# XLS/XLSC-2G & XLP/XLPC-2G 8"-24" INSTALLATION INSTRUCTIONS



## IMPORTANT INFORMATION

Prior to the commencement of Installation, all materials MUST be inspected for Damage. Any damage must be reported to CONSTRUCTION SPECIALTIES, INC., as soon as possible, so that replacement materials may be furnished without delay.

All work must be completed as per Architect's Approved "Shop Drawings", and in accordance with these Installation Instructions. When installation is complete, all materials must be protected from damage until the Architect's FINAL INSPECTION.

All materials should be arranged in the order that they are to be installed. All hardware required for each portion of the work should be placed with the appropriate materials.

Please review all Approved Shop Drawings and this Document to familiarize yourself with all the details and components of this assembly.

IMPORTANT:
READ THROUGH ALL INSTRUCTIONS PRIOR TO STARTING INSTALLATION

3/24/2021

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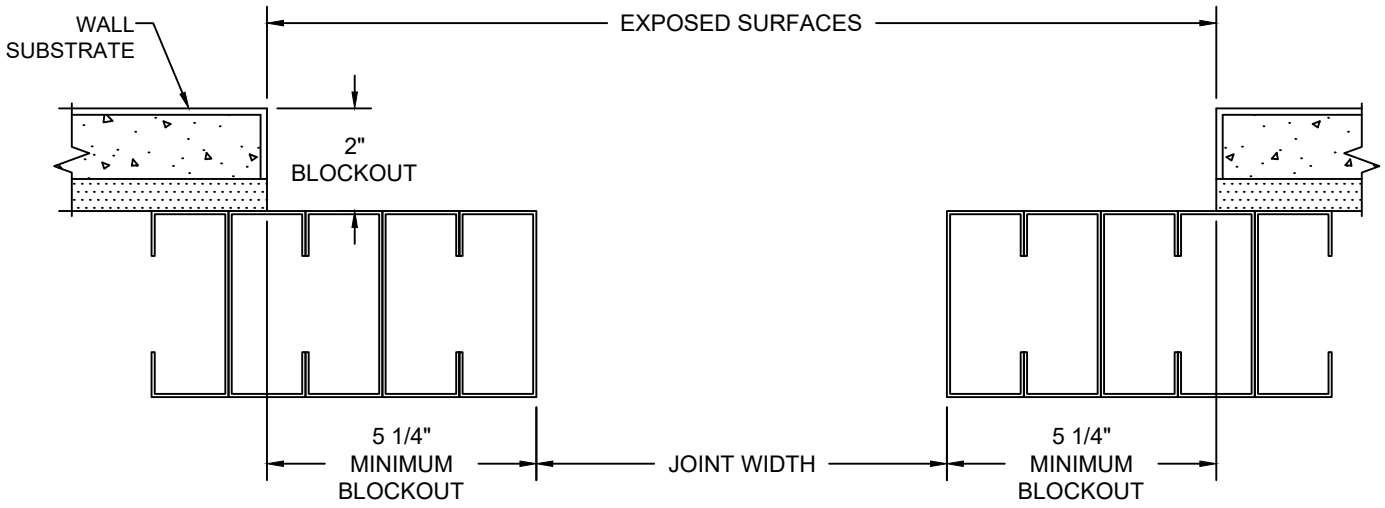
# STEP 1

BEGINNING INSTALLATION




1.) Before beginning installation of the "XLS/XLP-2G & XLSC/XLPC-2G" joint covers, review the layouts for the various runs of joint cover as detailed on the approved Construction Specialties shop drawings.

2.) The "XLS/XLP-2G & XLSC/XLPC-2G" series Joint Covers must be securely mounted to a structurally sound wall. Repair all damage to the blockouts before beginning installation.

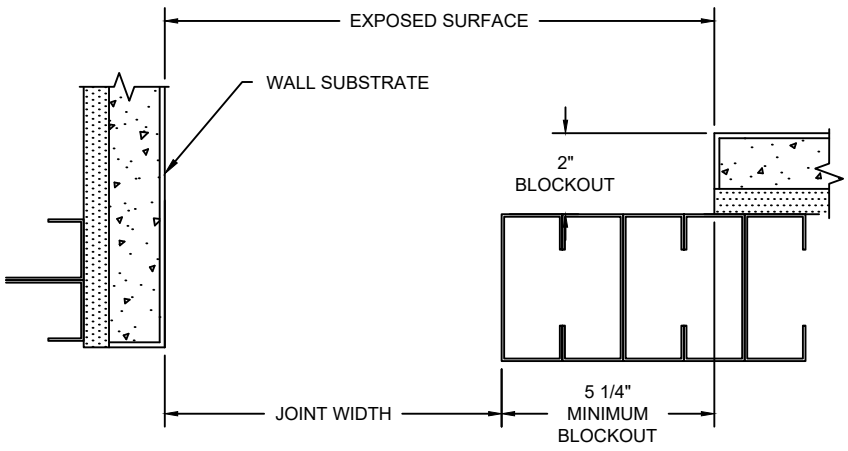
3.) The blockouts in which the covers are to be mounted must be **flat, level and parallel**. **The base of the blockout must be flat (along the length of the joint) to within +/-1/16" [1.6mm] and level (across the joint) to within +/-1/16" [1.6mm].**

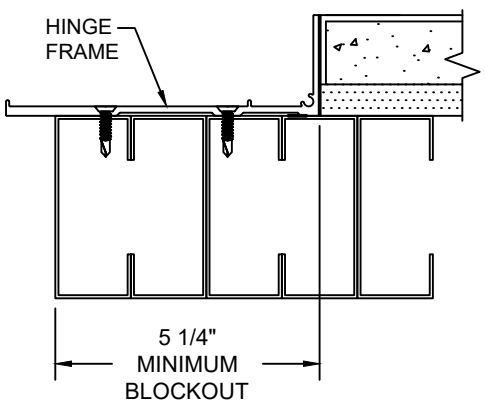
4.) The blockout width shown on the Construction Specialties shop drawings is a minimum width dimension. The blockout may be made wider to allow for greater installation tolerance.

5.) The surface of the blockouts must be clean and free from any loose dust, dirt, debris and oils that would affect the installation of the covers.

6.) It is possible that the expansion/seismic joint may have experienced some amount of movement at the time of installation. For proper installation of the "XLS/XLP-2G & XLSC/XLPC-2G" covers, the joint width **must be within +/-1/4" [6.4mm] of nominal**. If the joint width at the time of installation is not within this tolerance, please contact the factory as some adjustments to the key installation dimensions may be required. These instructions assume that the nominal joint is within tolerance.

7.) Coordinate installation of cover with installation of fire barrier systems and waterstop membrane when required.



# STEP 2

HINGE FRAME INSTALLATION XLS-2G AND XLP-2G

Note: If Vapor Barrier is required, ensure that it is positioned correctly before placing the "XLS/XLP-2G & XLSC/XLPC-2G" Frame members.

2.1) To install the Hinge Frame measure, on XLS-2G and XLP-2G models, over 5 1/4" from the joint edge marking the substrate in several locations on the vertical face. Align the edge of the Hinge Frame to the marked substrate lines and ensure it is plumb and square. (Fig. 2A)

2.2) Fasten the Hinge Frame to substrate with the supplied fasteners in the staggered predrilled Hinge Frame holes. (Fig. 2B)

*Note: Frames are pre-drilled in our CS shop for Hinges.

(Fig. 2A)

(Fig. 2B)

2.3) Align the Door Mount bottom End Hinge along Hinge Frame joint edge and bottom of the frame, aligning the pre-drilled fastener holes. Install machine screws, washers and lock nuts through Bottom Hinge and Hinge Frame clearance holes and tighten. At countersunk pre-drilled holes install the substrate fastener supplied screws. (Fig. 2C)

(Fig. 2C)

# STEP 2 CON'T

HINGE FRAME INSTALLATION XLSC-2G AND XLPC-2G

Note: If Vapor Barrier is required, ensure that it is positioned correctly before placing the "XLS/XLP-2G & XLSC/XLPC-2G" Frame members.

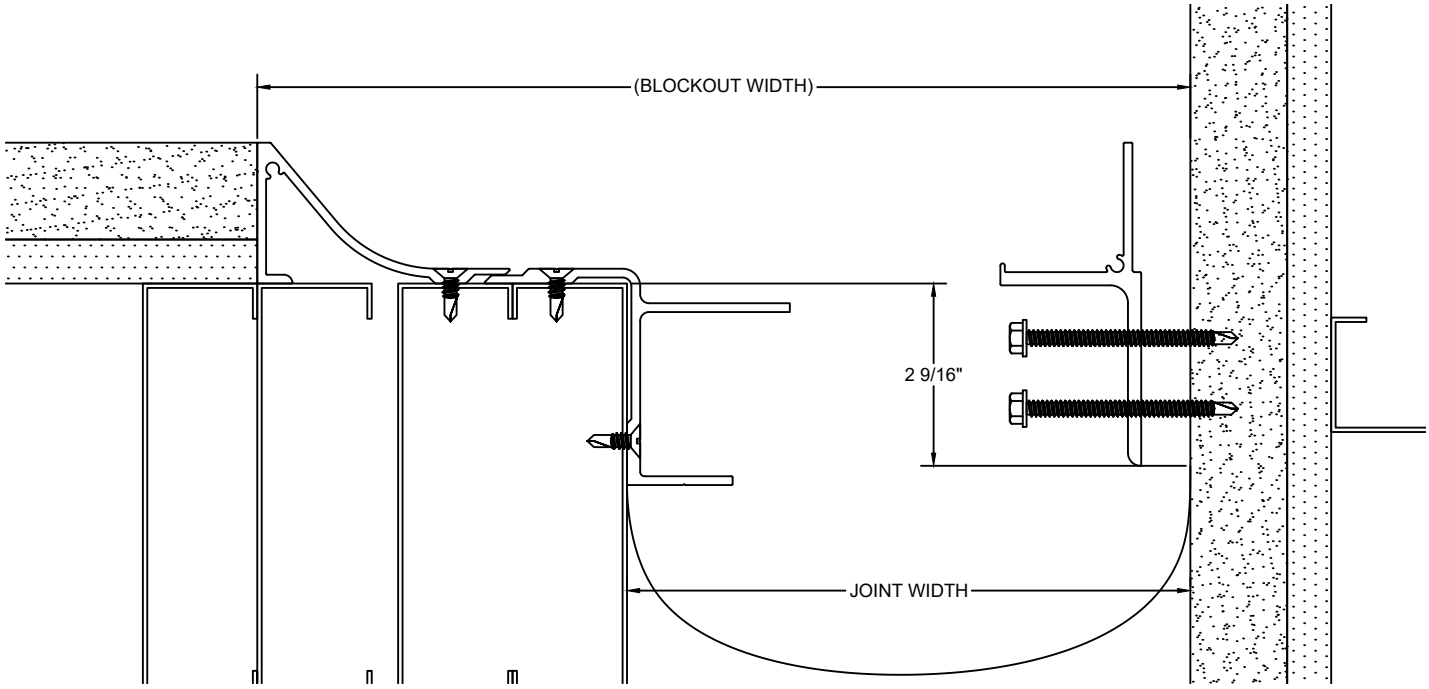
2.4) To install the Hinge Frame, on XLSC-2G and XLPC-2G models, establish a level chalk line below and parallel to the top of the blockout to the bottom edge of the Hinge Frame at 2 9/16". (Fig. 2D)

2.5) Position a 10' length of Hinge Frame along the chalk line. Using the Frame as a template mark and drill the staggered hole locations of the CS supplied fasteners per manufacturer's guidlines.

2.6) Reposition the Hinge Frame aligning the frame holes with the drilled fastener holes. Fasten the Hinge Frame to the substrate with the supplied CS fasteners.

2.7) Fasten the Hinge Frame to substrate with the supplied fasteners in the staggered predrilled Hinge Frame holes.

*Note: Frames are pre-drilled in our CS shop for Hinges.




(Fig. 2D)

2.8) Align the Door Mount bottom End Hinge along Hinge Frame joint edge and bottom of the frame, aligning the pre-drilled fastener holes. Install machine screws, washers and lock nuts through Bottom Hinge and Hinge Frame clearance holes and tighten. At countersunk pre-drilled holes install the substrate fastener supplied screws. (Fig. 2E)

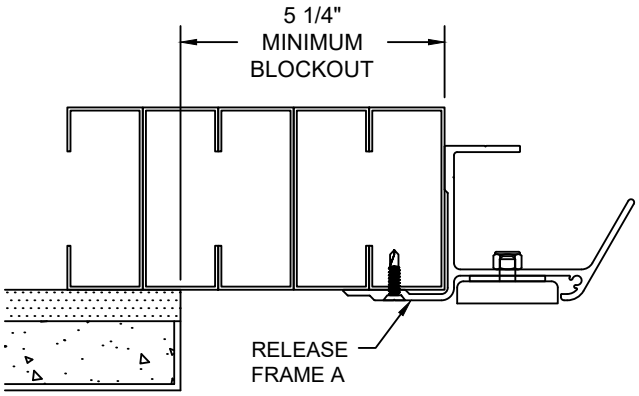
(Fig. 2E)

# STEP 3

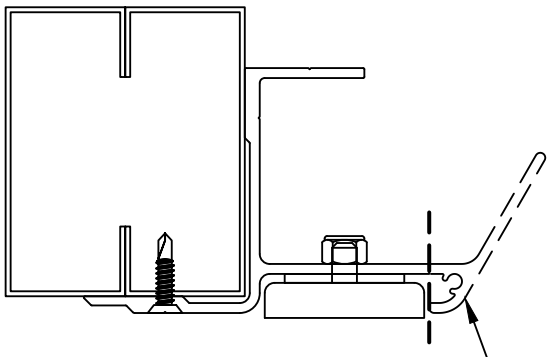
RELEASE FRAME INSTALLATION

Note: The Release Frame A will have a protective covering taped over the magnets. Do not remove the magnet protective covering until all steps of the door assembly installation is complete in STEP 5.

3.1) Begin installation of Release Frame A by placing a length of the Frame into the blockout and joint opening. Note the orientation of the frame in Fig. 3A. (**Note: XLSC-2G & XLPC-2G 8" & 9" joints use a modified cut down Release Frame A, See Fig. 3B.) Attach the Release Frame A to the substrate with the supplied substrate fasteners. (Fig. 3C)




(Fig. 3A)



MODIFIED RELEASE FRAME A FOR XLSC & XLPC 8"-9" JOINTS

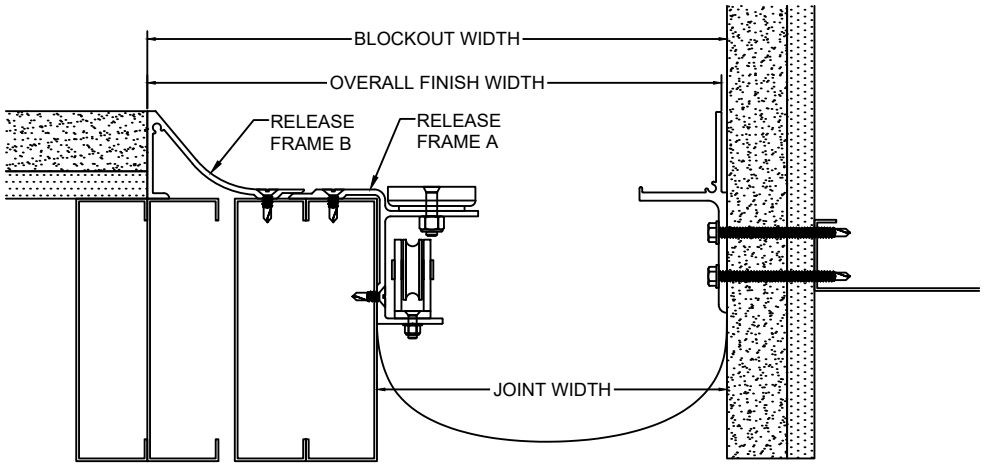
(Fig. 3B)

(Fig. 3C)

# STEP 3 Con't

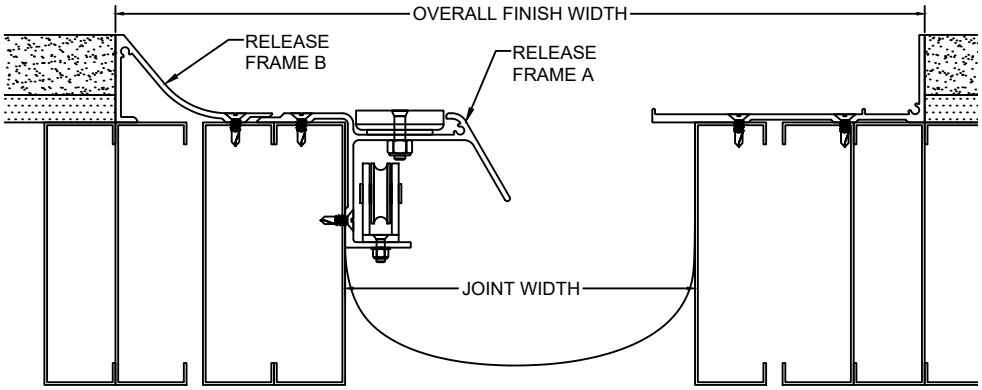
RELEASE FRAME INSTALLATION

3.2) To locate the Release Frame B outside edge, use the Overall Finish Width dimension on the charts per the model and nominal joint size. (Fig. 3D-3F)




XLSC-2G/XLPC-2G MODELS

(Fig. 3D)




XLS-2G/XLP-2G MODELS

(Fig. 3E)

| XLS-2G - XLP-2G RELEASE FRAME B | |
|---|---|
| JOINT WIDTH (NOM.) | OVERALL FINISHED WIDTH (IN.) |
| 8" | 18 1/2" |
| 9" | 19 1/2" |
| 10" | 20 1/2" |
| 11" | 21 1/2" |
| 12" | 22 1/2" |
| 13" | 23 1/2" |
| 14" | 24 1/2" |
| 15" | 25 1/2" |
| 16" | 26 1/2" |
| 17" | 27 1/2" |
| 18" | 28 1/2" |
| 19" | 29 1/2" |
| 20" | 30 1/2" |
| 21" | 31 1/2" |
| 22" | 32 1/2" |
| 23" | 33 1/2" |
| 24" | 34 1/2" |

| XLSC-2G - XLPC-2G RELEASE FRAME B | | |
|---|---|---|
| JOINT WIDTH (NOM.) | BLOCKOUT WIDTH (IN.) | OVERALL FINISH WIDTH (IN.) |
| 8" | 13 1/4" | 13 1/8" |
| 9" | 14 1/4" | 14 1/8" |
| 10" | 15 1/4" | 15 1/8" |
| 11" | 16 1/4" | 16 1/8" |
| 12" | 17 1/4" | 17 1/8" |
| 13" | 18 1/4" | 18 1/8" |
| 14" | 19 1/4" | 19 1/8" |
| 15" | 20 1/4" | 20 1/8" |
| 16" | 21 1/4" | 21 1/8" |
| 17" | 22 1/4" | 22 1/8" |
| 18" | 23 1/4" | 23 1/8" |
| 19" | 24 1/4" | 24 1/8" |
| 20" | 25 1/4" | 25 1/8" |
| 21" | 26 1/4" | 26 1/8" |
| 22" | 27 1/4" | 27 1/8" |
| 23" | 28 1/4" | 28 1/8" |
| 24" | 29 1/4" | 29 1/8" |

(Fig. 3F)

# STEP 3 Con't

RELEASE FRAME INSTALLATION

3.3) Measure over from the outside edge of the Hinge Frame and mark the substrate. (Fig. 3G)

3.4) Align the outside edge of the Release Frame B along the marked substrate lines and install with the supplied substrate fasteners. (Fig. 3G - 3J )

(Fig. 3G)

(Fig. 3H)

(Fig. 3J)

# STEP 4

LADDER DOOR ASSEMBLY INSTALLATION

Note: Once the frames have been installed, the following steps are performed to install the Door Assembly to the hinge frame and the hinge frame to the substrate. All corner applications, XLSC-2G & XLPC-2G, the hinges come with Press-in fasteners factory installed in the hinges.

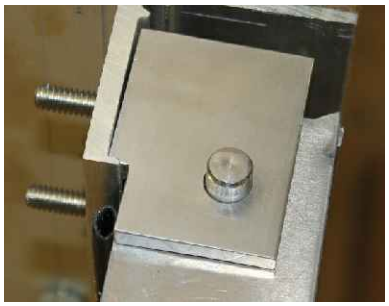
4.1) Set the Door Assembly with the groove pin at the bottom of the door to rest on a delrin washer, aligning with the hole in the bottom hinge attached to the hinge frame. Fig. 4A)

4.2) Install the top End Hinge sliding down over the top door pin. Open the door to access the field fastener holes. Align the holes of the Top End Hinge and the Hinge Frame holes bolting in place using the supplied bolts, washers and lock nuts. With the Hinge fastened to the frame install the field fasteners, fastening through the Hinge, Hinge Frame and into the substrate with the supplied fasteners. (Fig. 4B - 4D)

4.3) With the door open Bolt the Center Hinge to the Hinge Frame, fastening through the Center Hinge, Hinge Frame and into the substrate with the supplied fasteners. Once the Center Hinge is secured the Ladder Door Assembly will only open to a 45° angle. (Fig. 4E) Note: on models of XLS-2G & XLP-2G Center Hinge field fasteners will be difficult to install. Install a minimum of 2 field fasteners in the Center Hinge.

(Fig. 4A)

(Fig. 4B)



(Fig. 4C)

(Fig. 4D)

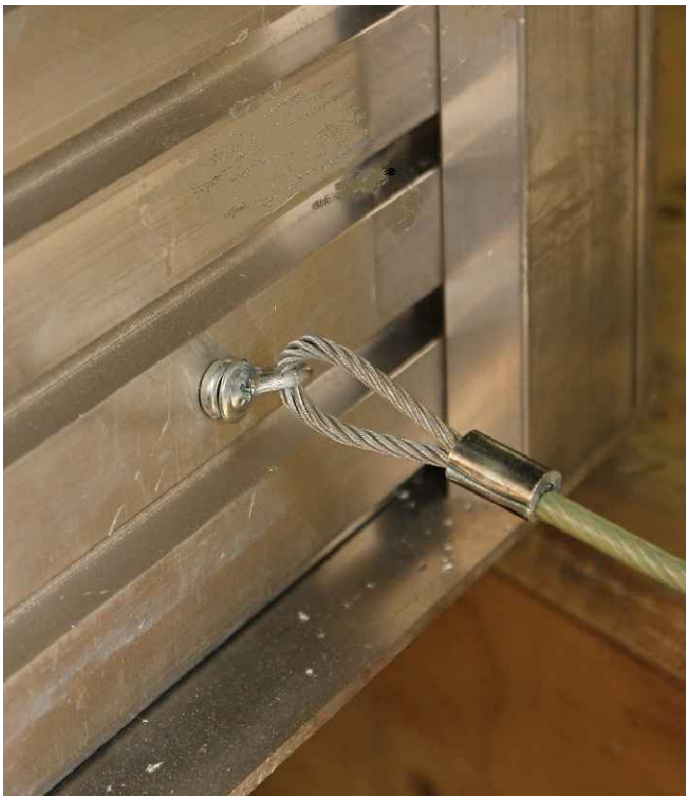
(Fig. 4E)

# STEP 5

LANYARD INSTALLATION

Note: The following steps performed to complete installation of the " XLS/XLP-2G & XLSC/XLPC-2G" expansion joint cover.

5.1) With the Door Assembly in an open position attach the Lanyard looped end to the S-Hook at the top and bottom of the Door Assembly and crimp the S-hooks shut. (Fig. 5A)



(Fig. 5A)

(Fig. 5B)

Note: With the magnet pull strength use caution when removing the protective cover keeping hands/fingers from getting pinched.

5.2) With the Door Assembly completely installed remove the protective cover from the magnets and allow the door to fully close. (Fig. 5B)

# STEP 6

CONTINUED INSTALLATION

Note: To assist in maintaining the alignment of the exposed top edge of the Hinge Frame, Control Frame A and B alignment pins are placed in Frame sections prior to additional Door Assembly installations.

6.1) Place alignment pin into the top of each Hinge Frame, Control Frame A and Control Frame B extrusion boss, inserting the alignment pin approximately 1/2 of its length.

6.2) Continue to install the next length of Hinge Frame, Control Frames A and B following installation steps 2 through 3.

6.3) Continue with installation instructions of steps of 4 through 5 for installation of the Door Assembly and Lanyard.

6.4) Repeat installation procedures for any additional lengths of Frame.

# STEP 7

FIELD LENGTH MODIFICATION INSTRUCTIONS

Note: Use the following steps to cut down "XLS/XLP-2G & XLSC/XLPC-2G" expansion joint cover overall length in the field. ***XLP and XLPC door assemblies with factory installed infill panels can not be cut down in the field.*** To cut down the Door Assembly or Frame , **cut equal distances from both ends of the door assembly**.

7.1) To cut down the XLS/C-2G Door Assembly remove the top and bottom grooved alignment pins from the end plates, then remove the top and bottom end plates and modular center plates from the Door Assembly. (Fig. 7A - 7C)

7.2) Cut equal dimensions from both ends of the Door Assembly. Replace and reattach the top and bottom modular plates and top and bottom end plates. Reinstall the grooved alignment pins in the end plates.

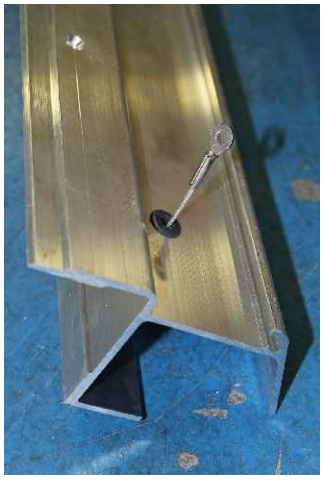
(Fig. 7A)

(Fig. 7B)

(Fig. 7C)

7.3) To field cut the Release Frame A, cut equal dimensions from both ends of the frame. If the cut down dimension affects the grommet, lanyard, and pulley assembly remove and relocate these on the Release Frame A. To reinstall the grommet and lanyard drill a 5/8" diameter hole at 2 1/4" down from the top and bottom of Release Frame A. To reinstall the pulley assembly drill two aligning 3/16" diameter holes for the machine screws at 2" and 3 3/4" down from the top and bottom of Release Frame A. (Fig. 7D-7E)

(Fig. 7D)



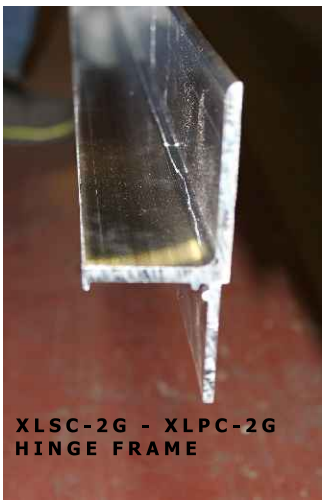
(Fig. 7E)

# STEP 7 Con't

FIELD LENGTH MODIFICATION INSTRUCTIONS

7.4) To cut down the Hinge Frame cut equal distance from the top and the bottom of frame. New Hinge attachment holes may need to be drilled. Using the End Hinges as a drilling guide, align Hinges along Hinge Frame joint edge at top and bottom of the Hinge Frame. Mark hole locations and drill out. Reinstall Top and Bottom End Hinges using the supplied machine screws, washers and locknuts in the clearance holes and substrate fasteners at the countersunk holes.


(Fig. 7F)




(Fig. 7G)


(Fig. 7H)


(Fig. 7J)

7.5) Cutting down the Release Frame B cut equal distance from the top and bottom of the frame. New attachment holes may need to be drilled. Drill countersunk attachment holes, for the supplied fasteners no more than 6" (max.) in from each end of the Release Frame B in alignment with attachment holes on the "V" groove.

(Fig. 7K)