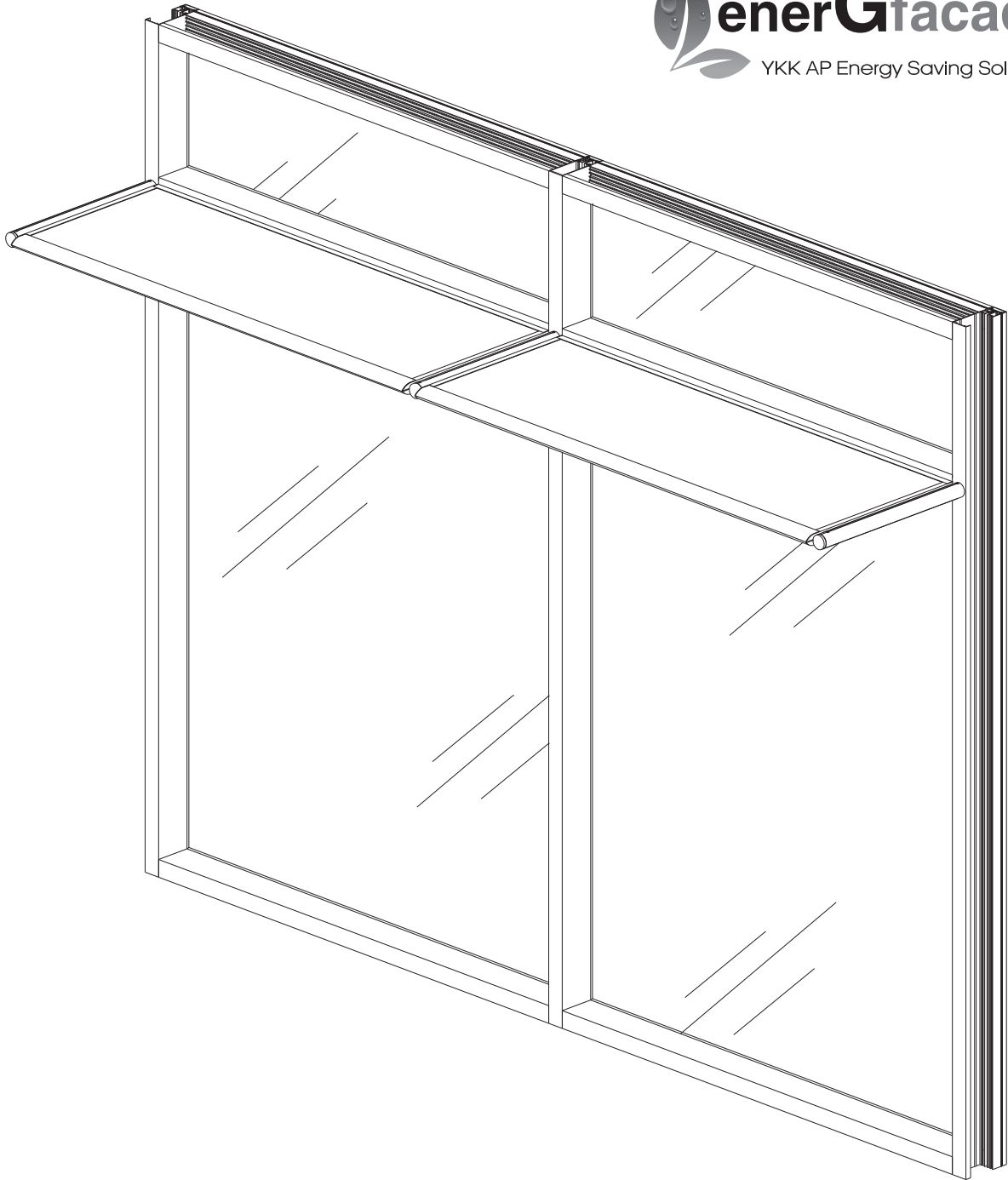


**Luminance® Light Shelf System**



**Installation Manual**




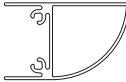
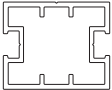
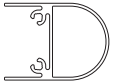

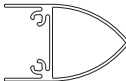

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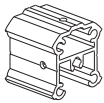

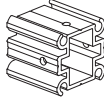

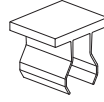

## Installation Notes

1. Do not drop, roll or drag boxes of aluminum framing. Move and stack boxes with proper support to prevent distortion. If fork lifts are used, be especially careful about striking the boxes when lifting or moving.
2. Store in a dry, out of the way area. If rain exposure, condensation or any water contact is likely, then all packaging material should be removed. Wet packaging materials will discolor and may stain aluminum finishes and paints.
3. All materials should be checked for quality and quantity upon receipt, YKK AP must be notified immediately of any discrepancies in shipment. Check to make sure that you have the required shims, sealants, supplies and tools necessary for the installation.
4. Carefully check the openings and surrounding conditions that will receive your material. Remember, if the construction is not per the construction documents, it is your responsibility to notify the general contractor in writing. Any discrepancies must be brought to the general contractor's attention before you proceed with the installation.
5. Gather your shop drawings, materials, packing list, and this installation manual. Carefully review parts location, the sequence it goes therein, when you glaze it and how you seal it. Installation instructions are of a general nature and may not cover every condition you will encounter. The shop drawings and/or installation manuals were prepared specifically for the product.
6. Any material substitutions must be of equal or greater quality.
7. Make certain that material samples have been sent for compatibility testing for all manufacturer's sealants involved. Make certain sealants have been installed in strict accordance with the manufacturer's recommendations and specifications, including cleaning and priming all parts.
8. Remember to isolate, in an approved manner, all aluminum from uncured masonry or other incompatible materials.
9. System-to-structure fasteners are not supplied by YKK AP. Fasteners called out on shop drawings are to indicate minimum sizes for design loading.
10. If any questions arise concerning YKK AP products or their installation, contact YKK AP for clarification before proceeding.
11. YKK AP storefront and/or curtain wall framing is typically completed before drywall, flooring and other products which may still be in process. Take the extra time to wrap and protect the work produced.
12. Cutting tolerances are plus zero, minus one thirty second unless otherwise noted.
13. Check our website, [www.ykkap.com](http://www.ykkap.com), for the latest installation manual update prior to commencing work.

## STOCK LENGTHS

	<b>Intermediate Strut</b>	<b>E9-3771</b>		<b>Trim – Quarter Round</b>	<b>E9-3777</b>
	<b>Intermediate / End Bay Square Strut</b>	<b>E9-3780</b>		<b>Trim – Bull Nose</b>	<b>E9-3778</b>
	<b>Jamb Strut</b> (Use for End Bay Condition Only)	<b>E9-3772</b>		<b>Trim – Bullet</b>	<b>E9-3779</b>
	<b>Trim – Square</b>	<b>E9-3775</b>			

## STRUT PARTS

	<b>Shear Block</b> Use with E9-3771 and E9-3772	<b>E1-3890</b>		<b>End Cap Medallion</b> With stud	<b>E1-3894</b>
	<b>Shear Block</b> Use with E9-3780	<b>E1-3886</b>		<b>#10 x 1-3/4" PHSMS Type AB, Zinc Plated Steel</b> Use to attach shear block to wall system vertical	<b>PC-1028</b>
	<b>Square End Cap</b> Use with E9-3780	<b>E1-3887</b>		<b>#10 x 1/2" PHSMS Type AB, Zinc Plated Steel</b> Use to attach strut to shear block	<b>FC-1008</b>

## PANEL PARTS

		<b>Notched Trim – Square</b>	24" E1-3892L E1-3892R 30" E1-3893L E1-3893R
		<b>Notched Trim – Quarter Round</b>	24" E1-3888L E1-3888R 30" E1-3889L E1-3889R
		<b>Notched Trim – Bull Nose</b>	24" E1-3895L E1-3895R 30" E1-3896L E1-3896R
		<b>Notched Trim – Bullet</b>	24" E1-3897L E1-3897R 30" E1-3898L E1-3898R
	<b>60" x 23-7/8" Panel</b> <b>E3-3891</b>		<b>Cleaning Pivot</b> <b>E1-3899</b>
	<b>96" x 23-7/8" Panel</b> <b>E3-3892</b>		<b>K-Lock Nut</b> 10-32, Zinc Plated Steel For use with Cleaning Pivot <b>HE-1000</b>
	<b>60" x 29-15/16" Panel</b> <b>E3-3893</b>		<b>#10-24 x 3/4" FHSMS Type F</b> , Zinc Plated Steel Use to attach notched trim to interior trim and fascia <b>UF-1012</b>
	<b>96" x 29-15/16" Panel</b> <b>E3-3894</b>		

## STRUT FABRICATION

### STEP 1 CUT STRUTS

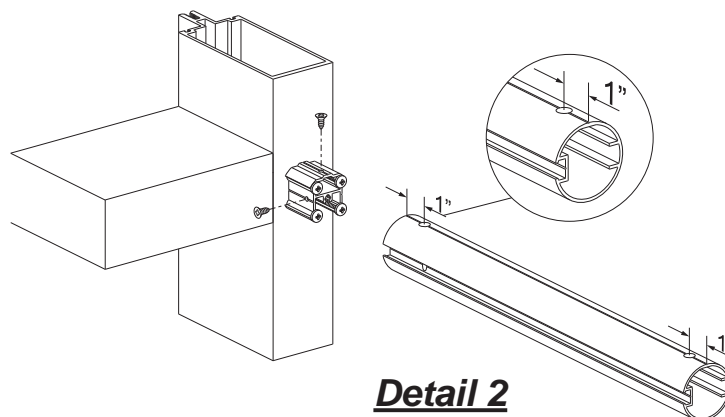
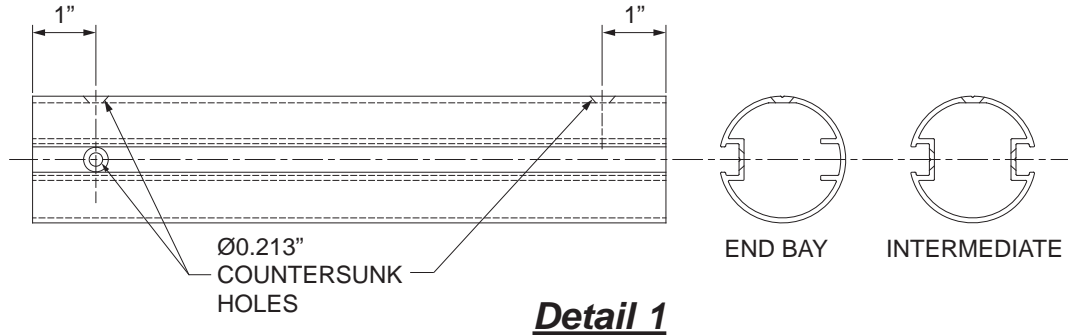
- Cut the struts to the length shown in the chart below.

STRUTS	PANEL DEPTH	
	24"	30"
ROUND INTERMEDIATE	24-5/16"	30-5/16"
ROUND JAMB	24-5/16"	30-5/16"
SQUARE	24-1/2"	30-1/2"

### STEP 2 PREP STRUTS

- Using a #3 drill bit (0.213 dia.), drill and countersink the two top holes located at a distance of 1" from from each end of the strut, and centered through the V-groove.

See **Detail 1 and 2.**



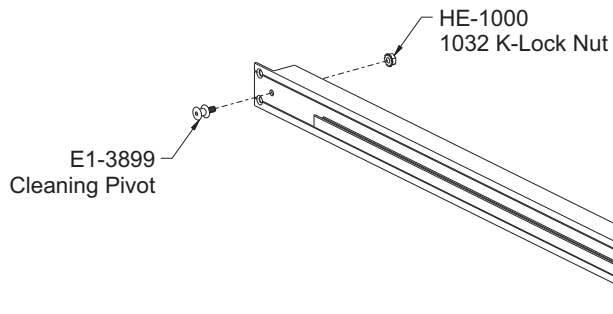
**PANEL ASSEMBLY****STEP 3  
CUT TRIM AND FASCIA**

- For a 2-1/2" wall system, cut the interior trim and fascia pieces to D.L.O.
- For a 3" wall system, cut the interior trim and fascia pieces to D.L.O. + 1/2".
- For a 2-1/4" wall system, cut the interior trim and fascia pieces to D.L.O. - 1/4".

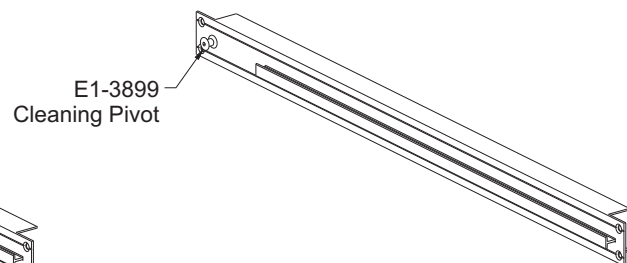
**STEP 4  
ASSEMBLE NOTCHED TRIM**

- Attach the E1-3899 cleaning pivot to the notched trim pieces with an HE-1000 1032 K-Lock nut.

See **Detail 3** and **4**.



**Detail 3**



**Detail 4**

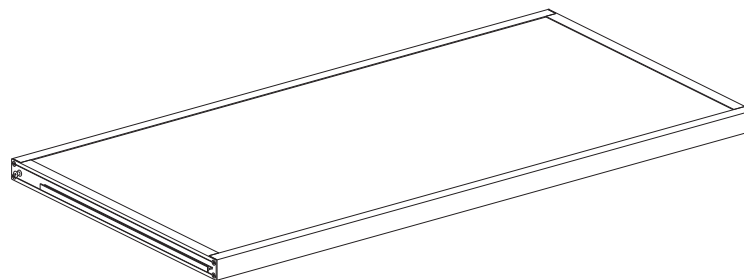
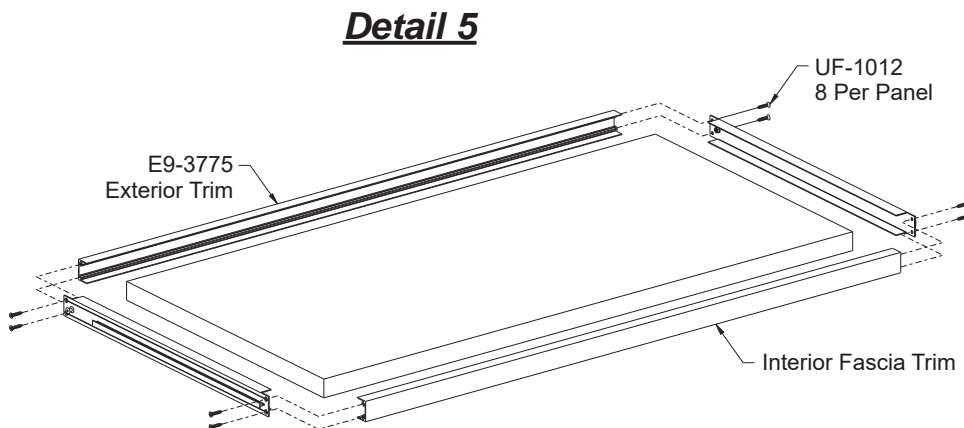


## PANEL ASSEMBLY

### STEP 5 FABRICATE PANELS

- Measure from the centerline of a mullion to the centerline of the adjacent mullion, and cut the panels to width of centerline to centerline minus 2-3/4".
- Slide the panel into the inside of the notched trim pieces.
- Use four UF-1012 fasteners to attach the E9-3775 interior trim pieces to the notched trim pieces.

See **Details 5 and 6.**



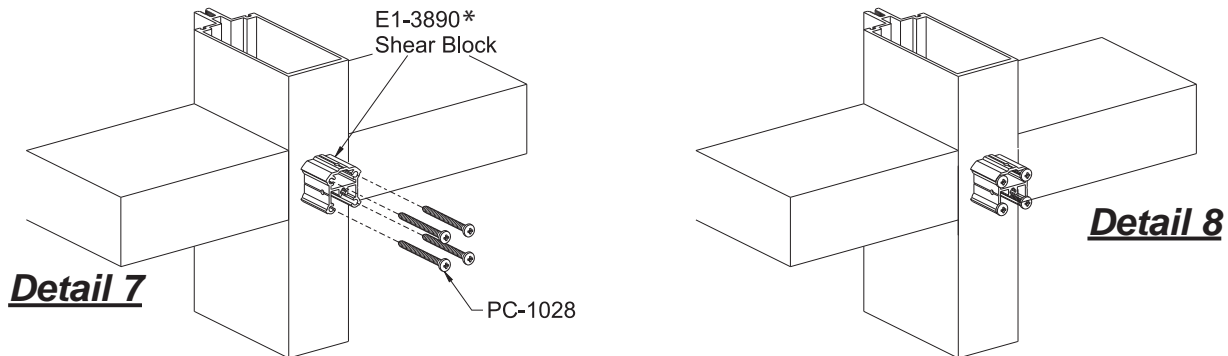
### **Detail 6**

## FRAME INSTALLATION

### STEP 6 SHEAR BLOCK ATTACHMENT

- Choose the appropriate drill fixture template (**Pages 11-16**) for your job. Cut out the template as shown.
- Position the paper drill fixture located on **Page-11** of this manual at the horizontal to mullion intersection.
- Using a nail set or similar tool, punch a small hole in the center of each of the four holes to be drilled.
- Remove the template and drill the four holes with a #20 (0.161 dia.) drill bit.
- Attach the E1-3890 shear block to the vertical with four PC-1208 fasteners (do not over torque).

See **Details 7 and 8.**

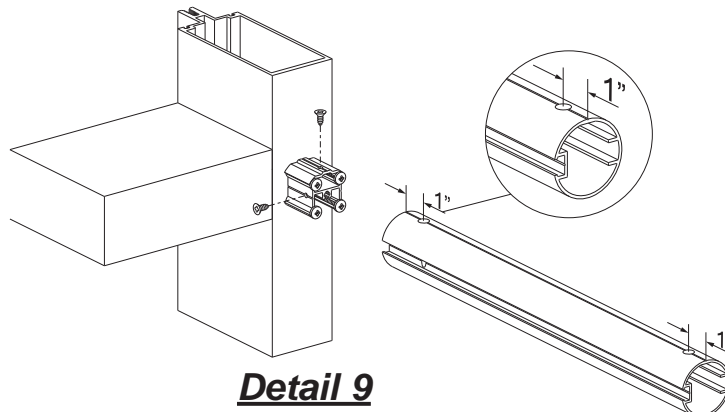


\* Round strut shown, square strut similar.

### STEP 7 STRUT ATTACHMENT

- Slide strut onto the shear block and attach with one FC-1008 screw through the countersunk hole drilled in **Step 2.**
- If the strut being attached is at the end of a run of panels, use one additional FC-1008 fastener on the interior side of the strut, to secure it to the shear block.

See **Detail 9.**



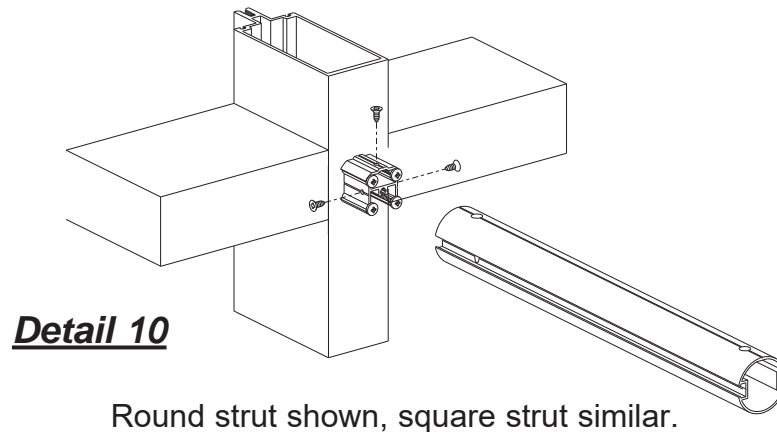
\* Round strut shown, square strut similar.

## FRAME INSTALLATION

### STEP 7 STRUT ATTACHMENT (continued)

- If the strut being attached is at an intermediate location, use one FC-1008 fastener on each side of the strut, to secure it to the shear block.
- The location for the inside fasteners is 1" from the end of the strut.

See **Detail 10**.

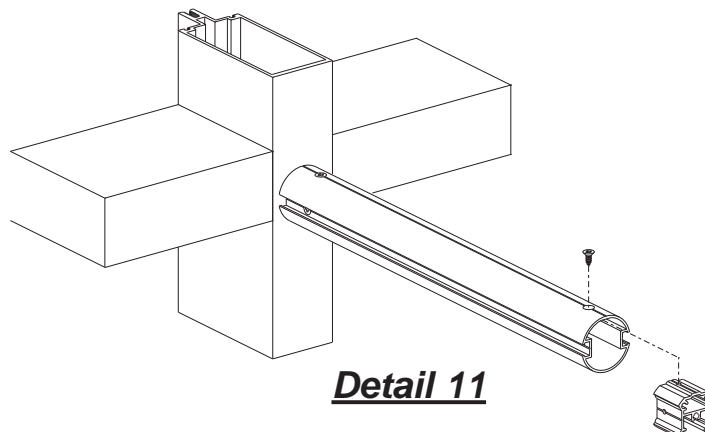


### STEP 8 END SHEAR BLOCK ATTACHMENT (FOR ROUND STRUTS ONLY)

Note: Skip this step if using square strut.

- Slide the E1-3890 shear block into the exposed end of the strut until the end of the shear block and the end of the strut are flush with each other.
- Attach strut to the shear block with with one FC-1008 fastener through the countersunk hole drilled in **Step 2**.

See **Detail 11**.

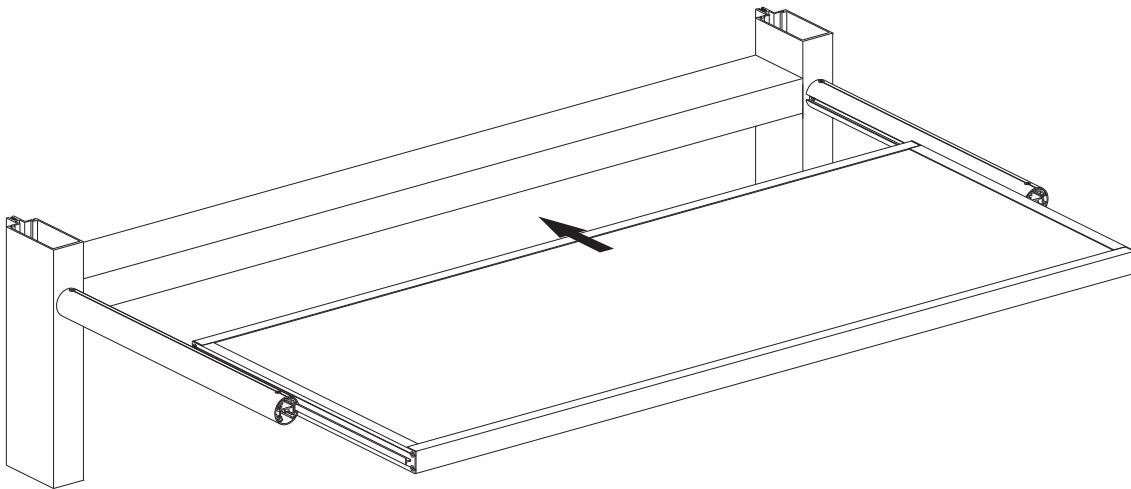


**PANEL INSTALLATION****STEP 9  
INSERT PANELS**

- Slide the panel assemblies into the channels on the struts.

See **Detail 12**.

- The cleaning pivot head and the notched “T” on the trim pieces slide into the channel.
- Slide the panel toward the wall system horizontal until there is a 1/16” gap between the horizontal and the interior trim piece, leaving 1/2” from the end of the strut to the end of the fascia trim piece.
- Attach the E1-3890 shear block to the vertical with four PC-1028 fasteners (do not over torque).



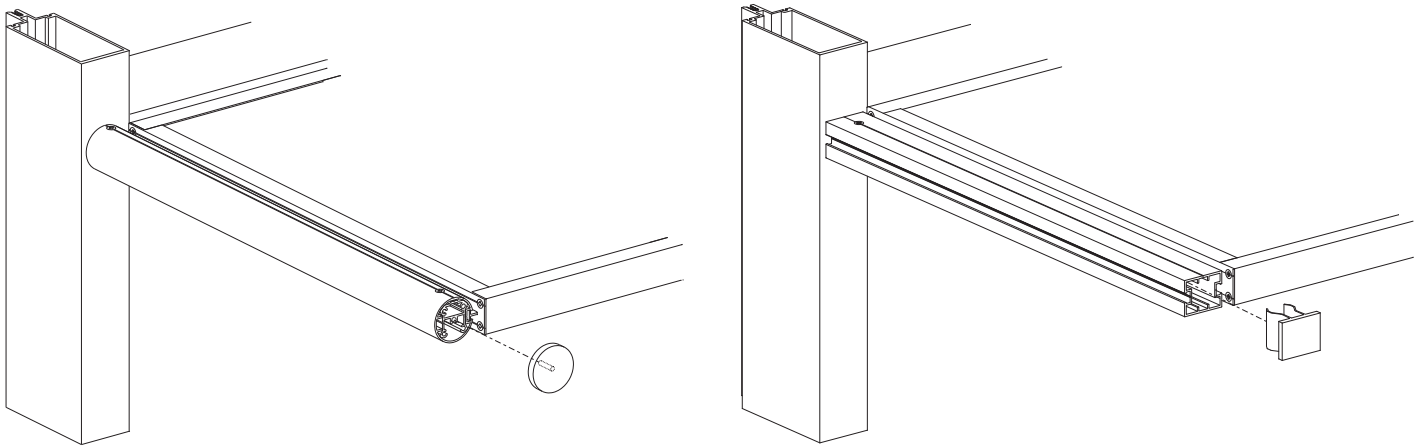
**Detail 12**

## PANEL INSTALLATION

### STEP 10 ATTACH END CAP MEDALLIONS

- For round end cap medallions, screw on the E1-3894 end cap medallion into the center screw spline of the shear block in the exterior end of the strut. For square end cap medallion, snap the E1-3887 end cap medallion into the square strut.

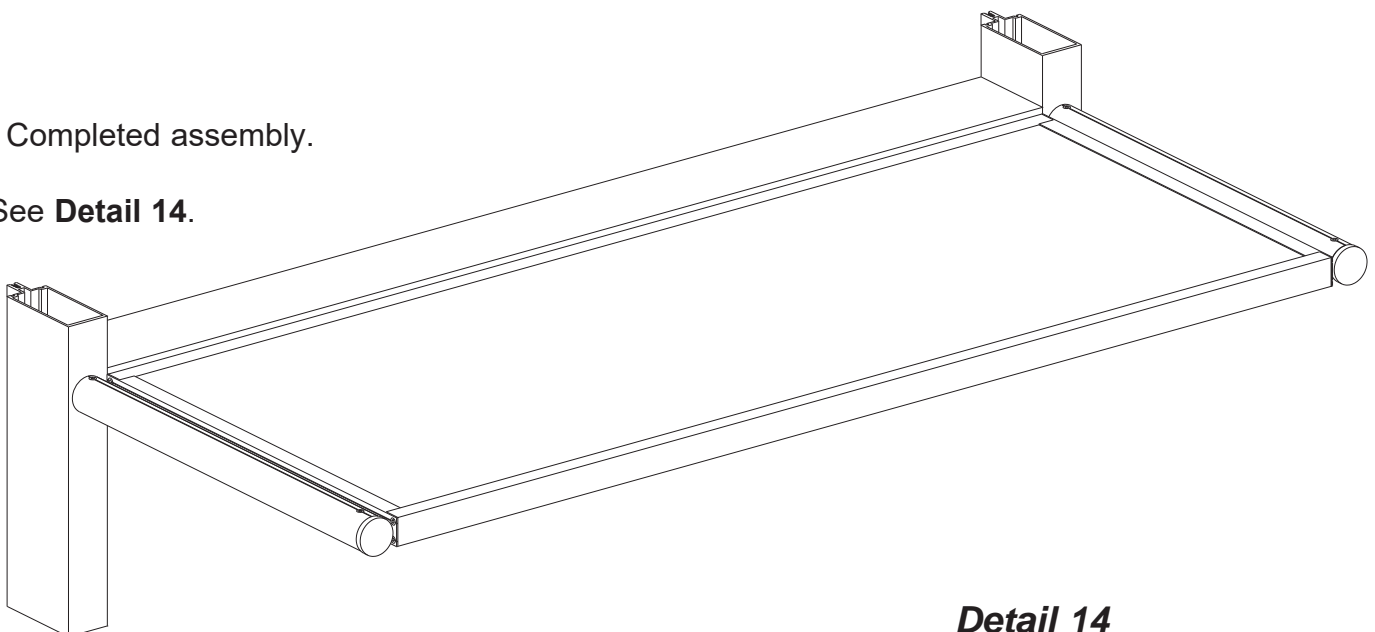
See **Detail 13**.



**Detail 13**

- Completed assembly.

See **Detail 14**.

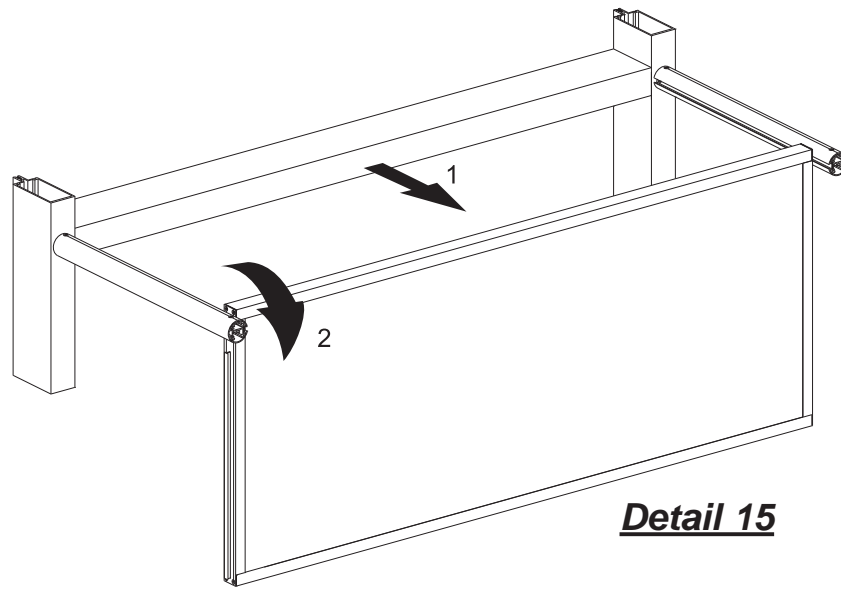


**Detail 14**

**CLEANING PANELS**

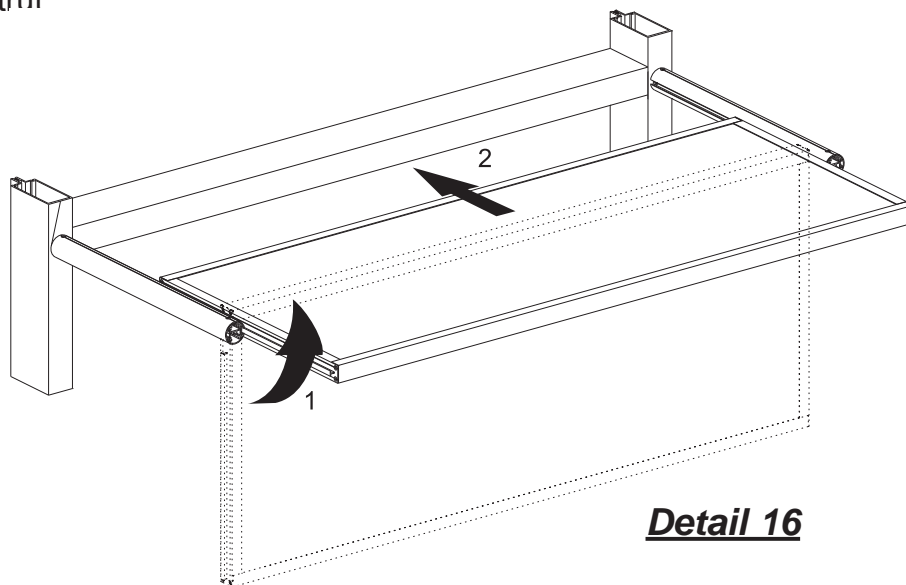
- To slide the panels out for cleaning, remove end cap medallion and slide the panel assembly out of the pockets of the struts until the “T” shape is outside of the pocket, but not the E1-3899 cleaning pivot.
- Rotate the assembly panel down to clean.

See **Detail 15**.

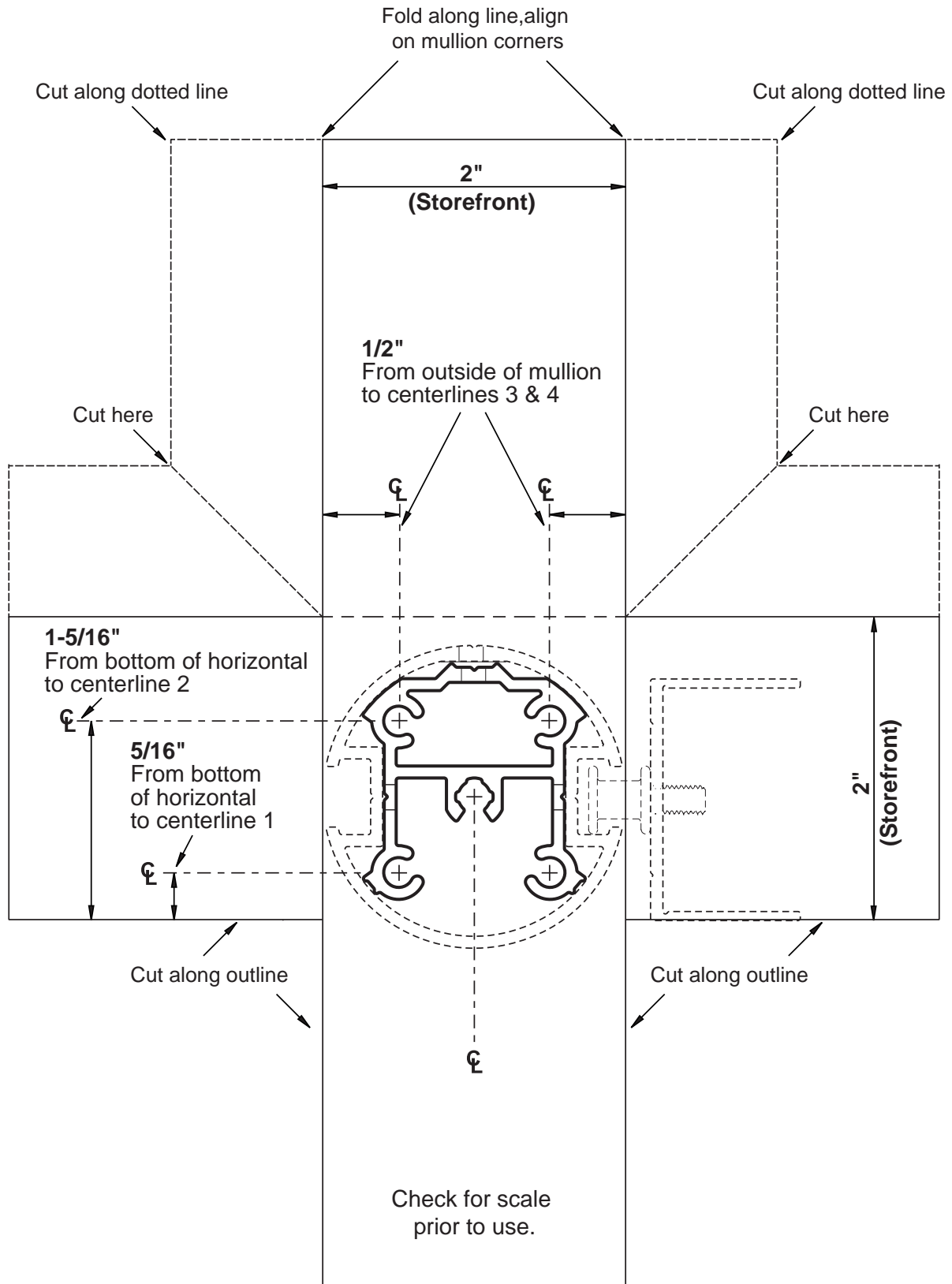


- To restore the panels to the correct position, rotate the panel assemblies up to where the “T” shape is once again lined up with the pockets of the struts.
- Slide the panel toward the wall system horizontal until there is a 1/16” gap between the horizontal and the interior trim piece, leaving 1/2” from the end of the strut to the end of the fascia trim piece.
- Screw on the E1-3894 end cap medallion back into the center screw spline of the shear block in the exterior end of the strut

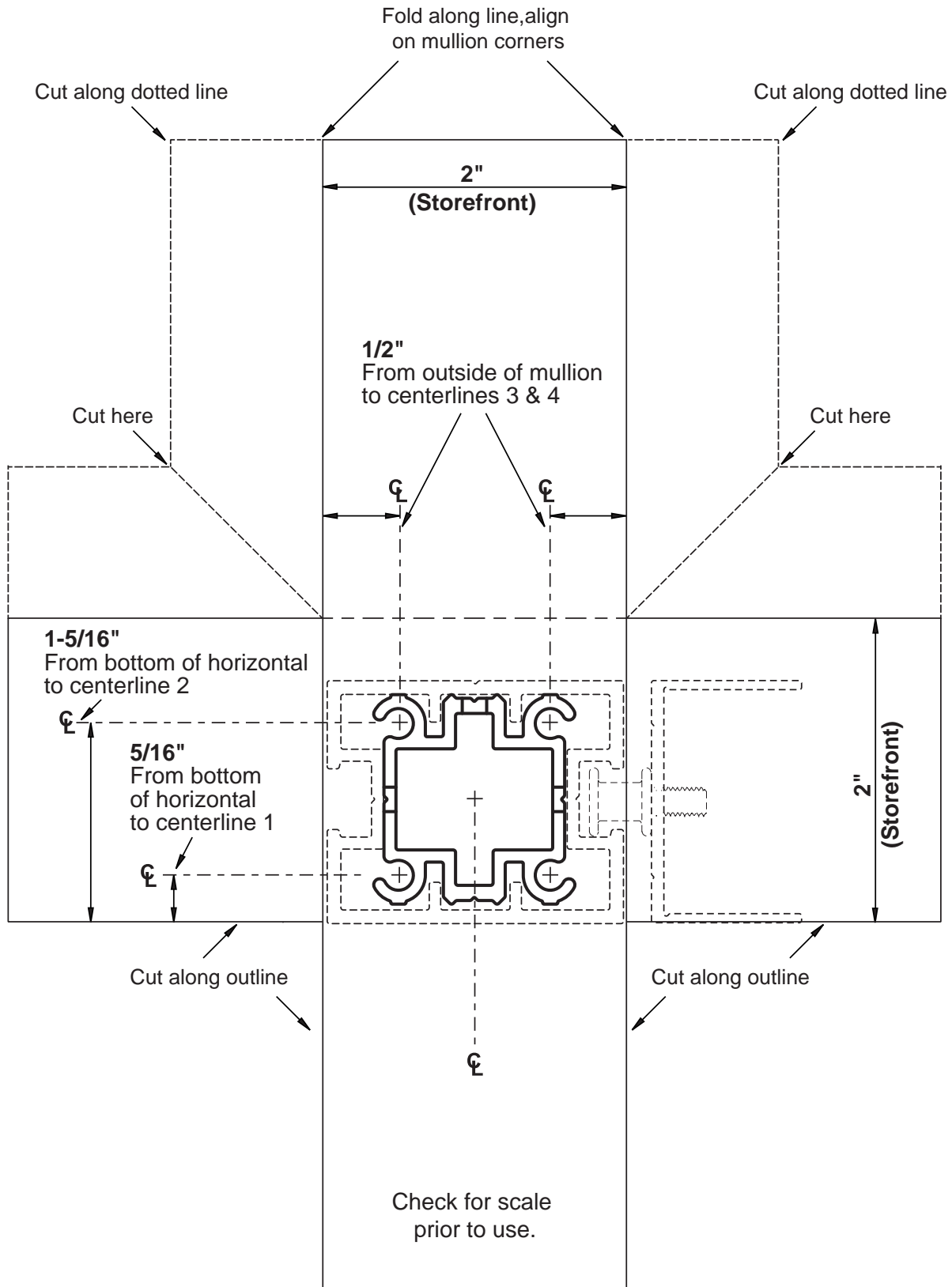
See **Detail 16**.



**DRILL TEMPLATE – STOREFRONT**  
 When using round strut.

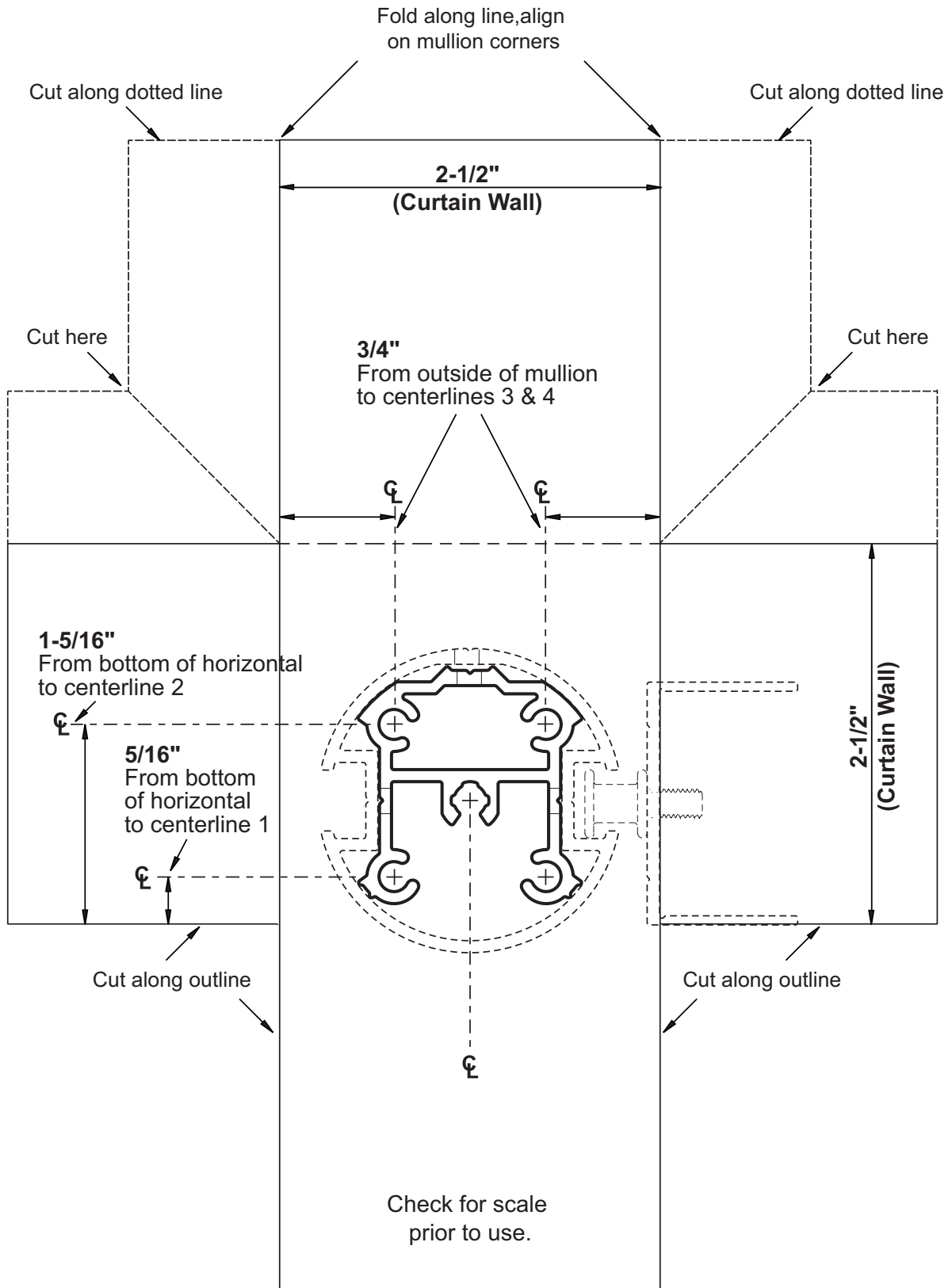


**DRILL TEMPLATE – STOREFRONT**  
When using square strut.

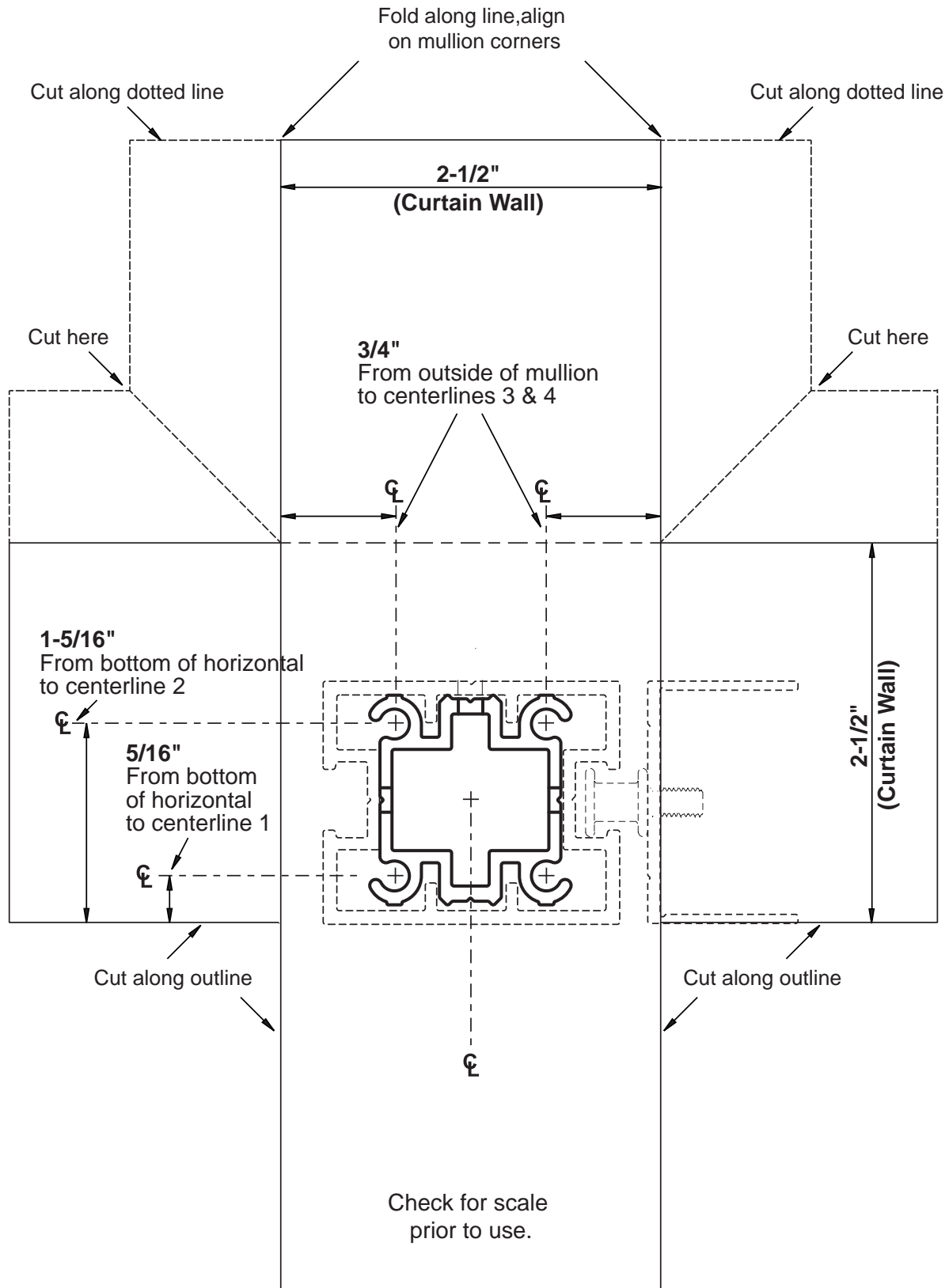




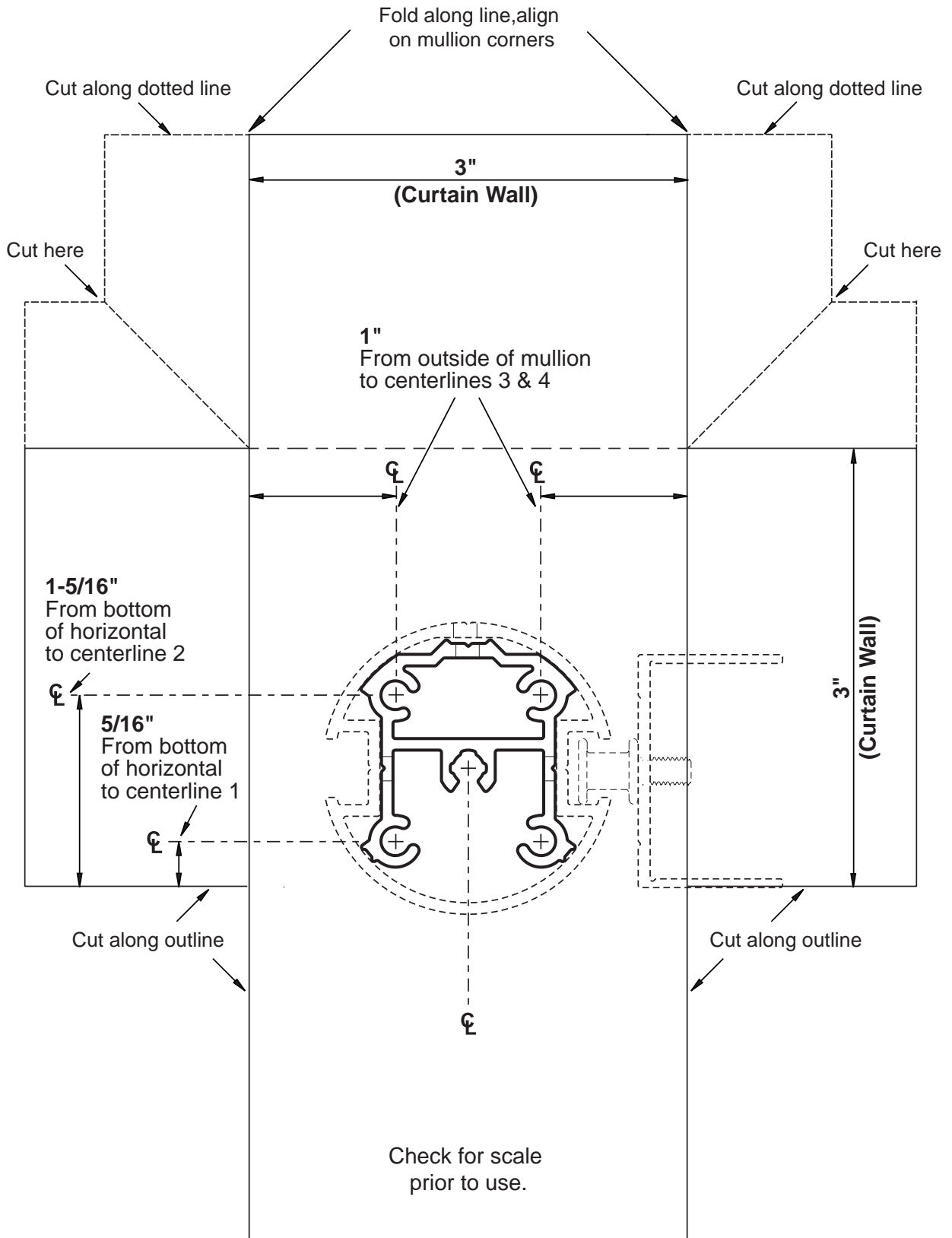
**DRILL TEMPLATE – 2-1/2" CURTAIN WALL**  
**When using round strut.**



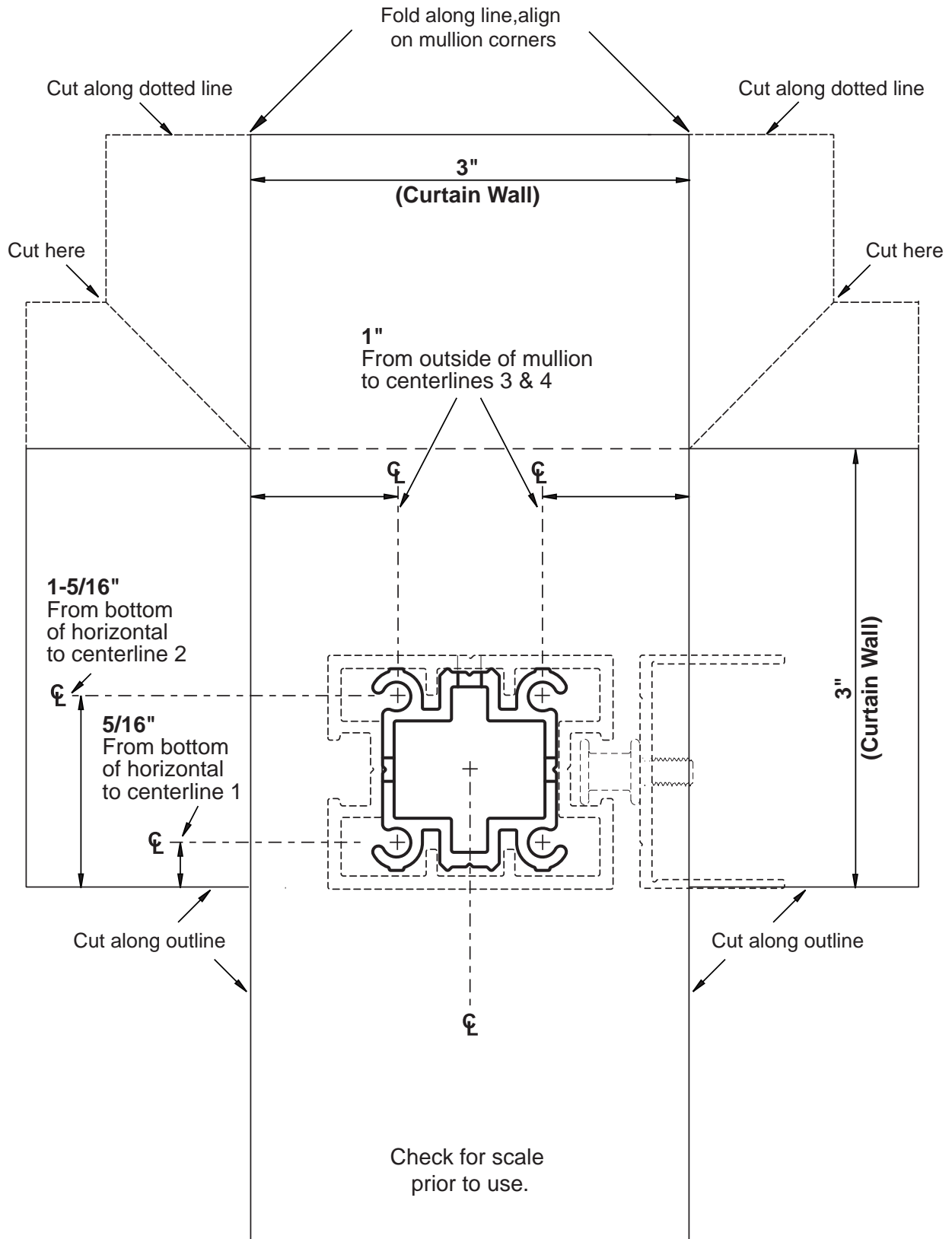
**DRILL TEMPLATE – 2-1/2" CURTAIN WALL**  
When using square strut.



**DRILL TEMPLATE – 3" CURTAIN WALL**  
**When using round strut.**



**DRILL TEMPLATE – 3" CURTAIN WALL**  
When using square strut.







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