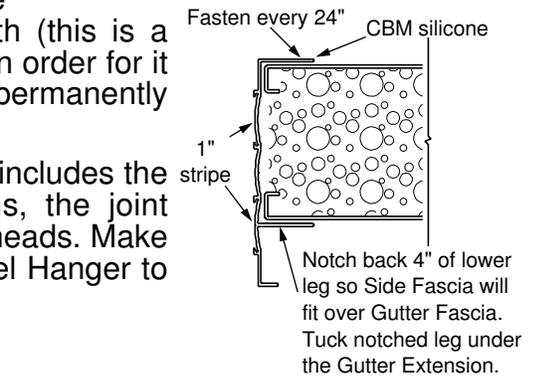
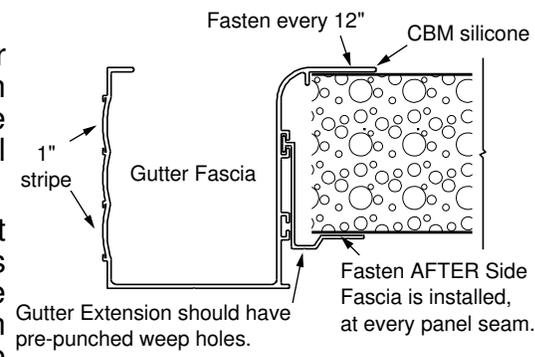
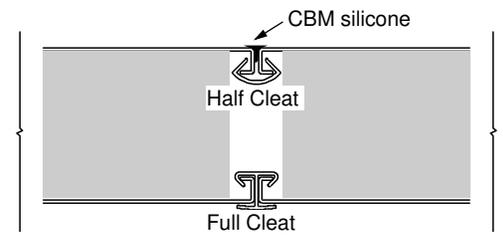
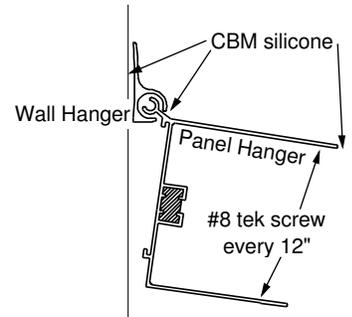


Roof Installation

1. Determine overall width of roof including overhangs.
2. Cut Wall Hanger and Panel Hanger to width of roof. Determine proper location for anchors following the screw chart at the end of this guide and pre-drill Wall Hanger accordingly.
3. Assemble Wall Hanger & Panel Hanger together.
4. Mounting height must allow for a 1:12 pitch minimum. Apply sealant to back of Wall Hanger and install assembly onto wall.
5. For patio covers using Craft-Bilt's 3" 'I' Beam or 3" square beam:
 - i. Cut Beam 3" less than Panel hanger so it fits between the Side Fascias. (see "Notes" regarding splicing).
 - ii. Cut Posts to required height. Attach post brackets to beam and to floor. Attach posts to beam.
 - iii. Stand up the beam/post assembly and fasten to floor brackets. Hold assembly in plumb position by temporarily screwing Side Fascia between Panel Hanger and beam.
6. Place first panel in position. Use self drilling #8 tek screws to fasten panel to Panel Hanger. Use Craft-Bilt's 1/4" Patio Bolts or 1/4" self drilling screws to fasten roof panels to front wall or beam, two per panel. Refer to Craft-Bilt catalog "Fasteners" section.
7. Install next panel leaving a 1/8" space between them. Connect the panels by sliding the cleats into the roll-formed edges of the panels from front of the roof. Cut cleats flush with roof. Top cleat must be continuous, no splices. Install the rest of the panels in this manner.
8. Cut excess width off last panel if necessary before you raise it into position.
9. Measure width at front of roof. Cut Gutter Fascia & Gutter Extension to this size. Slide them together as shown. Fasten along the top as shown. Do not fasten the Extension to the bottom of the roof yet, first install the Side Fascia which will "square up" the Gutter Fascia to the roof..
10. For a nice fit: before cutting Side Fascia to length, mitre cut the ends that meet the house, (depending on pitch, mitre as follows 1:12=4.75°, 2:12=9.5°, 3:12=14.25°). Remove approximately 5/8" of the top leg of the Side Fascia so it can slip under the Panel Hanger and be pushed all the way to the house wall. Hold the Side Fascia in place, mark cut length (this is a straight cut). Remove 4" off the lower leg of the Side Fascia in order for it to overlap the Gutter Fascia. Now the Side Fascia may be permanently installed.
11. Use CBM sealant to completely seal the top of the roof. This includes the seams between the panels, all channel/panel connections, the joint between the Wall and Panel Hangers as well as all fastener heads. Make sure Side Fascia is sealed well to the house and to the Panel Hanger to prevent moisture from getting in at this point.



Important: the recommended way to seal between panels is to push the caulking gun, not pull, squeezing at a rate that produces a slight bulge of sealant at the tip. Pushing this "bulge" should have the result of filling the gap between the panels to the desired depth of 1/4". Clean areas to be sealed with denatured alcohol.

12. Seal end of Gutter Fascia where it meets Side Fascia. Cut hole in bottom of Gutter Fascia and attach drop outlet, elbows and downspout. Use 2³/₈" hole-saw or jig saw with metal blade for Craft-Bilt's drop outlets. Refer to Craft-Bilt catalog for these items.
13. When the roof is complete, flash from house wall over Wall Hanger/Panel Hanger assembly. Always flash from existing structure. Flashing should extend 2" or so past the Panel Hanger. Use sealant to hold flashing to roof skin, do not screw the flashing down.

Notes:

- Pitch: Approximately 1" @ foot minimum (i.e. 8' projection: 8" drop, 12' projection: 12" drop, etc.)
- Splicing Beams: The splice must never occur in the first or last span. Never splice an 'I' Beam when only 2 posts are being used. The splice joint should be within 1/8th of the span (distance between posts) away from the center of a post. Craft-Bilt has splicer kits for 3" 'I' Beam & 3" x 3" tube, instructions are included with the kits.
- Brown roof top colour is not permitted and voids warranty.
- When using honeycomb panels, make sure fins point to the wall. This will allow top & bottom cleats to slide easier
- Clean areas to be sealed with denatured alcohol.

Skylight Installation:

The CBM vinyl skylight comes with instructions in the box regarding installation and cut-out size. Vinyl snap-on covers install from underneath the roof to cover the cut-out. Covers are available for 3", 4 1/2" and 6" roof thicknesses. Covers are ordered separately.

Important: The skylight must be installed in the centre of the span and width of the panel. Skylights must not be installed in adjacent panels. Roofs with skylights must use our Thermally Broken H Coupler (see below). An improper skylight installation will void panel warranty. We strongly recommend the use of CBM sealant since the use of an inferior sealant may void panel warranty. Load tables DO NOT include PanelCraft™ roofs with skylights, site specific engineering will be required.

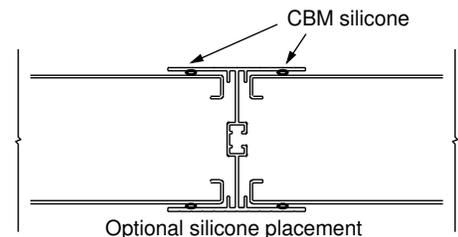
1. Lay panel on saw horses. Mark hole size in centre of panel with a pencil, top and bottom. Set skill saw to 1 1/2" depth and cut from both sides. Take care not to scratch the panel.
2. Install skylight while it is still on the ground. Fasten & seal according to the instructions provided with the skylight. Seal screw heads.
3. Install covers after all panels are in place. The mitres of the vinyl extrusion may not line up perfectly: apply silicone under the covers to glue them to the bottom roof skin. Use masking tape to hold mitres in place. The homeowner can remove the tape on the next day.

Optional Thermally Broken H Coupler Installation:

(mandatory for roofs with skylights)

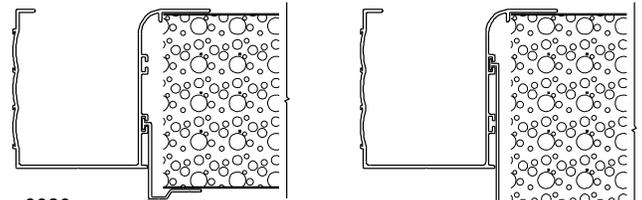
Using 'H' increases allowable roof load, refer to Craft-Bilt load tables. Cut 'H' to length so that it tucks into panel hanger approximately 1" and so that it is flush with the other end of the panels.

Before placing 'H' over panel, make sure there is a generous, continuous bead of sealant under the top flanges as shown at right.



Make sure H is screwed to Panel Hanger & Gutter Fascia with #8 tek screws. Fasteners used on the top of the roof must have their heads sealed.

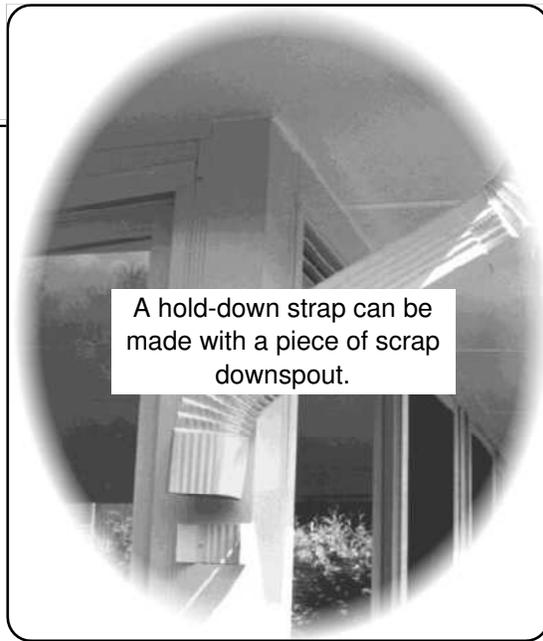
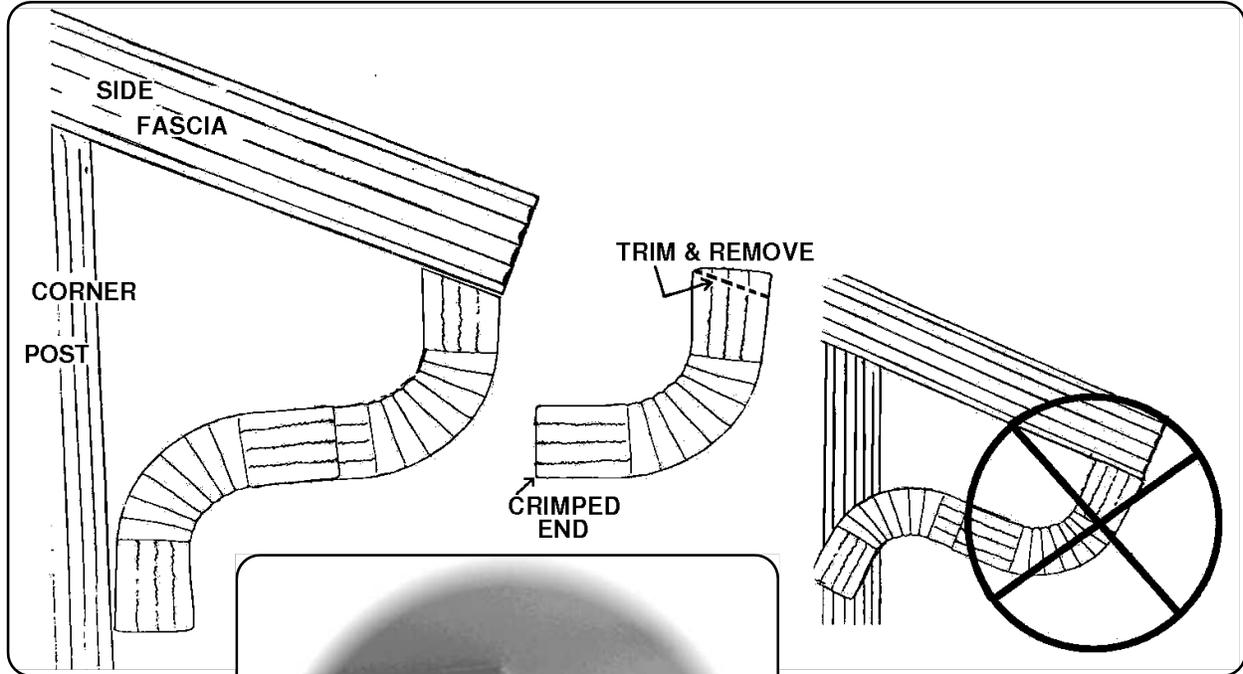
Installation of Gutter to 4½” and 6” Roof Thicknesses:



Gutter Extension part no. 6080xxxx is used for 3” & 4.5” thick panels.

Gutter Extension part no. 6083xxxx is used for 6” thick panels.

Installation of Elbows:



A hold-down strap can be made with a piece of scrap downspout.

Anchor Chart:

| SPAN | ANCHOR | | | |
|------------|----------|-------|---------|-----------|
| | Quantity | Size | Spacing | Embedment |
| Up to 10' | 1 | 1/4" | 12" | 3" |
| 11' to 13' | 1 | 1/4" | 10" | 3" |
| 14' to 16' | 2 | 1/4" | 12" | 3" |
| 17' to 18' | 2 | 5/16" | 12" | 3" |

Note: when 2 screws are required, you may place one in the Wall Hanger, and the other in the back of the Panel Hanger. "Embedment" refers to the length of the screw that is in structurally sound material.

Attach roof to existing structure as per Craft-Bilt stamped connection details or other approved permit documents.