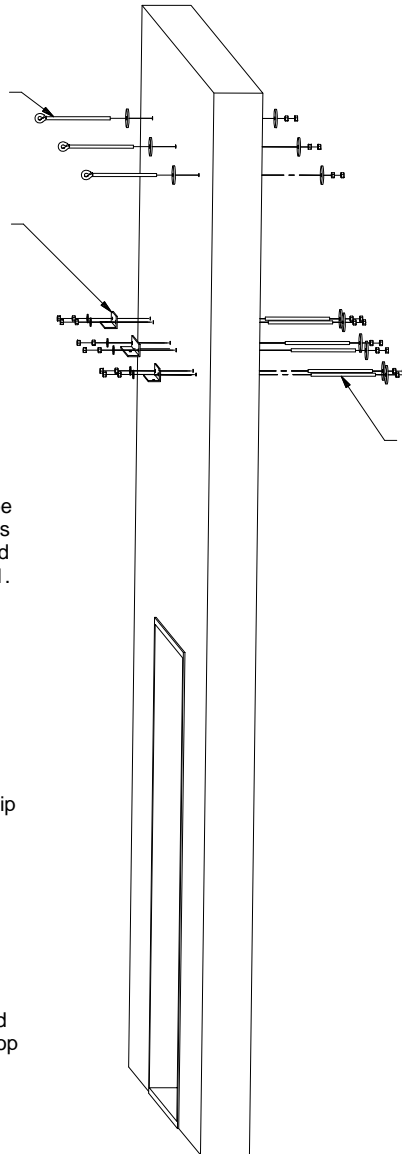


**MAPES INDUSTRIES  
LUMISHADE  
INSTRUCTIONS**

1/2"ØX16" ASTM A193 GRADE B5 THRU EYEBOLT (WELDED) - (INSTALL W/ WELD UP) W/ 3"ØX.25 PLTD STEEL WASHER, STD WASHERS, & NUTS

EXTR. ALUM. REAR CLIP ANGLE (2"X2"X.1875X8" ENDS) (2"X2"X.1875X12" CENTERS)



**Step 1.**

Layout and install rear clip angles (2" x 2" x 3/16" Angles 8" ends, 12" centers). This is done as follows: On a straight run of canopy, begin at whichever end is most convenient. It is suggested that a string or line be stretched across the building face as a guideline to be sure all clip angles are straight and level. In spacing these angles, all measurements should be made from the starting point to prevent cumulative error. **SEE FIG. 1.** Mapes will supply continuous angle in the event that the canopy must span wall openings (Windows, cut-outs, etc.)

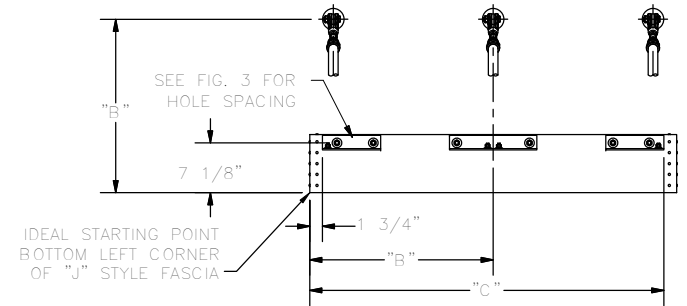
**IF CONTINUOUS REAR GUTTER IS USED, REFER TO PARAGRAPH ON REAR GUTTER ON PAGE 4 OF THIS INSTRUCTION BOOKLET.**

**Step 2.**

Install eyebolts. These should be directly above the center of the rear clip angles, except at the two ends. This will make the center to center spacing the same dimensions as the lengths of the canopy sections (at the two ends, the eyebolt is spaced 1 1/2" in from the end of the section) **SEE FIG. 2.** Drill 9/16" holes for through eyebolts. If, due to windows, etc., not all eyebolts can be spaced as described, a continuous front clip angle will be supplied.

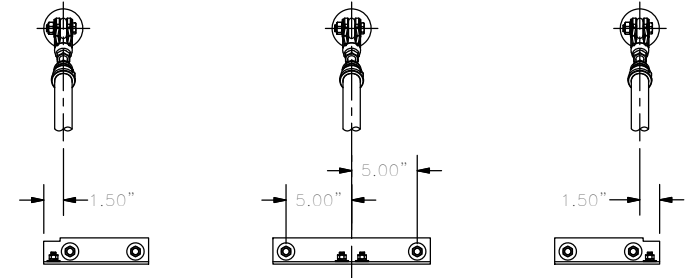
**Step 3.**

Prepare rear clips. Place square washer over each 3/8" carriage bolt and insert one of these bolts up through each slot in the rear clip angles. Drop on a 3/8" lock washer and turn on a 3/8" nut a couple turns so the assembly hangs loosely in the slot. **SEE FIG. 3.**

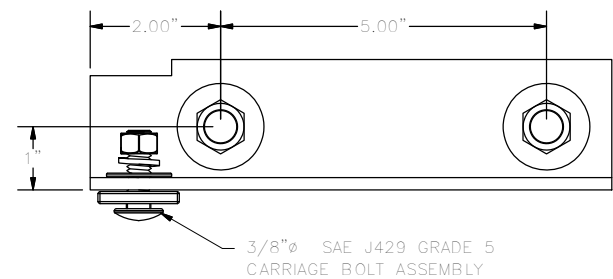


**1 MEASURING EXAMPLE**  
Scale: N/A

1/2"Ø ASTM A193 GRADE B7 THRU THREADED ROD W/ 3"ØX.25 PLTD STEEL WASHER, STD WASHERS, & NUTS



**2 HANGER ROD SPACING**  
Scale: N/A



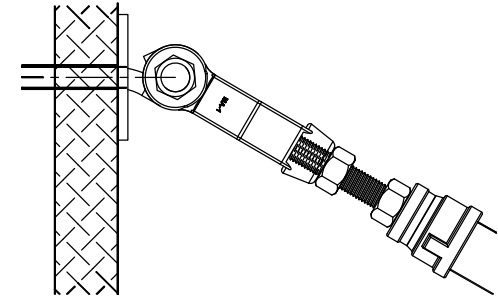
**3 REAR CLIPS PREPARED**  
Scale: N/A

3/8"Ø SAE J429 GRADE 5 CARRIAGE BOLT ASSEMBLY

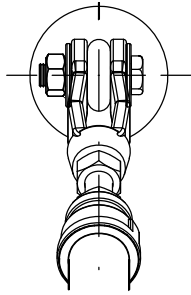
**Step 4.**

Hanger rod assembly. Assemble Upper Clevis as shown in **FIG. 1**. Then Attach clevis end of hanger rod to eyebolt using  $\frac{5}{8}$ " x  $2\frac{1}{2}$ " bolt with a flat washer on each side of eye, and  $\frac{5}{8}$ " nut on end.

**SEE FIG. 1A.** At lower pipe end screw  $\frac{5}{8}$ " x 6" threaded rod into reducer end of hanger rod, leaving about 3" of thread showing. Now turn two  $\frac{5}{8}$ " nuts onto threaded rod. Insert rod into slot in front clip angle with a  $\frac{5}{8}$ " flat washer on each side of slot followed by a  $\frac{5}{8}$ " nut. This assembly should look like **FIG. 2**.



**1 UPPER CLEVIS ASSEMBLY, TYP.**  
Scale: N/A



**1A UPPER CLEVIS ASSEMBLY, TYP.**  
Scale: N/A

DROP-FORGED STEEL CLEVIS  
( $\frac{5}{8}$ " THROAT -  $\frac{5}{8}$ " EYE)

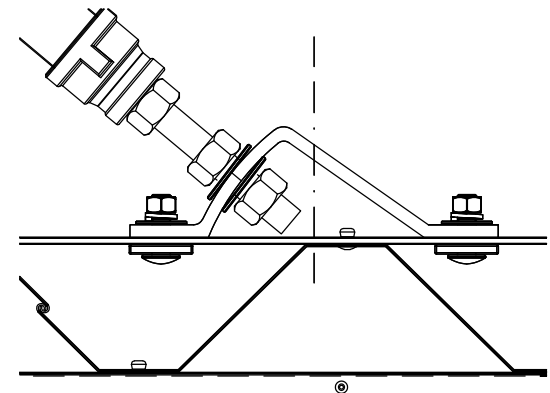
$\frac{5}{8}$ " $\times$ 6" ASTM A193 GRADE B7  
THREADED ADJUSTMENT ROD W/ (2)  
 $\frac{5}{8}$ " $\phi$  SAE J429 GRADE 5 NUTS

1" PIPE REDUCER

$\frac{5}{8}$ " $\phi$  SAE J429 GRADE 5 FLAT WASHER  
&  $\frac{5}{8}$ " $\phi$  SAE J429 GRADE 5 NUT EACH  
SIDE OF FRONT CLIP ANGLE

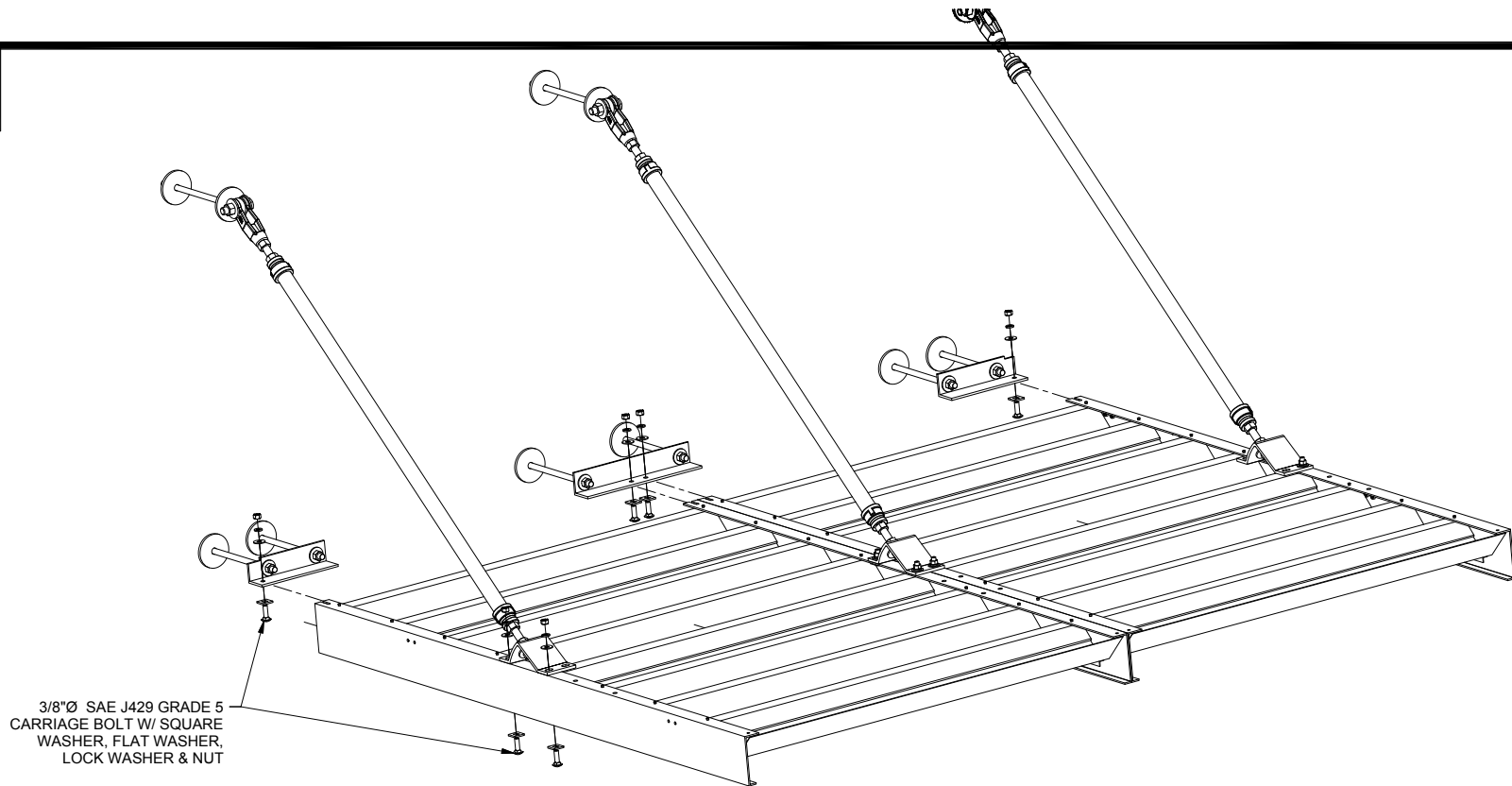
$\frac{5}{8}$ " $\times$ 6" ASTM A193 GRADE B7  
THREADED ADJUSTMENT ROD W/ (2)  
 $\frac{5}{8}$ " $\phi$  SAE J429 GRADE 5 NUTS

FRONT CLIP ANGLE  
(SEE CANOPY ASSEMBLY  
FOR LOCATION)



**2 FRONT CLIP ASSEMBLY, TYP.**  
Scale: N/A

MAPES INDUSTRIES  
LUMISHADE  
INSTRUCTIONS



**Step 5.** (NOTE: If section comes "KD" (knocked down) see Step 5A on page 7).

Section installation. **NOTE:** Rear gutter must be in place before sections and fascia are put on. Drainage holes will be field drilled and set with either a scupper or drain stub per customer request. Using two people, pick up the first canopy section and slip it into position under the rear clip angle. The slots at the rear of the section must rest on the square washer as illustrated above. It is not necessary to tighten this assembly at this time, it can be tightened later from the top. While holding the section about level, swing the first two hangar rods out from the wall and attach the front clip angles to the canopy section through the 9/16" holes provided on the section angles. Put the square washers onto the 3/8" carriage bolts then insert each bolt up through the 9/16" holes. Drop on a 3/8" lock washer and a 3/8" Nut. **SEE ABOVE.** Adjust threaded rod and 5/8" nuts as necessary, so section hangs approximately level.

**Step 6.**

Multiple section assembly. Hang the rest of the canopy sections in the same way as described in **Step 5.**

**Step 7.**

Securing sections. Tighten the sections to the rear clip angles by getting up onto the canopy and tightening the 3/8" nuts. Be sure a lock washer is under each nut. **IT IS BEST TO PLACE 1/2" OR THICKER PLYWOOD OR PLANKS ON TOP OF CANOPIES TO WORK ON.** This will spread out load and prevent any damage from assembly.

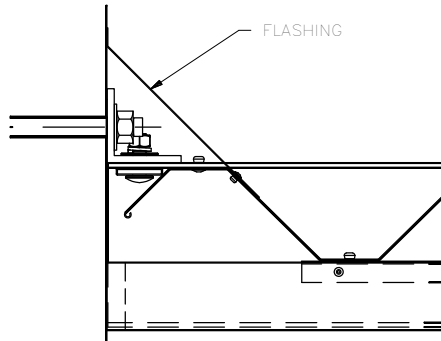
**Step 8.**

Section adjustments. At the front clip angle, make final adjustments on the hangar rod nuts to make all sections hang uniformly straight and true. Sections should pitch forward away from building about 1/16" per foot of projection. Example: On a 6 ft. projection canopy, the front edge of the canopy sections should be about 3/8" lower than the back edge along the wall. ( **NOTE:** If the canopy happens to have the continuous rear gutter on the back wall, the sections should be pitched backward toward the building, also with 1/16" per foot, so water will drain to back wall and rear gutter.)

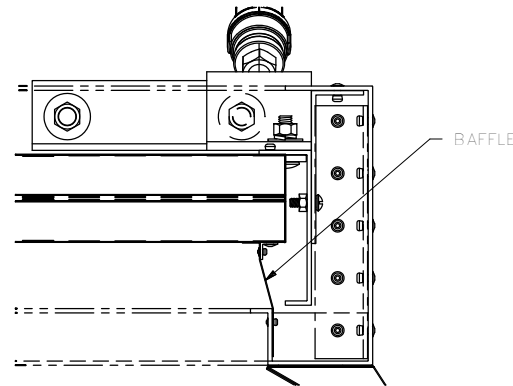
sheet:

03

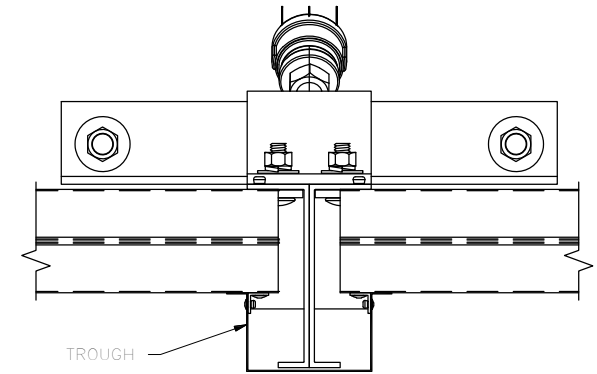
of 7



**1 FLASHING ASSEMBLY**  
Scale: N/A



**2 BAFFLE ASSEMBLY**  
Scale: N/A



**3 TROUGH ASSEMBLY**  
Scale: N/A

**Step 9.**

Install flashing. The flashing furnished will take care of most situations. This flashing is laid over the edge of the rear leaf of the section, and the small bent lip is pressed against the building wall, preferably into a horizontal mortar joint. Caulking may be applied between and over bent flashing edge. Rivet the flashing to the rear leaf about every 2 to 3 feet, caulking over the rivet to help prevent any leakage. Flashing is by Mapes, caulking is "By Others". **SEE FIG. 1.**

**Step 10.**

Install baffles. Baffles are attached to  $\frac{1}{2}$ " x  $\frac{1}{2}$ " angle on the canopy sections using  $\frac{1}{8}$ " rivets. The  $\frac{1}{2}$ " bent edge of the baffle sits flush to the bottom of the leaves and the flat side is riveted to the flat side of the  $\frac{1}{2}$ " x  $\frac{1}{2}$ " angle, with the offset leg of the baffle set toward the outside of the canopy. This offset allows the baffle to sit inside of the fascia and seals the end of the canopy. **SEE FIG. 2.**

**Step 11.**

Install intermediate trough. The intermediate trough slides over the  $\frac{1}{2}$ " x  $\frac{1}{2}$ " angle of two sections, hiding the angle, with the closed end of the trough at the back wall, and the open end draining into the front fascia. **NOTE:** If using rear gutter, the closed end will be at the front of the canopy.  $\frac{1}{8}$ " rivets are put into the sides of the intermediate troughs to attach them to the angles, and through the lip of the fascia to match the bottom of the trough. Caulking should be applied between the lip of the fascia and the bottom of the intermediate trough to prevent the rivets from leaking and prevent any water run back that may occur from the trough edge **SEE FIG. 3.**

**Step 12.**

Fascia installation. **NOTE:** Rear gutter must be in place before sections and fascia are put on. Place fascia on canopy as shown on separate installation instructions, and align for required drainage. Drainage holes will be field drilled and set with either a scupper or drain stub per customer request.

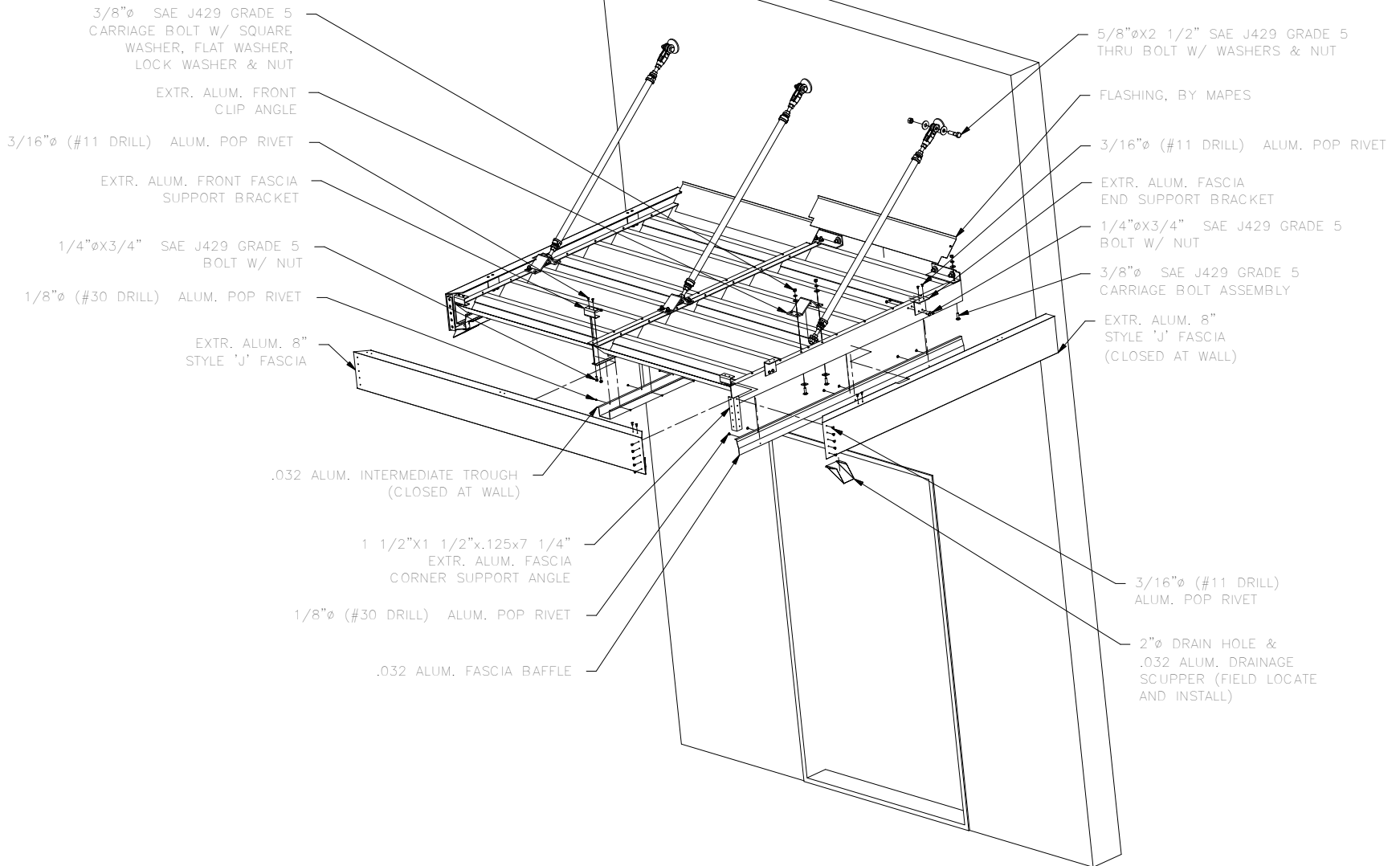
**Step 13.**

Clean Up. Wash or wipe away any smudges or marks from handling, using mild soap if necessary, do not use any abrasives or strong cleaners, as this may affect finish. On clear anodized an eraser can be used to clean marks as well.

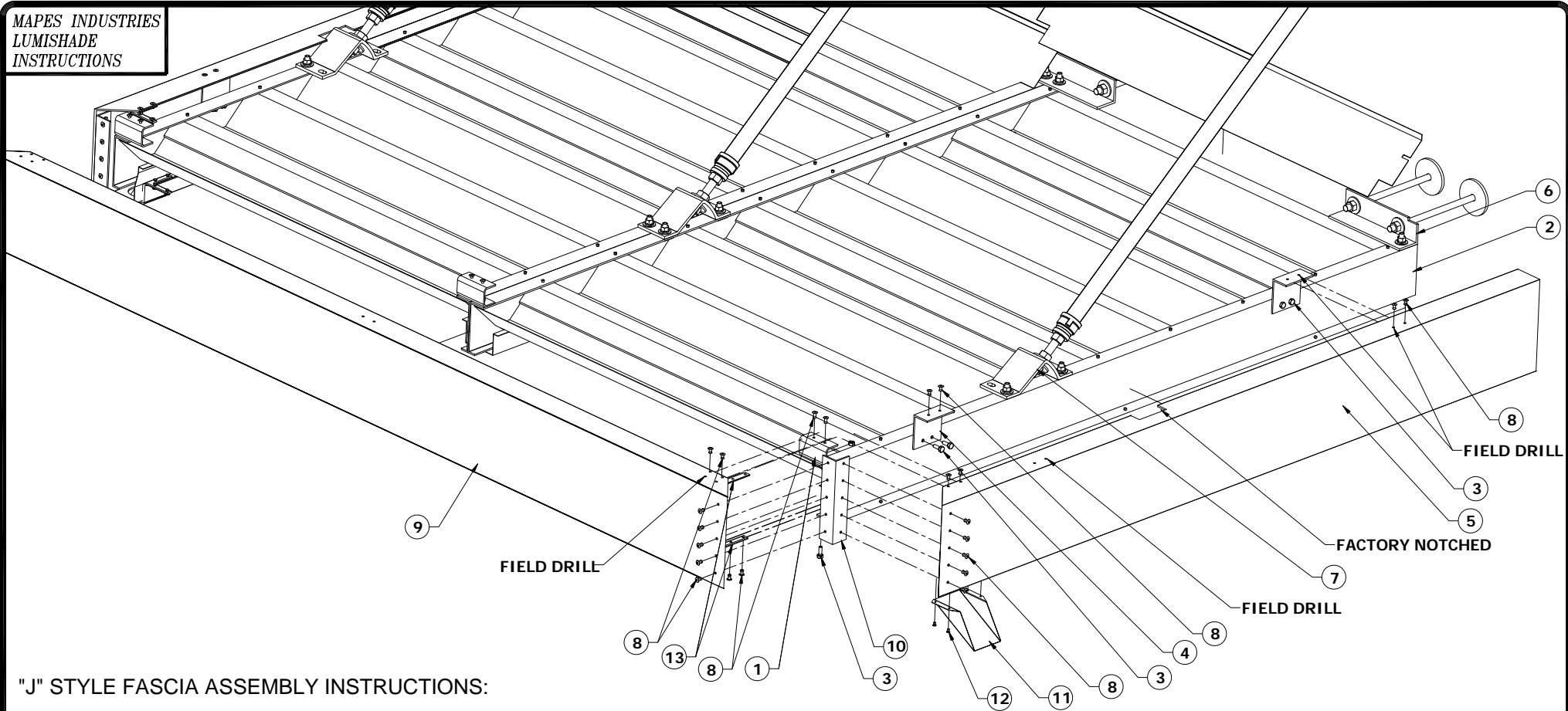
**REAR GUTTER:**

On jobs where rear gutter is being used, the gutter runs continuous along the building wall for the full length of the canopy. The upper lip of this gutter hooks over the top of the canopy sections, **SEE FIG. 6,** while the lower lip is attached to the intermediate troughs with  $\frac{1}{8}$ " rivets. The gutter ends are closed, notched, and sealed to fit the fascia. The piece with the left side closed goes onto the left side of the canopy, (as you face the building), the other on the right side. The center pieces of rear gutter are open and are not notched. Inside and outside splices are furnished for the joints between rear gutter pieces. Caulking should be applied to the inside and outside of the gutter and then the inside and outside splices should be put on. Caulking is not supplied by Mapes. Use  $\frac{1}{8}$ " Rivets to attach splices. Intermediate troughs will have open ends feeding into the rear gutter when rear gutter is used. When no rear gutter is used, open ends will feed into front fascia, and attach to front fascia lip with  $\frac{1}{8}$ " rivets (Refer to **Step 11.**)

**MAPES INDUSTRIES  
LUMISHADE  
INSTRUCTIONS**



**1 CANOPY ASSEMBLY**  
NO SCALE



"J" STYLE FASCIA ASSEMBLY INSTRUCTIONS:

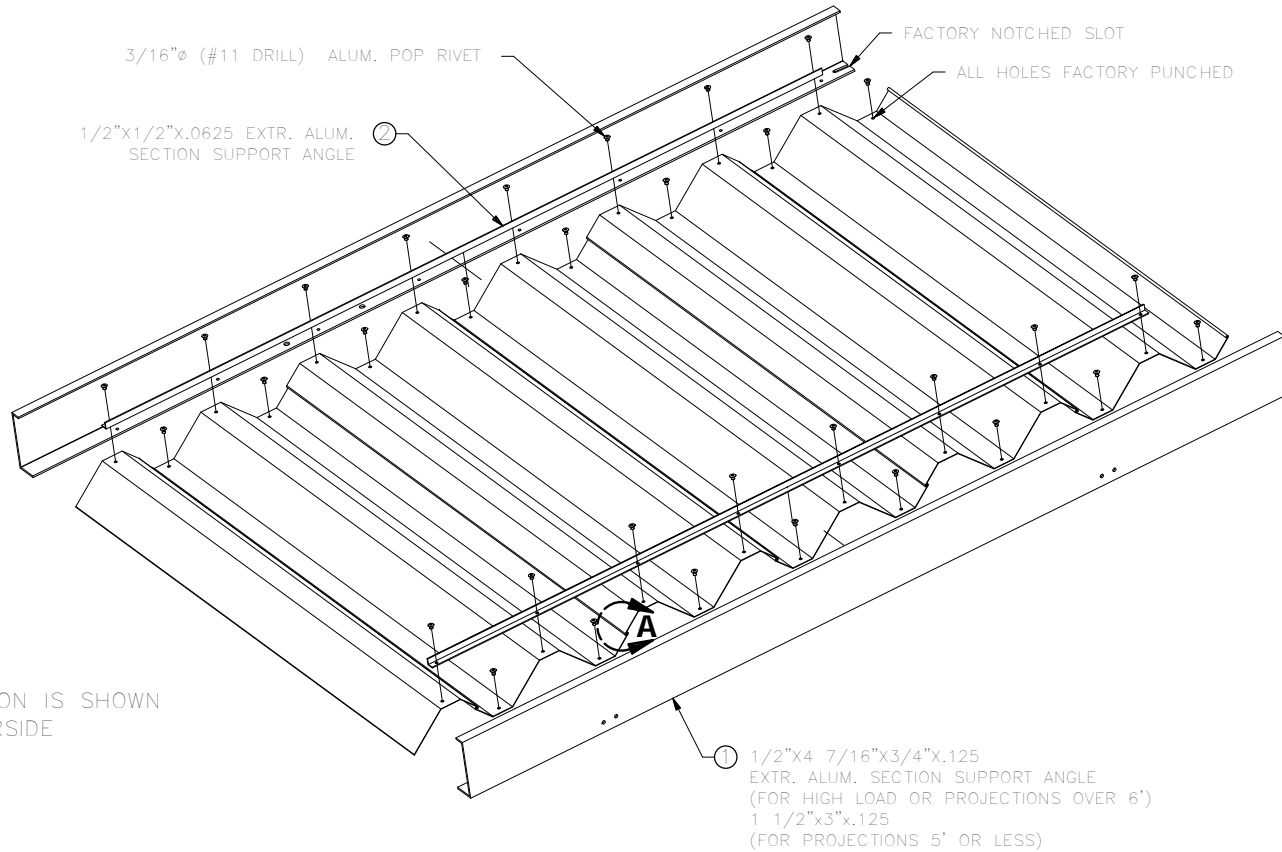
After canopy has been erected, it is time to install the "J" style fascia. Attach the extr. alum. fascia front support brackets (#1) to the section support angle (#2) with the 1/4"Øx3/4" bolts and nuts (#3) provided. Next (facing outward as shown) attach the 1 1/2"x3"x.125x3" extr. alum. fascia end support brackets (#4) to the section support angle (#2). Position 6" to 9" from each end, and field drill (2) 3/16"Ø holes in the section support angle. The 1 1/2" flange on the end support bracket nearest the canopy front should be flush with the top flange of the front support brackets (#1). If drainage is to the front the rear most end support bracket can be raised 1/8" - If drainage is to the rear then it can be lowered 1/8"

The end fascia member (#5) can then be attached to the canopy. With the closed end flush with the wall, set the fascia member on top of the fascia end support brackets (#1), keeping the face of the fascia out 1 3/4" from the face of the section support angle (#2). Secure with 3/16"Ø alum. pop rivets (#8). (field drill holes in top of fascia member). When both end fascia members (#5) are attached, then attach the front fascia member (#9).

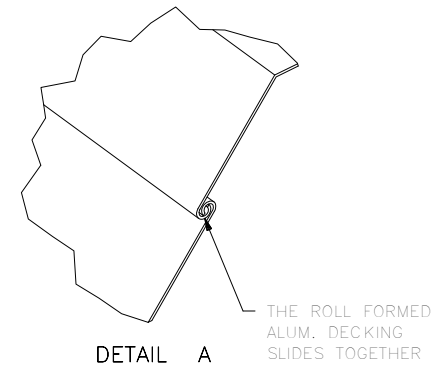
Place the top lip of the front fascia member (#9) on top of the extr. alum. fascia front support brackets (#1), and secure with 3/16"Ø alum. pop rivets (#8). To assure a tight fit between the mitered ends 1 1/2"x1 1/2"x.125x7 1/4" extr. alum. fascia corner support angles (#10) have been included. The corner support angle is fastened with 3/16"Ø alum. pop rivets (#8). Add corner irons (#13) if inside corners don't align. These irons will dress up corners.

Finally, add a bead of sealant all along the seam at the corner, paying particular attention to the corner and the seam across the bottom. (If canopy is to be front draining, when sealant has cured, a 2"Ø drain hole may be field drilled at the corner, with a scupper (#11) secured with 1/8"Ø alum. pop rivets (#12) and additional sealant added).

**MAPES INDUSTRIES  
LUMISHADE  
INSTRUCTIONS**



NOTE: SECTION IS SHOWN FROM UNDERSIDE



**Step 5A.**

If canopy comes "KD" (knocked down) Section assembly is as shown above. Slide the roll formed alum. decking together as shown in **DETAIL A**. Make sure the decking is pointing up on the wall side as shown above. Attach the decking to the extr. alum. section support angle (#1) with 3/16"Ø alum. pop rivets starting at one end and working toward the other. Attach the section support angle (#2) facing outward to the decking with 3/16"Ø alum. pop rivets starting at one end and working toward the other .

sheet:

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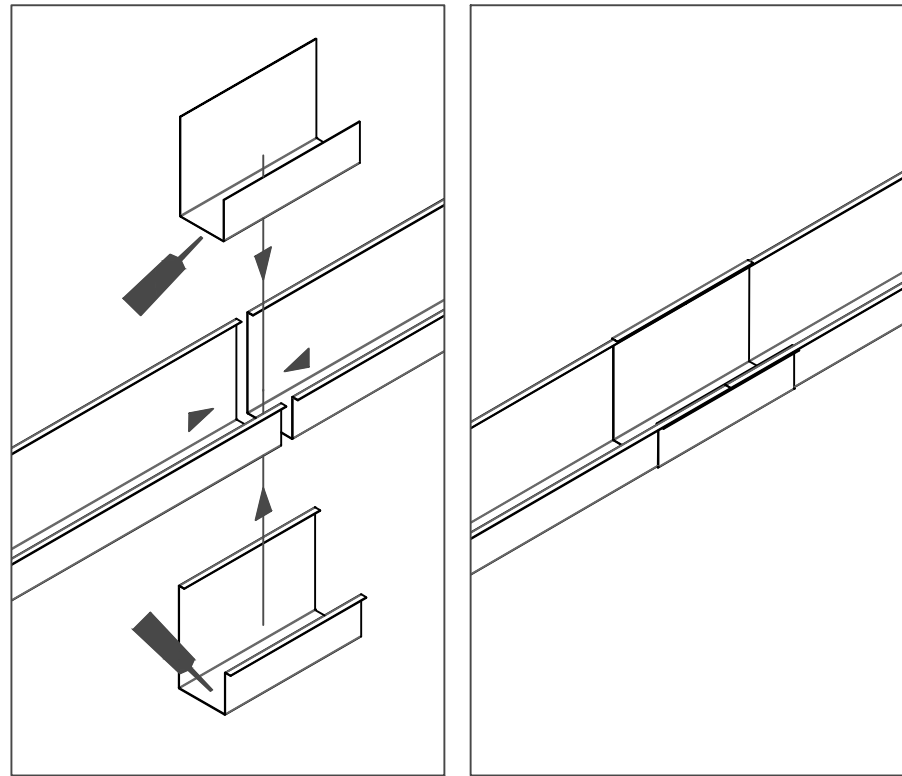


figure 4

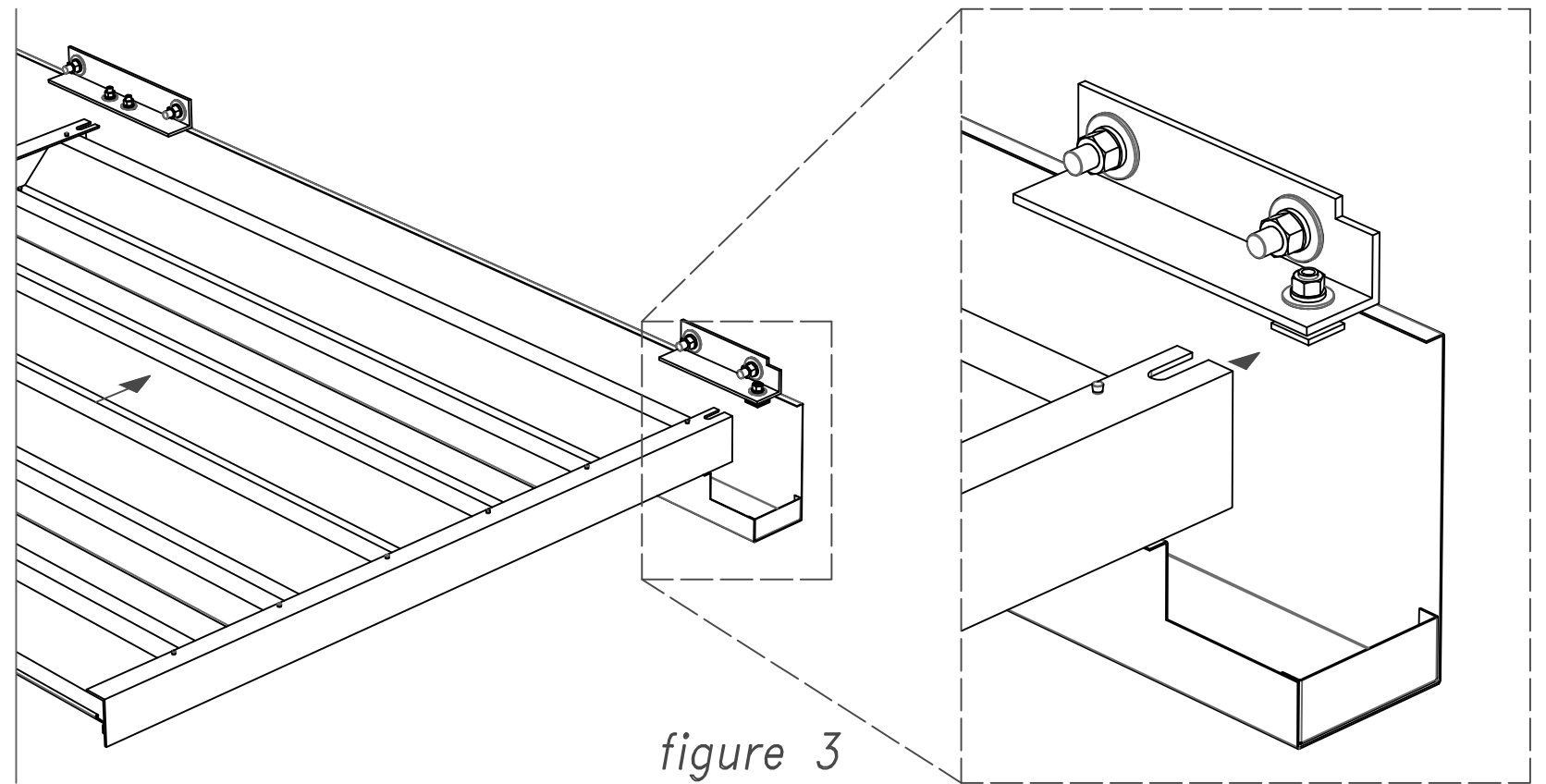


figure 3

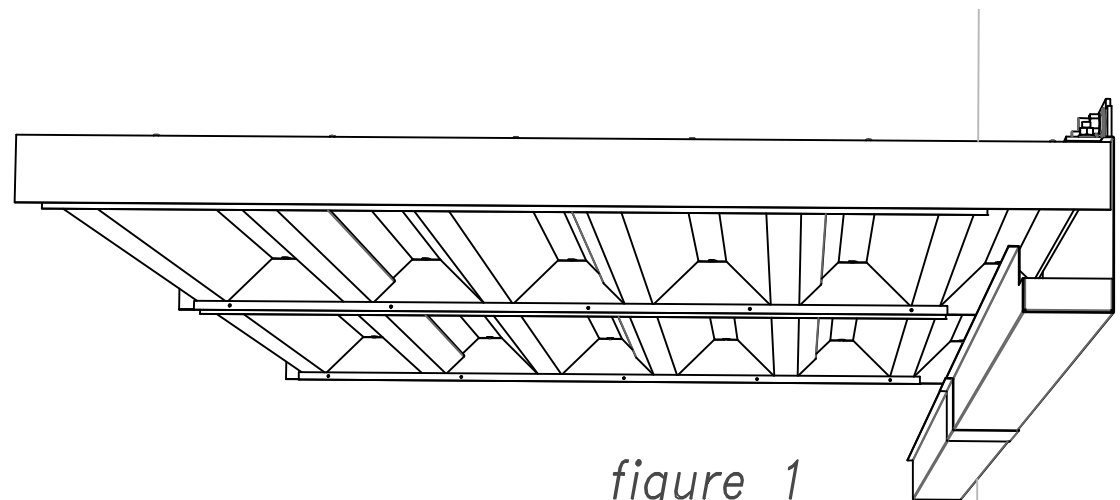


figure 1

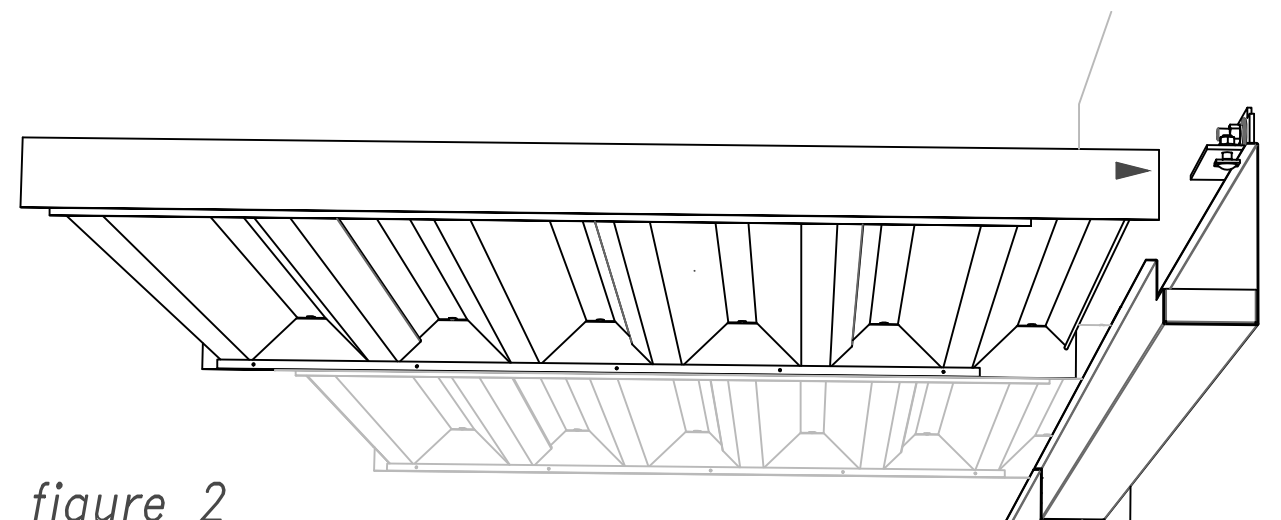


figure 2

## REAR GUTTER:

On jobs where rear gutter is used, the gutter runs continuously along the the building wall for the full length of the canopy (Fig.1 above). The upper lip of this gutter hooks over the top of the canopy sections, as the sections are installed on the rear clips (during Step 5, sheet 03), securing the gutter between the wall and section (Figs. 2 & 3). (The lower lip of rear gutter is later attached to the intermediate troughs with  $\frac{1}{8}$ " rivets). The gutter ends are closed, notched, and sealed to fit the fascia. The piece with the left side closed goes onto the left side of the canopy (as you face the building), the other on the right side. The center pieces of rear gutter are open and are not notched. Inside and outside splices are furnished for the joints between rear gutter pieces (Fig.4). Caulking should be applied to the inside and outside of the gutter and then the inside and outside splices should be put on. Caulking is not supplied by Mapes. Use  $\frac{1}{8}$ " rivets to attach splices. Intermediate troughs will have open ends feeding into the rear gutter (refer to previous steps for information on pitch and adjustment).