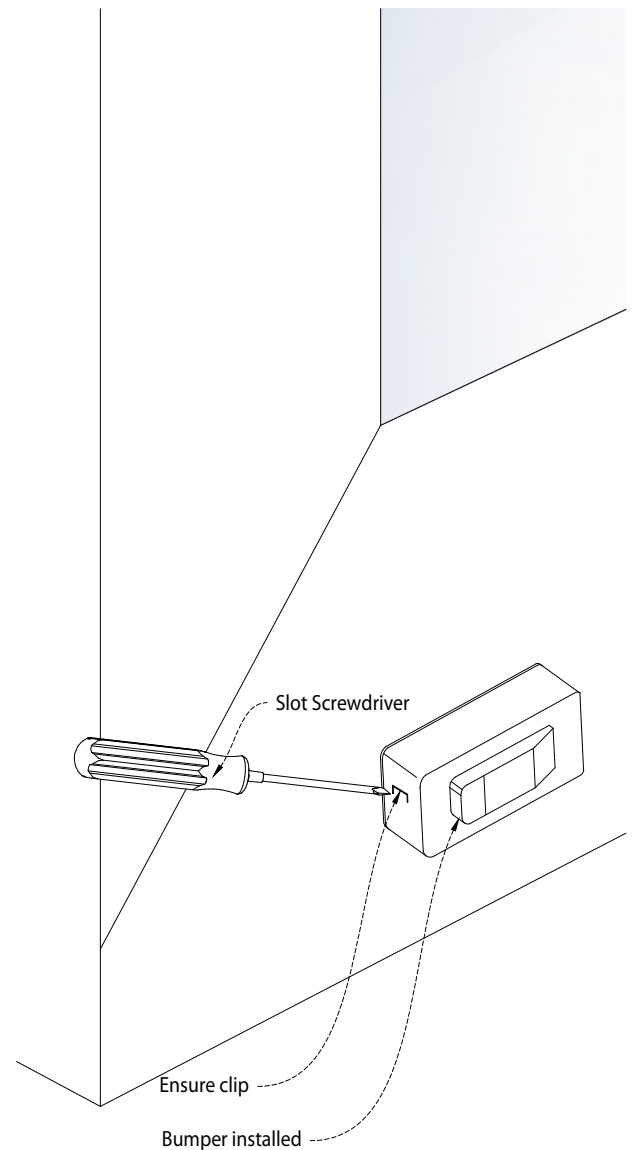
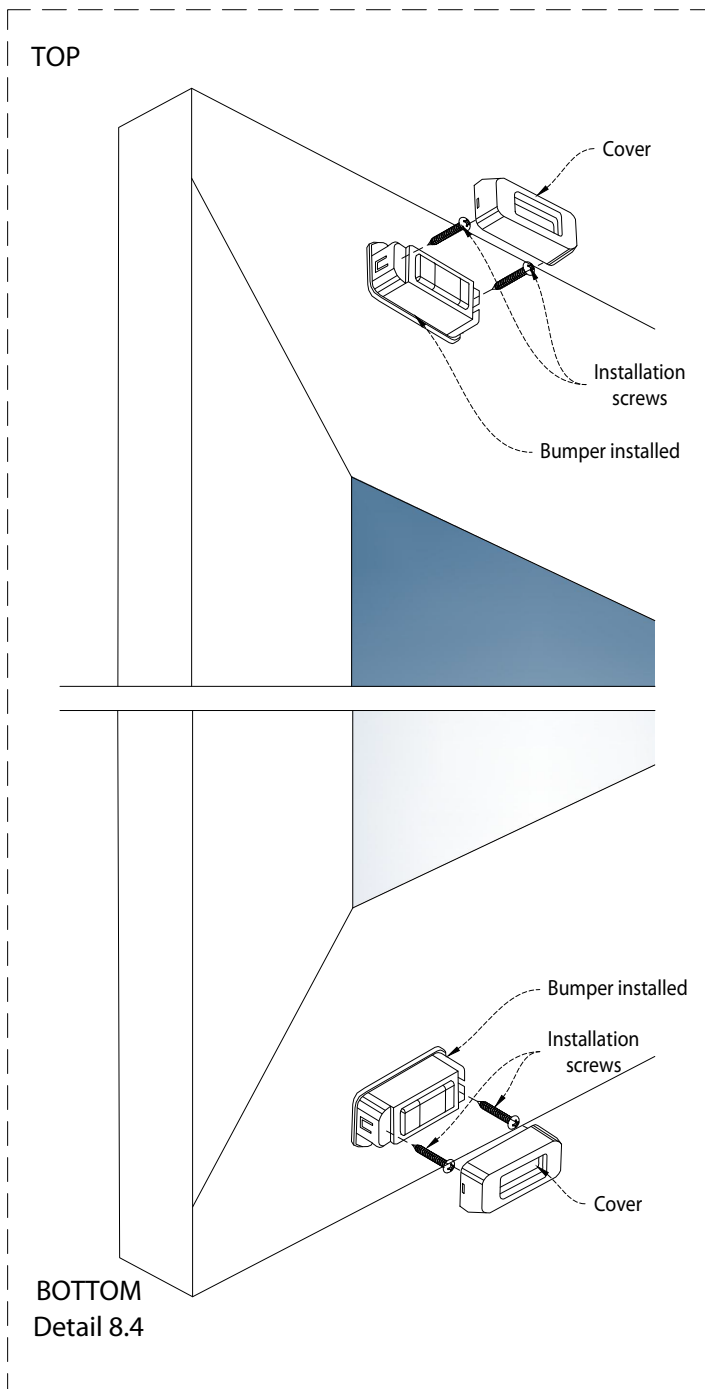


**!** Verify shop drawings to determinate if the system configuration requires bumpers installation.

8.4. After pre-drilling the screw hole, attach the set into the door panel using the screws included in the set.

8.5. Add the cover, ensuring the clip is through the slots on each side.

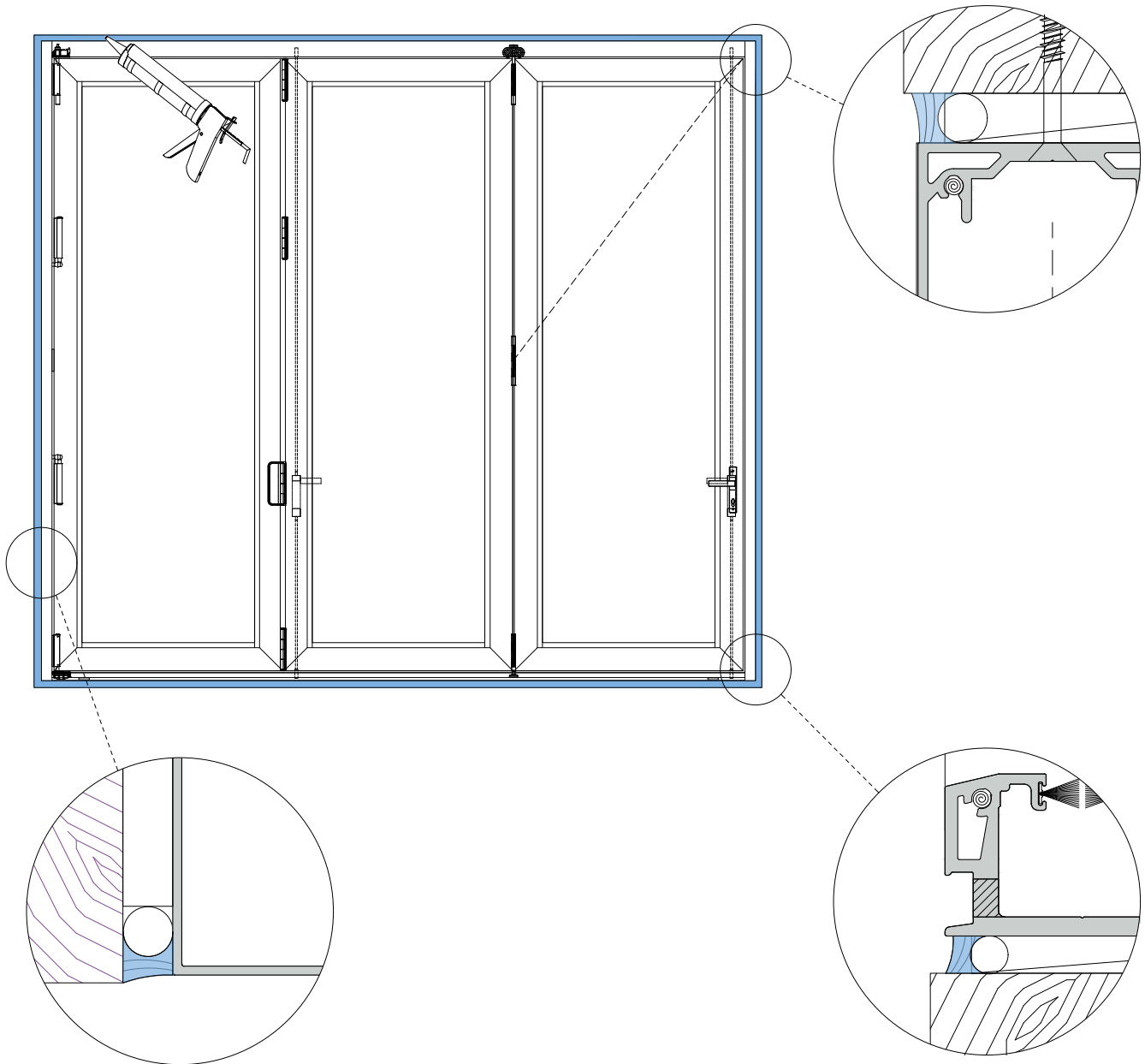
8.6. Repeat procedure for each door catch.












# STEP 9

## PERIMETER SEAL:

9.1. Insert backer rods and apply weatherproofing sealant per approved shop drawings.



# INSTALLATION INSTRUCTIONS

<b>REVISION No.</b>	<b>DATE</b>	<b>DESCRIPTION</b>	<b>BY.</b>	<b>PAGE.</b>
	<b>02-03-17</b>	<b>Installation of adhesive pile pads and flush bolt keeper update</b>	<b>SG</b>	<b>16-17</b>
	<b>22-11-17</b>	<b>Bumper installation was added</b>	<b>MC</b>	<b>19-20</b>
	<b>31-05-19</b>	<b>Hinge installation note: 1 5/16" from outer end of jamb, was added.</b>	<b>ES</b>	<b>13</b>
				
				
				
				
				
				



Av. Circunvalar a 100 mts de la Via 40 Las Flores  
Barranquilla, Colombia PBX: (57 5) 3664600  
servicioalcliente@energiasolarsa.com , PBX: (+57) 5 3664600

BY Sariel González.