



# FLS INSTALLATION INSTRUCTIONS

5' SINGLE SLOPE CANOPY

5' Slingle Slope FLS Canopy Patent No. 5,299,395 issued 4/5/1994

- 1. Identify each of the parts in the "Framing Kit" according to the enclosed packing list. Most parts are marked with a part number.
- 2. **Determine location of "FLS Canopy" on building.** Mark the centerline of canopy on girt above door. This usually is the same as the center of the door opening. Draw a line 2'-6" on both sides of the centerline. Locate, center punch and drill the (8) holes as dimensioned in **Figure 1**.

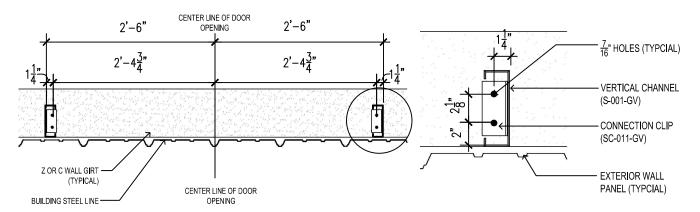
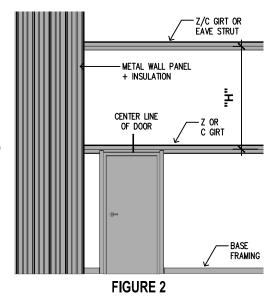
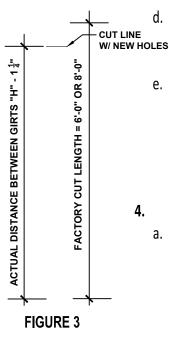


FIGURE 1

## 3. Installing the Vertical Channels

- a. Measure the distance (H) between girts or girt and eave strut. See **Figure 2**.
- b. If ("H") is less than 6'-1 $\frac{1}{4}$ ", deduct 1 $\frac{1}{4}$ " to get the new length of the Vertical Channels. By deducting 1 $\frac{1}{4}$ " you allow for the height of the connection clips. Measure from the end with the tab and cut the end having two holes. See **Figure 3**. For example, if ("H") measures 3'-6", subtract 1 $\frac{1}{4}$ " which leaves 3'-4 $\frac{3}{4}$ ". Cut the (2) Vertical Channels to a length of 3'-4 $\frac{3}{4}$ ".
- c. Drill (2)  $\frac{7}{16}$ " diameter new connection clip holes in the cut end of the the Vertical Channels. Use the cut off as a template to create new holes.





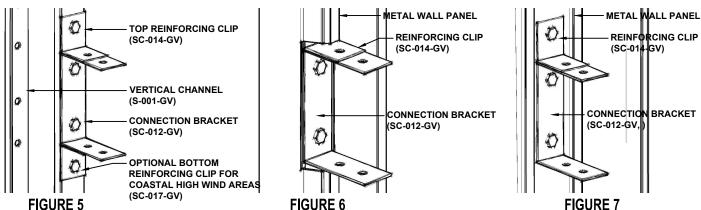
d.

- Attach the Clips, (Part SC-011-GV), to both ends of the Vertical Channels with (2)  $\frac{3}{8}$ " diameter bolts. The 3" leg of the clip attaches to the Vertical Channel.
- Using \( \frac{3}{8} \)" diameter bolts, attach the tabbed end of the Vertical e. Channel, open "C" facing toward the center, to the drilled girt holes. Level and plumb the Vertical Channel in both directions. Using the top connection clip, mark the hole locations and drill  $\frac{7}{16}$ " diameter holes in the upper girt or eave strut. Bolt together with  $\frac{3}{8}$  bolt/nuts. (Figure 4) Repeat for other Vertical Channel.

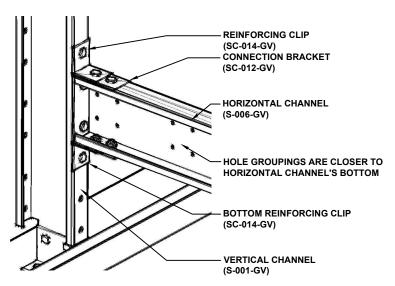


#### **Installing the Horizontal Channels** 4.

- Determine the mounting height of your canopy. The Vertical Channel is punched with a a. variety of holes to choose from.
  - Figure 5 Structural Connection Detail Top Reinforcing Clip (SC-014-GV), Connection Bracket (SC-012-GV) and optional bottom Reinforcing Clip (SC-014-GV) (for coastal high wind areas) all connected with  $\frac{3}{8}$ " bolt/nuts. ALWAYS INSTALL THE TOP REINFORCING CLIP (SC-014-GV).



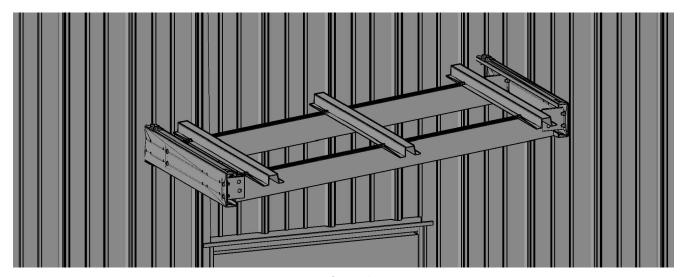
- 2. Figure 6 - Use your selected holes in the Vertical Channel to drill pilot holes through your metal wall panel. If the pilot hole lands on or near a panel rib, cut a (+/-) 2" x 6" hole to allow the bracket to penetrate through the panel as shown (Figure 6). ALWAYS INSTALL THE TOP REINFORCING CLIP (SC-014-GV).
- Figure 7 If your bracket location falls in the flat of the wall panel you may 3. surface mount the Reinforcing Clip (SC-014-GV) and Connection Bracket (SC-012-GV) as shown. You may want to remove some of the batt insulation to allow a tight connection. ALWAYS INSTALL THE TOP REINFORCING CLIP (SC-014-GV).
- Horizontal Channel (S-006-GV) The bottom of the Horizontal Channel is identified by the b.  $\frac{1}{4}$ " holes in the face of the member. These holes are closer to the bottom then the top. The open part of the "C" should face to the center of the canopy as shown on the cover of the instructions. Level and bolt the Horizontal Channel to the Connection Bracket and Reinforcing Clip as shown in **Figure 8** using  $\frac{3}{8}$ " bolt/nuts.



**FIGURE 8 - EXTERIOR SUPPORT** 

# 5. Secondary Framing

- a. Gable Channels Attach (4) gable channels (S-004-GV) as shown in Figure 9. Attach to Horizontal Channels using (2) Connection Clips (SC-015-GV) and  $\frac{1}{4}$ " bolt/nuts. Note holes for purlin attachment must be on top of Gable Channels.
- b. Hat Purlins Attach (3) Hat Purlins (S-005-GV) to the Gable Channels using  $\frac{1}{4}$ " bolts/nuts. If necessary, use a channel lock pliers to squeeze the Hat Purlins to allow the holes to line up. See **Figure 9** for a completed FLS frame. **Purlins are not punched symmetrically, shorter cantilever toward wall.**



### 6. Roof Panel & Trim

FIGURE 9

### a. Standard Transition Flash Installation for "R-Panel" wall panel

- 1. Place the Roof Sheet on to the Hat Purlins. Center the sheet and slide against the building wall sheets as shown. Mark each of the wall corrugations at the top of the roof panel per **Figure 10**.
- 2. Mark where the roof panel will end. Remove roof panel and set aside.

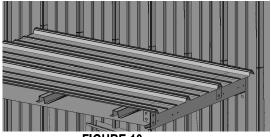




FIGURE 10 FIGURE 11

- 3. Cut each of the major ribs as shown in Figure 12 following the roof slope. **Do not cut the** minor ribs or the flat of the panel. If the end of the roof sheet ends on a major rib, only cut the portion of the rib in line with the roof panel.
- 4. Transition Flashing (T-036-00), 2" x 4" angle flashing, 2" leg down, 4" leg over the roof panel. With the flashing centered on the canopy, push the flashing to the wall and mark a vertical lines on the 2" leg on each side of the major ribs. Notch the 2" leg as in Figure 12. Trim off any part of 2" leg that interferes with the horizontal channel.

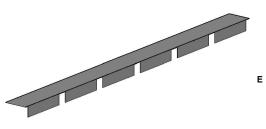


FIGURE 13

FIGURE 12

5. Using stitch screws (F-052-00) attach the 2" leg to the wall sheet. Locate fasteners 3" on center as close to bend as possible. Place a bead of caulking (not furnished) on top of transition flash following the contour of the wall sheet.

#### b. **Roof Panel & Trim**

Place the Roof Sheet back on the Hat Purlins. Slide the sheet toward the wall panel allowing  $\frac{3}{4}$ " 1. from the end of the Hat Purlins per Figure 14. Align the bottom of the panel with the end of the Transition Flashing. Square panel with canopy framing. Attach Roof Panel to lowest Hat Purlin with Structural Screws per Figure 14.

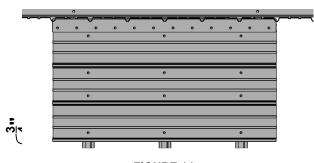


FIGURE 14

- 2. Using the roll of Tape Sealant, apply to the last major roof panel corrugation under the Transition Flashing from eave to eave. Remove paper and secure the Transition Flashing to the Roof Sheets with Stitch Screws (F-051-00) 6" on center.
- 3. Apply another strip of Tape Sealant on the outer most major rib of the roof sheet. Place the Rake Trim in place as shown in **Figure 15.**

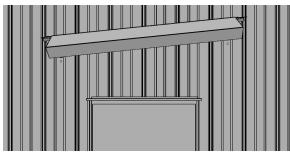
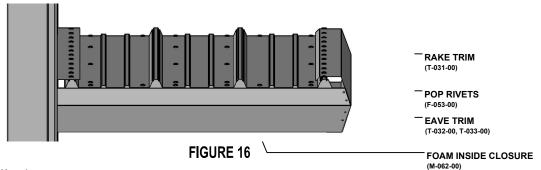


FIGURE 15

- 4. Install the Rake Trim, line up with the center of the roof sheet and press on to the tape sealant. Attach with Stitch Screws (F-051-00) 6" on center.
- 5. Measure the distance from the Rake Trim to the wall panel to determine the length of Right/Left Eave Trim. Notch around panel ribs as required to fit tightly against the wall. Cut each side separately due to wall panel rib locations. Align the center line of the trims and attach the Eave Trim to the Rake Trim using Pop Rivets (F-053-00), (4) per connection. Install a Foam Inside Closure on top of the Eave Trim and under the Roof Panel. Square the Eave Trim with the Roof Panel and install Structural Roof Screws through the Roof Panel, Eave Trim and Horizontal Channel.
- 6. Cut a piece from the Eave Filler (T-035-00) to fill in the gaps shown in Figure 16. Attach with Pop Rivets or Stitch Screws from below.



#### c. Soffit Sheets

- 1. Option #1 If you have outside foam closures matching your wall panel configuration, attach Soffit "F" Trim (T-037-00) with foam closures to the wall panel following the line of the underside of the canopy framing. Cut Soffit Sheet to span from Soffit "F" Trim to the bottom leg of the Rake Trim. Attach each Soffit Sheet (C-044-00) with (4) Soffit Screws (F-054-00) to the underside of the Gable Channels. The Soffit Panels can be easily cut with a tin snips.
- 2. Option #2 Cope the Soffit Sheet ends to match the configuration of the wall panel. When you have it so it fits nicely to the wall, cut the front end so that it will lie on the Rake Trims bottom leg. Attach Each Soffit Sheet with (4) Soffit Screws to the bottom of the Gable Channels.

# 3. Clean Up

a. Using a broom, sweep any metal chips off the roof. The Kynar500/Hylar 5000 Fluropon Paint is very durable and if you have any marks or dirt on your roof or trim, it normally can be removed with water and a rag.

