



# FlexLoc®

Technical/Installation Information

# IMPORTANT NOTICE

**READ THIS MANUAL COMPLETELY PRIOR TO BEGINNING THE INSTALLATION OF THE FLEXLOC® PANELS.**

**ALWAYS INSPECT EACH AND EVERY PANEL AND ALL ACCESSORIES BEFORE INSTALLATION. NEVER INSTALL ANY PRODUCT IF ITS QUALITY IS IN QUESTION. NOTIFY MBCI IMMEDIATELY IF ANY PRODUCT IS BELIEVED TO BE OUT OF TOLERANCE OR HAS BEEN DAMAGED DURING SHIPMENT.**

**IF THERE IS CONFLICT BETWEEN PROJECT ERECTION DRAWINGS PROVIDED OR APPROVED BY MBCI AND DETAILS IN THIS MANUAL, PROJECT ERECTION DRAWINGS WILL TAKE PRECEDENCE.**

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The Engineering data contained herein is for the expressed use of customers and design professionals. Along with this data, it is recommended that the design professional have a copy of the most current version of the North American Specification for the Design of Cold-Formed Steel Structural Members published by the American Iron and Steel Institute to facilitate design. This Specification contains the design criteria for cold-formed steel components. Along with the Specification, the designer should reference the most current building code applicable to the project jobsite in order to determine environmental loads. If further information or guidance regarding cold-formed design practices is desired, please contact the manufacturer.

Descriptions and specifications contained herein were in effect at the time this publication was approved for printing. In a continuing effort to refine and improve products, MBCI reserves the right to discontinue products at any time or change specifications and/or designs without incurring obligation. **To ensure you have the latest information available, please inquire or visit our website at [www.mbcicom](http://www.mbcicom).** Application details are for illustration purposes only and may not be appropriate for all environmental conditions, building designs or panel profiles. Projects should be designed to conform to applicable building codes, regulations and accepted industry practices. If there is a conflict between this manual and project erection drawings, the erection drawings will take precedence.

For complete performance specifications, product limitations, and disclaimers, please consult MBCI's Paint and Galvalume Plus® warranties. Upon receipt of payment in full, these warranties are available upon request for all painted or Galvalume Plus® prime products. Sample copies can be found at [www.mbcicom](http://www.mbcicom) or contact your local MBCI Sales Representative.

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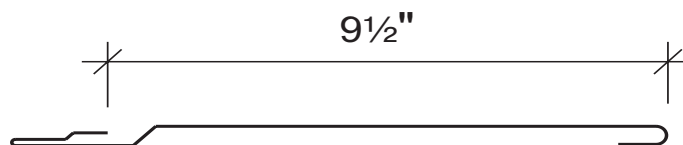
# PRODUCT INFORMATION

## ARCHITECT/ENGINEER INFORMATION

1. Use a properly aligned and uniform substructure to avoid panel distortion. Typical substructure for barrel roofs: two layers of  $\frac{3}{8}$ " plywood over metal deck. For fascia and soffit: subgirts or hat sections.
2. For barrel roofs, the panels must be installed over a completely waterproofed substructure. If the waterproofing membrane is mechanically attached with metal fasteners of any type, they should be covered to protect the back side of the panels. Any mechanical attachment device that does not lay flat on the deck will telegraph through the panels.
3. Panels are subject to surface distortion due to improperly applied fasteners. Overdriven fasteners will cause stress and induce oil canning across the panel at or near the point of attachment. Oil canning is not a cause for rejection.
4. For proper fastener application, see Product Checklist.
5. For continuous panels over 20'-0", please inquire.
6. Panels can be walked down to a 10'-0" minimum radius. Contact MBCI for radii of 10'-0" or less.

# PRODUCT INFORMATION

## GENERAL DESCRIPTION



Coverage Width - 9 1/2"

Panel Attachment - Clips

Panel Substrate - Galvalume

Gauge - Standard: 24      Optional: 22

Finishes - Smooth or Embossed

Coating - Signature® 200, Signature® 300 or Signature® 300 Metallic

## PRODUCT SELECTION CHART

Product	Signature® 300 Metallic		Signature® 300		Signature® 200		Galvalume	
	24 ga.	22 ga.	24 ga.	22 ga.	24 ga.	22 ga.	24 ga.	22 ga.
9 1/2" FlexLoc	●	■	●	■	●	■	●	●

- - Available in any quantity.
- - Minimum quantity may be required.

Other colors, finishes, gauges and materials available; please inquire.

# PRODUCT INFORMATION

## PRODUCT CHECKLIST

<p><b>FlexLoc Panel</b></p> <p style="text-align: right;"><input type="checkbox"/></p>	<p><b>Fasteners</b></p> <p> Fastener #12A <input type="checkbox"/> 12 - 14 x 1" #2 Quadrex Drive Pancake Hd S.D.</p> <p> Fastener #13A <input type="checkbox"/> 12 - 11 x 1" #2 Quadrex Drive Pancake Type "A"</p> <p> Fastener #14 <input type="checkbox"/> 1/8" x 3/16" Pop Rivet</p>	<p><b>Fasteners</b></p> <p> Fastener #11 <input type="checkbox"/> 1/4" x 1 1/4" Masonry Anchor</p> <p> Fastener #1A <input type="checkbox"/> 12 - 14 x 1" S.D.</p> <p> Fastener #4 <input type="checkbox"/> 1/4" - 14 x 7/8" Long-Life Lap Tek S.D.</p>
<p><b>FlexLoc Clip</b></p> <p style="text-align: right;">HW-4900 <input type="checkbox"/></p>	<p><b>SB Clip</b></p> <p>10 - 12 x 1" Pancake Head S.D.</p> <p style="text-align: right;">HW-4500 <input type="checkbox"/></p>	<p><b>SB Batten</b></p> <p style="text-align: right;">FL-560 <input type="checkbox"/></p>
<p><b>Tri-Bead Tape Sealer</b></p> <p style="text-align: right;">HW-504 <input type="checkbox"/></p>	<p><b>Urethane Sealant</b></p> <p style="text-align: center;">• Paintable</p> <p style="text-align: right;">White HW-540 <input type="checkbox"/> Gray HW-541 <input type="checkbox"/> Med. Bronze HW-542 <input type="checkbox"/> Almond HW-544 <input type="checkbox"/></p>	<p><b>Crown Trim</b></p> <p style="text-align: right;">10'-2" <input type="checkbox"/></p>
<p><b>Sill with Soffit</b></p> <p style="text-align: right;">T-5191 10'-2" <input type="checkbox"/></p>	<p><b>Sill without Soffit</b></p> <p style="text-align: right;">10'-2" <input type="checkbox"/></p>	<p><b>Angle Trim</b></p> <p style="text-align: right;">T-5051 10'-2" <input type="checkbox"/></p>

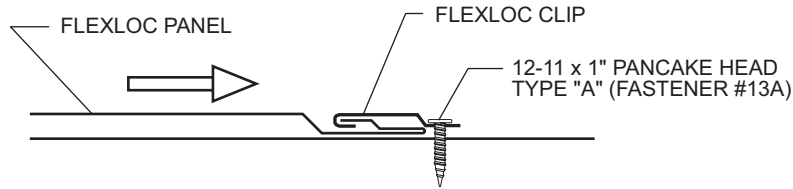
# PRODUCT INFORMATION

## PRODUCT CHECKLIST

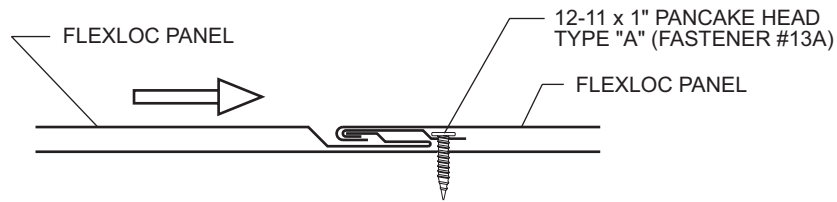
<p>Sill Trim</p> <p>T-5181 10'-2" <input type="checkbox"/></p>	<p>Panel Splice Trim</p> <p>Contact MBCI for lead time. HW-1200 10'-2" <input type="checkbox"/></p>	<p>Continuous Cleat</p> <p>T-5121 10'-2" <input type="checkbox"/></p>
<p>Offset Cleat</p> <p>T-5131 10'-2" <input type="checkbox"/></p>	<p>Factory Curved Rake Trim</p> <p>Specify Radius Contact MBCI for lead time. HW-1204 10'-2" <input type="checkbox"/></p>	<p>Outside Corner</p> <p>T-5241 10'-2" <input type="checkbox"/></p>
<p>Inside Corner</p> <p>T-5251 10'-2" <input type="checkbox"/></p>	<p>FlexLoc Panel Starter Trim</p> <p>Contact MBCI for lead time. HW-1206 10'-2" <input type="checkbox"/></p>	<p>Rake Termination Trim</p> <p>Contact MBCI for lead time. HW-1202 10'-2" <input type="checkbox"/></p>

# PRODUCT INFORMATION

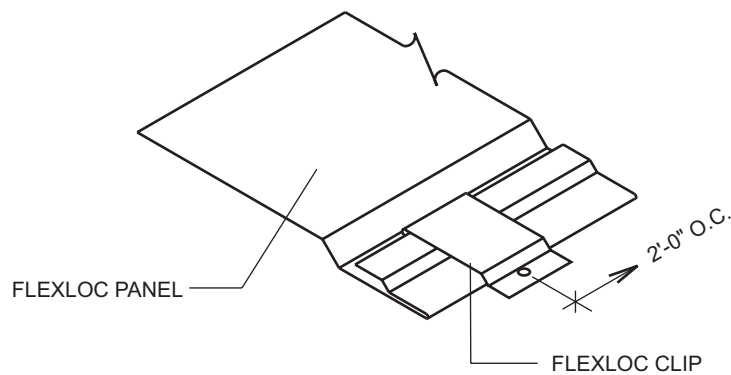
## CLIP DETAIL



## CLIP ATTACHMENT



## PANEL ENGAGEMENT DETAIL

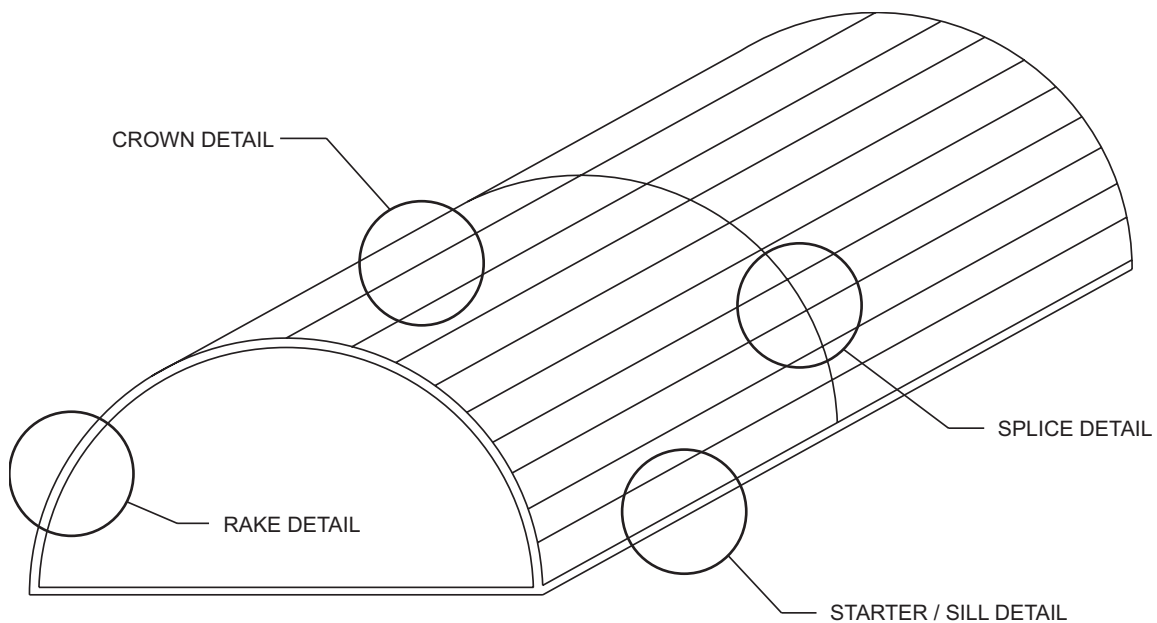

**NOTES:**

1. Panel clips to be installed 2'-0" on center unless instructed otherwise on construction drawings.
2. Typical clip fastener is one 12 - 11 x 1" pancake head Type A fastener per clip. Other fastener types may be required for different substrates.



# PRODUCT INFORMATION

## ISOMETRIC VIEW OF BARREL ROOF

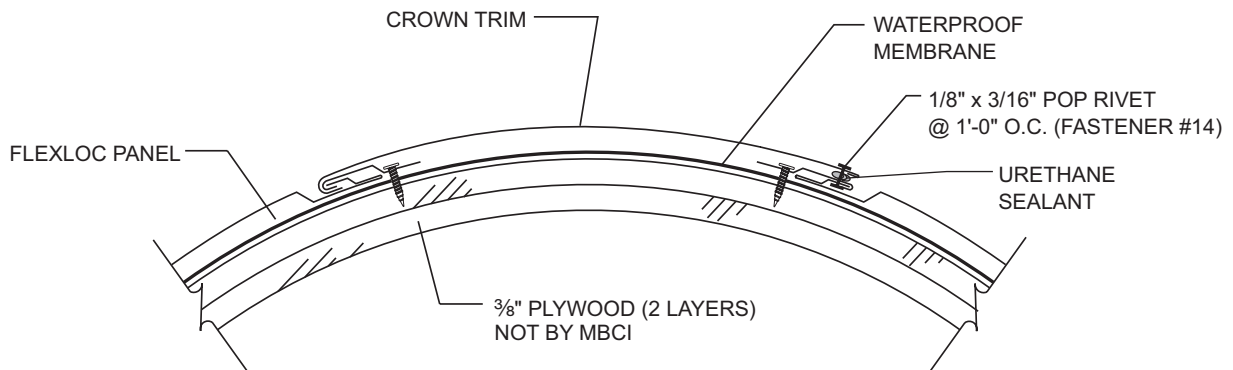


### NOTES:

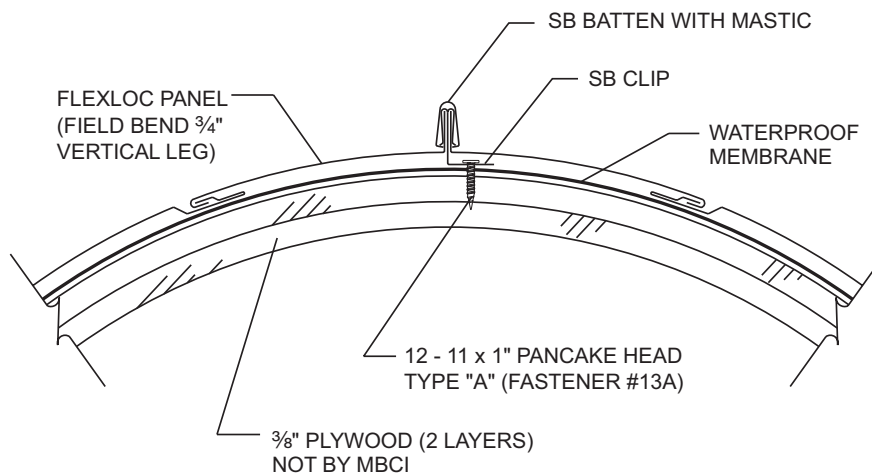
1. The following barrel roof details are based on the panels being installed horizontally. When installed horizontally, the panels do not need to be factory curved.
2. Always install panels beginning at bottom and working toward the top. This will prevent water from ponding in the panel seam.

# PRODUCT INFORMATION

## BARREL ROOF DETAILS



## STANDARD CROWN DETAIL



## OPTIONAL CROWN DETAIL

### NOTES:

#### Standard Detail

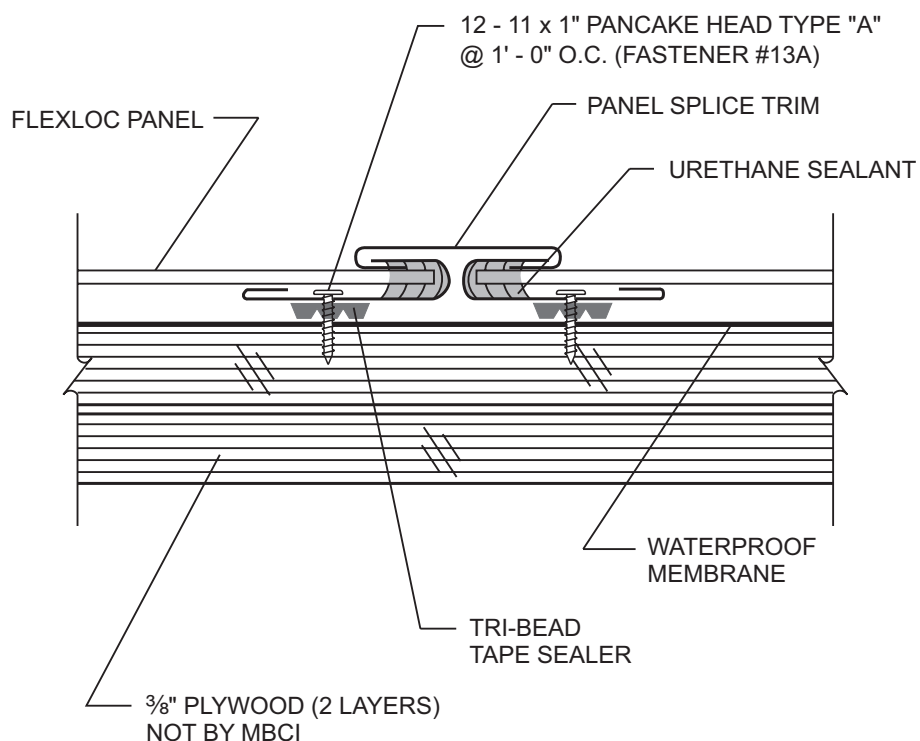
1. Install panels up to crown on both sides of barrel roof.
2. Install urethane sealant continuous on the male leg of one top panel.
3. Hook open side of cap trim onto male leg of one panel and slide end of cap trim into rake trim receiver. Pop rivet opposite side of cap trim (the side with the urethane sealant) to male leg of top panel 1'-0" o.c.
4. Lap additional cap trim three inches. Seal joint with urethane sealant between the two pieces of cap trim and pop rivet 2" on center.

#### Optional Detail

1. Install panels up to crown on both sides of barrel roof.
2. Last panel on each side must be field bent to form upturned leg  $\frac{3}{4}$ " tall.
3. Install first special panel at crown and clip to substructure with SB clips 2'-0" o.c.
4. Install second special panel at crown and bend clip tabs over both panels.
5. Install SB batten over panel clips and seal ends with urethane sealant.

# PRODUCT INFORMATION

## BARREL ROOF DETAILS



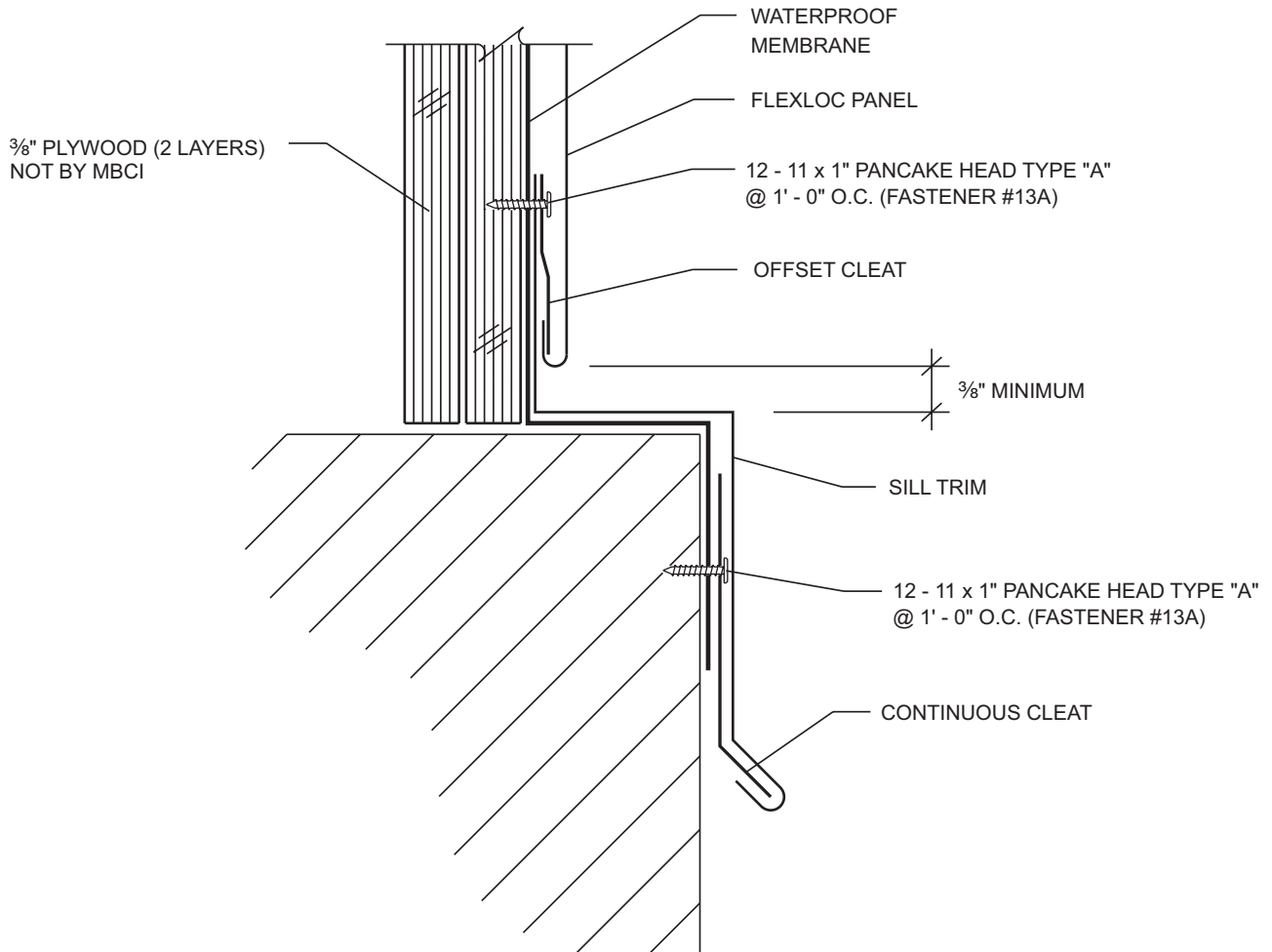
## SPLICE DETAIL

### NOTES:

1. Install triple-bead tape sealer to back side of splice trim at attachment points.
2. Fill open hems of panel splice trim with urethane sealant.
3. Install panel splice trim to roof with 12 - 11 x 1" pancake head Type A fasteners 1'-0" on center. Fasteners must go through tape sealer. Slide panels into open hem of splice trim working the panels to the radius of the roof as it is being installed. **Do not install panel clips closer than 1'-0" from end of panels.**

# PRODUCT INFORMATION

## BARREL ROOF DETAILS



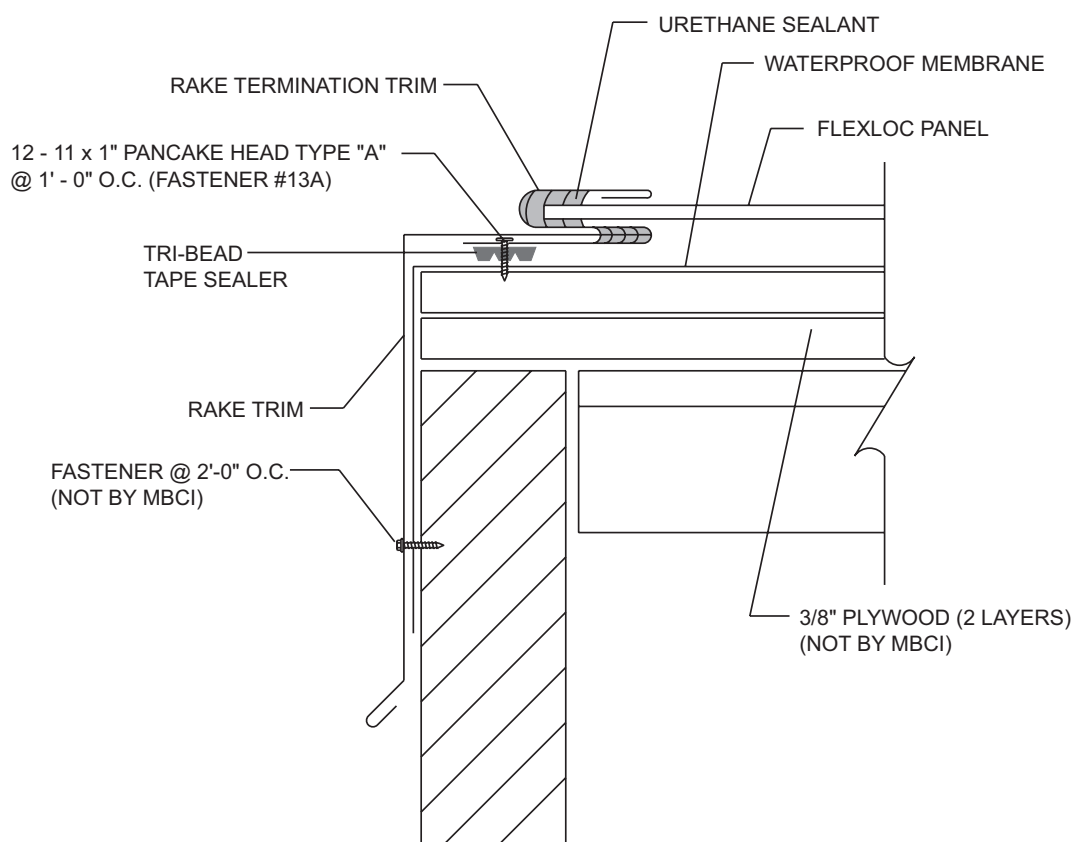
## STARTER/SILL DETAIL

### NOTES:

1. Install sill trim to substructure with 12 - 11 x 1" pancake head Type A fasteners. Bottom of sill trim may be hooked onto a continuous cleat or fastened with an exposed fastener.
2. Install offset cleat to substructure with 12 - 11 x 1" pancake head Type A fasteners at 1'-0" o.c. Offset cleat must be 3/8" above ledge of sill trim to allow panel to engage onto offset cleat.

# PRODUCT INFORMATION

## BARREL ROOF DETAILS



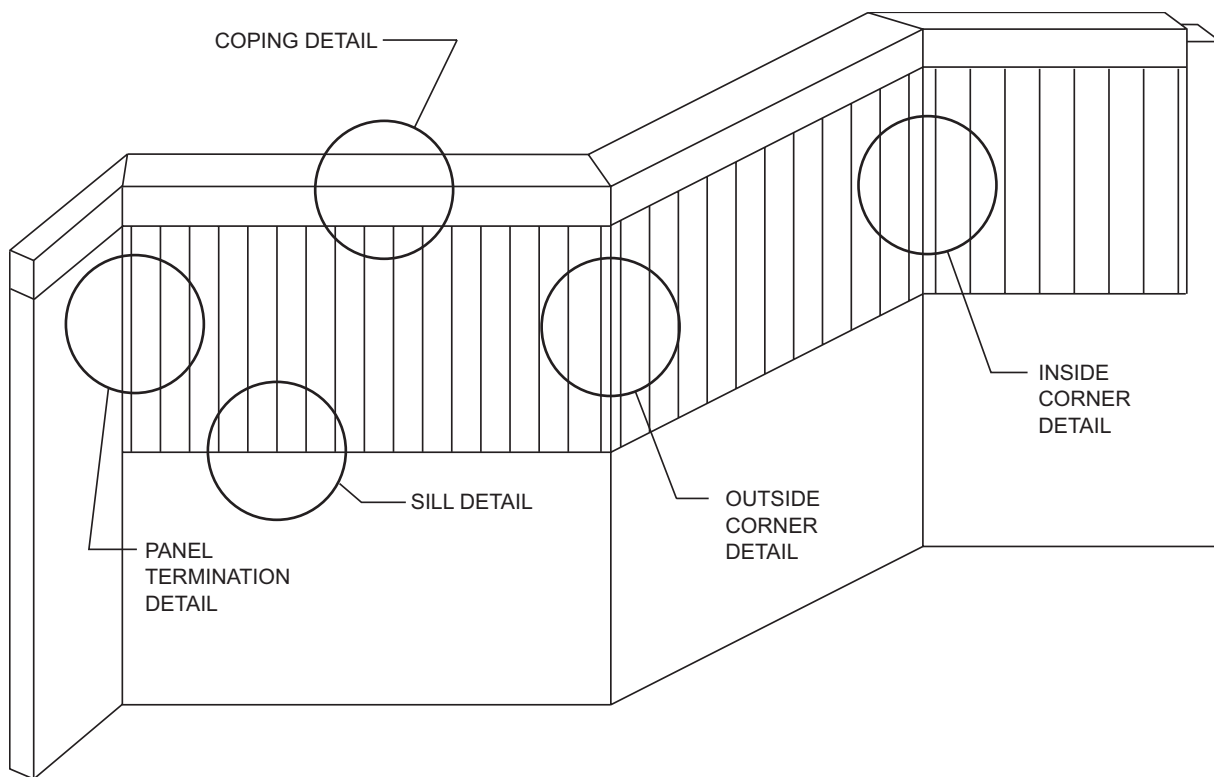
**RAKE DETAIL**

### NOTES:

1. Install panels before installing rake termination trim. **Do not install clips closer than 1'-0" from end of panel.**
2. Install tri-bead tape sealer to back side of rake termination trim at point of attachment to plywood deck. Install urethane sealant in open hem of trim.
3. Slide rake termination trim under and onto panels working the trim to the radius of the roof as it is being installed. Attach to substructure with 12 - 11 x 1" pancake head Type A fasteners at 1'-0" o.c. Fasteners must go through tape sealer.
4. Rake trim is factory curved. Install urethane sealant into open hem and slide top leg of rake trim into hem. Attach bottom of rake trim to wall with appropriate fastener 2'-0" o.c.

# PRODUCT INFORMATION

## ISOMETRIC VIEW OF VERTICAL FASCIA

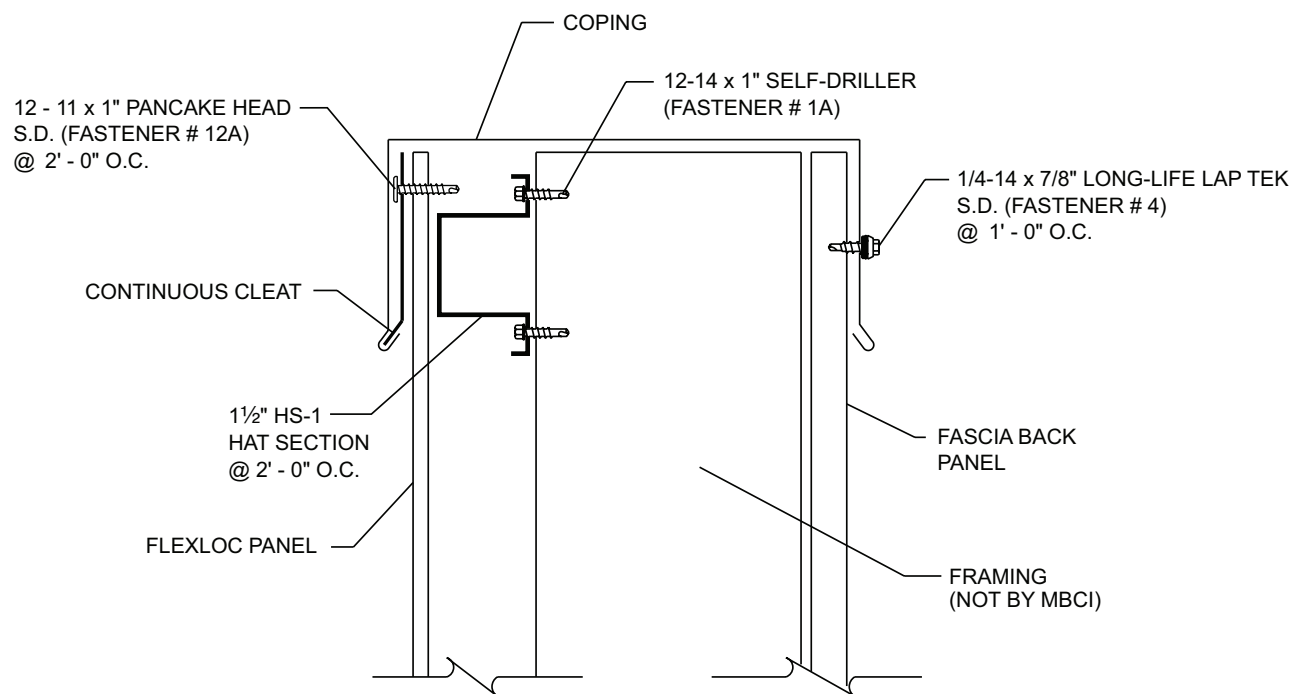


**NOTES:**

1. Panels may be installed from either direction.

# PRODUCT INFORMATION

## VERTICAL FASCIA DETAILS



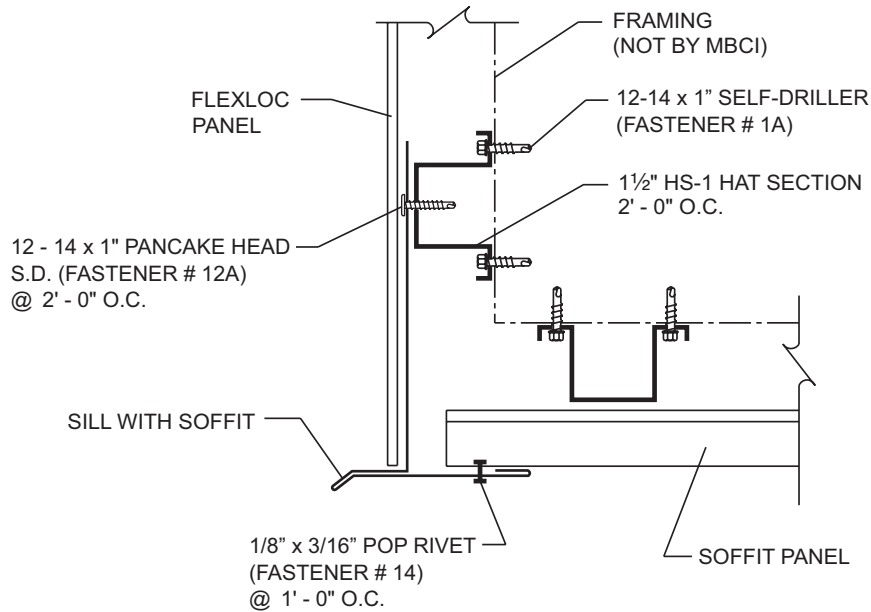
**COPING DETAIL**

### NOTES:

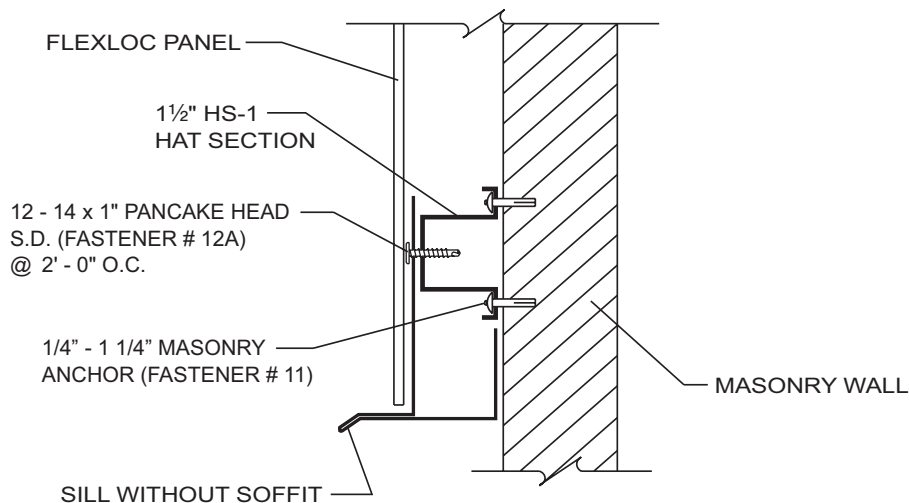
1. Install continuous cleat to FlexLoc panels with 12 - 11 x 1" pancake head self-drilling fasteners at 2'-0" o.c.
2. Install coping by engaging open hem in front onto continuous cleat. Install 1/4 - 14 x 7/8" Long-Life Lap Tek S.D. at 1'-0" o.c. to back side of coping.
3. Lap coping trim 3". Seal joints with urethane sealant between the two pieces of coping and pop rivet at 2" on center.

# PRODUCT INFORMATION

## VERTICAL FASCIA DETAILS



### SILL WITH SOFFIT



### SILL WITHOUT SOFFIT

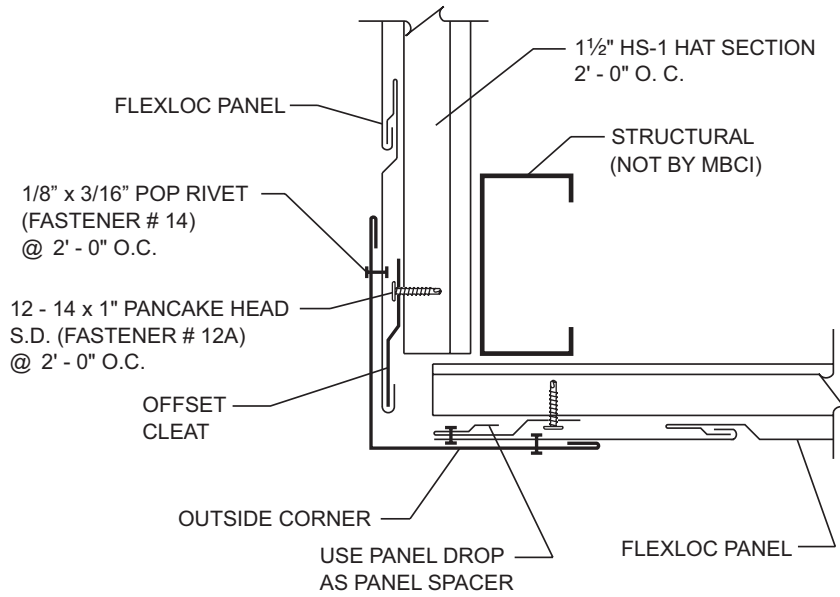
**NOTES:**

1. Attach sill trim to substructure with 10 - 16 x 1" pancake head self-drilling fasteners at 2'-0" o.c.
2. Install fascia panels to substructure allowing bottom of fascia panel to set gently on top of sill trim so as not to force it down.

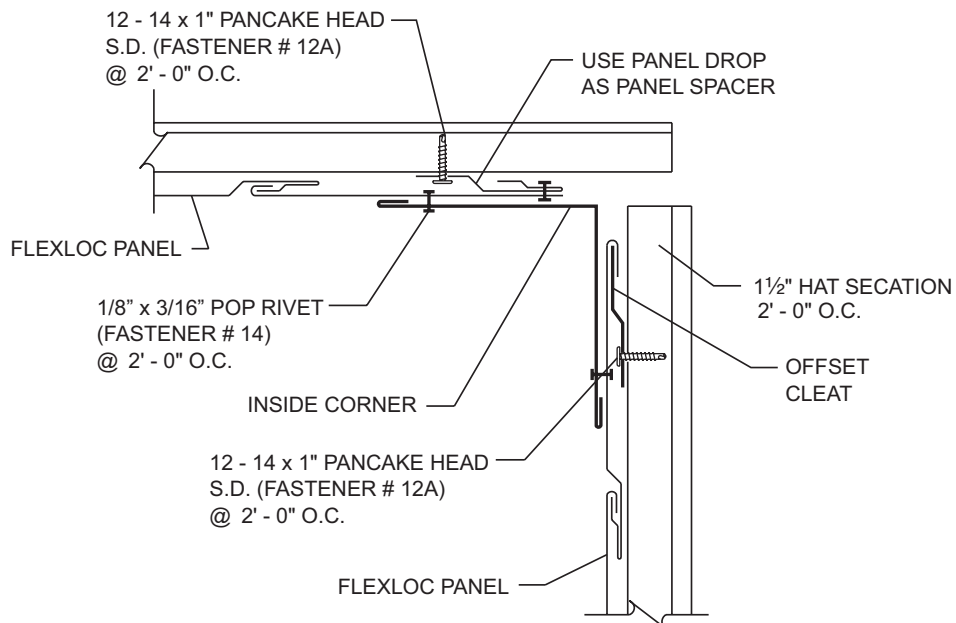


# PRODUCT INFORMATION

## VERTICAL FASCIA DETAILS



## OUTSIDE CORNER



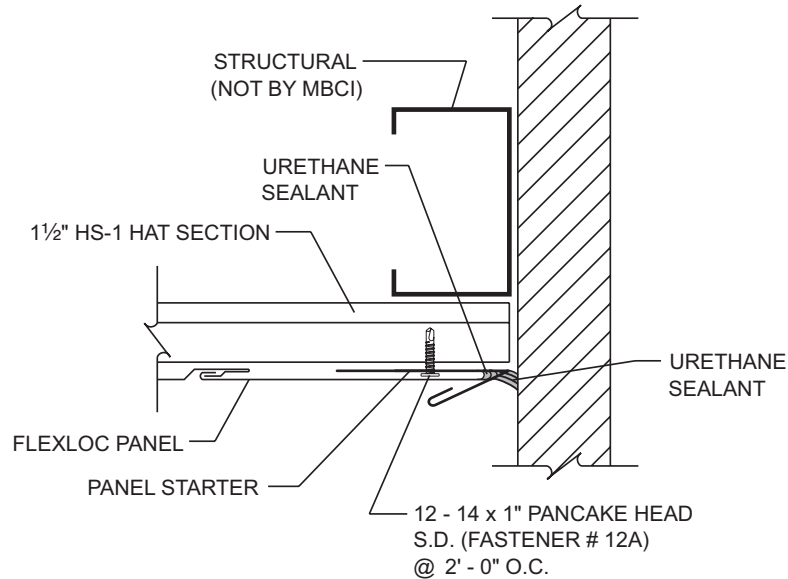
## INSIDE CORNER

**NOTES:**

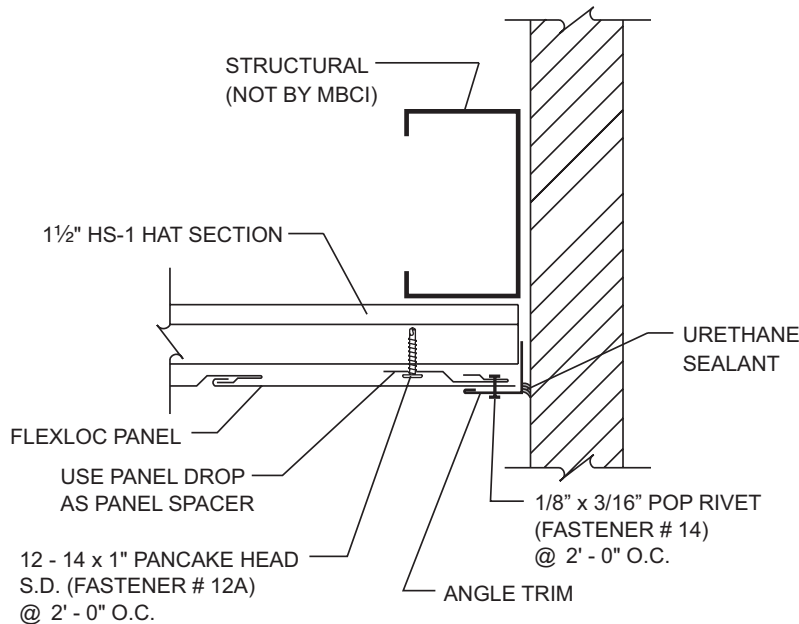
1. Field cut panels at corner as required.
2. Install drop from cut panel as a spacer to support end of last panel.
3. Install corner trim to panels with pop rivets at 2'-0" o.c.

# PRODUCT INFORMATION

## VERTICAL FASCIA DETAILS



## PANEL TERMINATION DETAIL



## ALTERNATE PANEL TERMINATION DETAIL

**NOTES:**

**Panel Termination Detail**

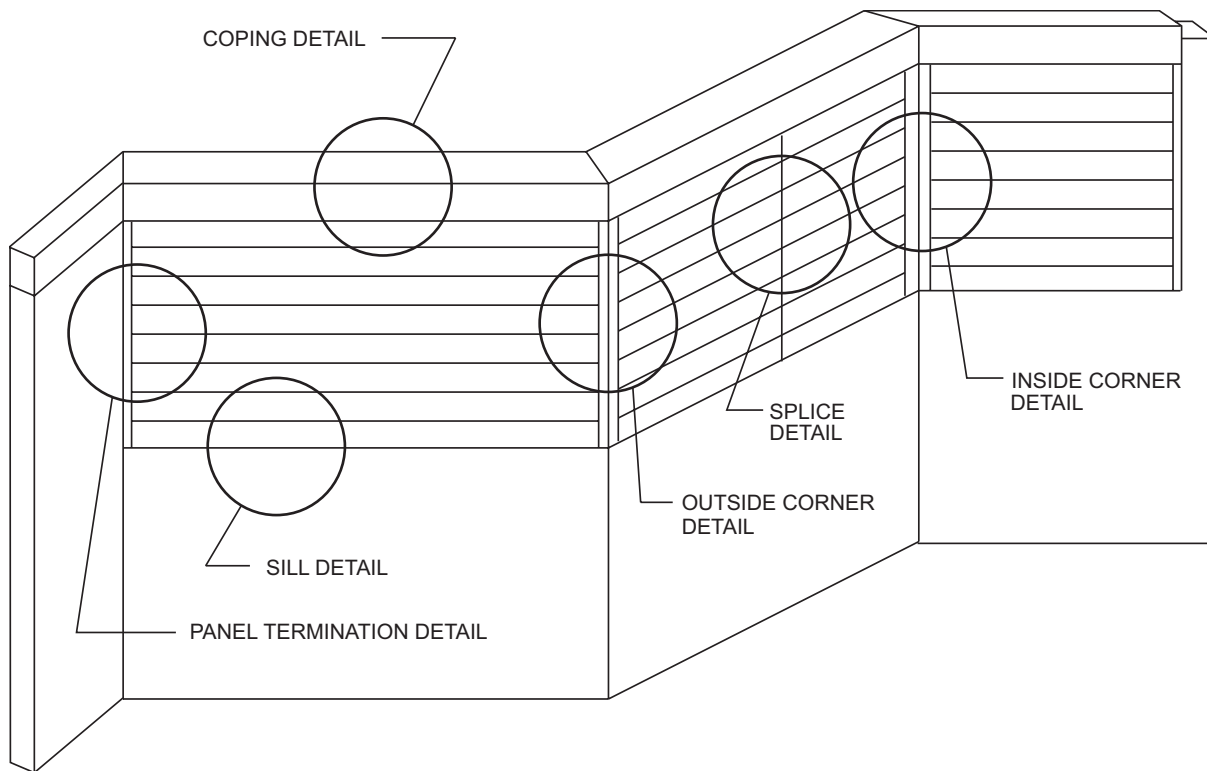
1. Install panel starter with 12 - 14 x 1" pancake head self-drilling fasteners.
2. Install urethane sealant into open hem of starter trim.
3. Field cut panel and slide cut end into panel starter.

**Alternate Panel Termination Detail**

1. Field cut panel as required.
2. Install drop from cut panel as a spacer to support end of last panel.
3. Install angle trim to panel with pop rivets.

# PRODUCT INFORMATION

## ISOMETRIC VIEW OF HORIZONTAL FASCIA

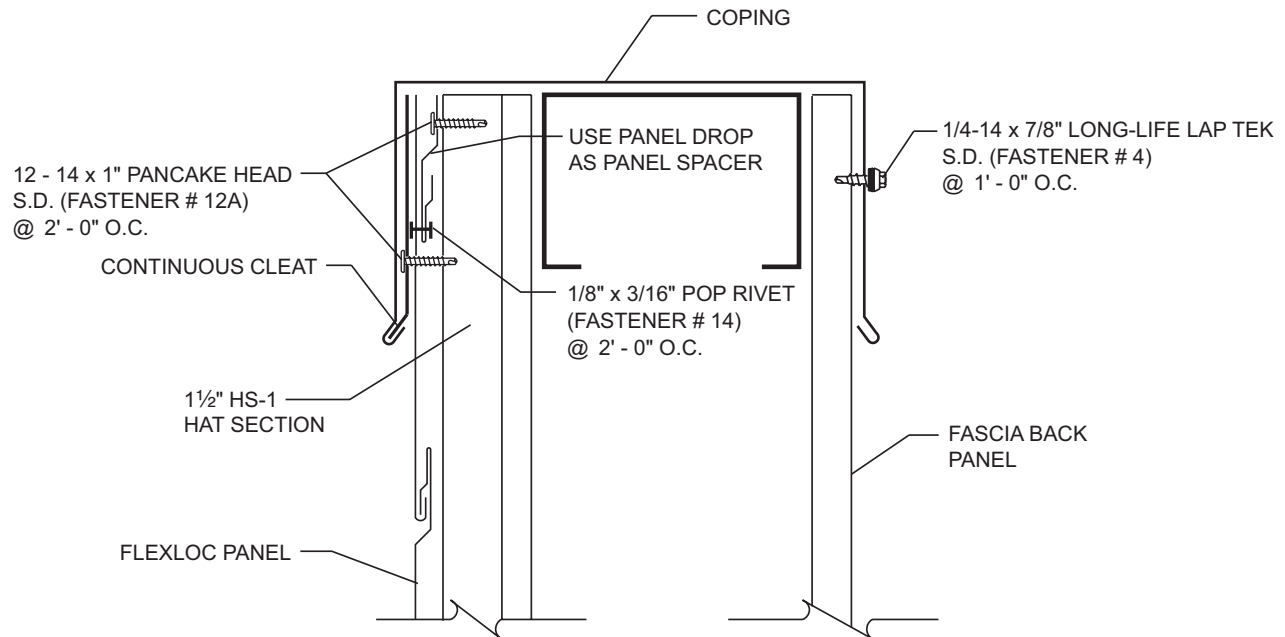


**NOTES:**

1. Panels must be installed from the bottom up to prevent water from ponding in the panel seams.

# PRODUCT INFORMATION

## HORIZONTAL FASCIA DETAILS



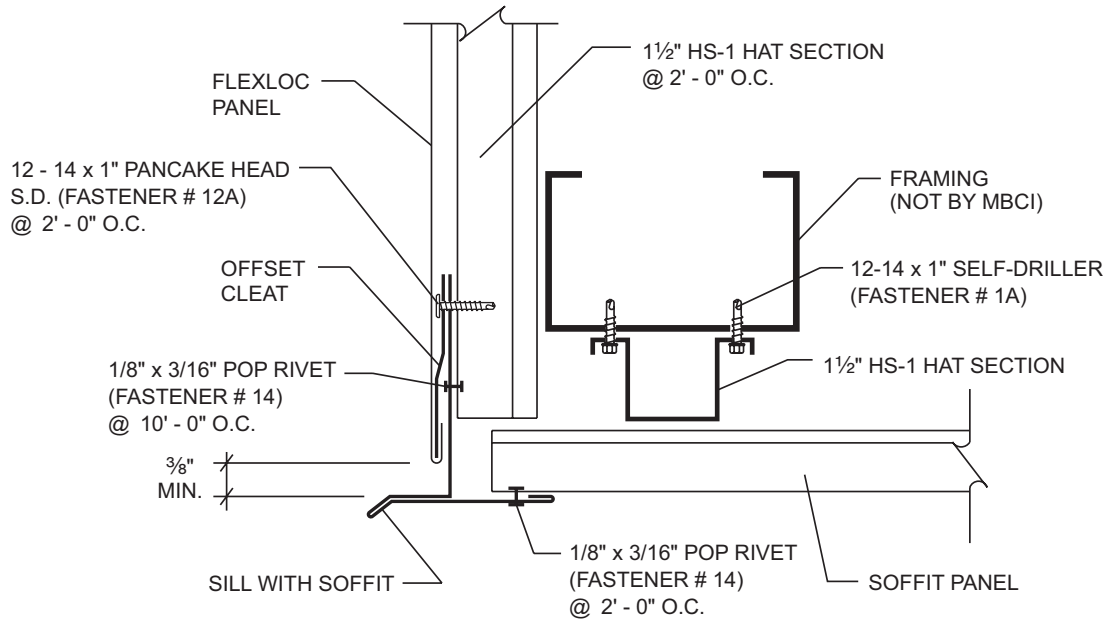
### COPING DETAIL

#### NOTES:

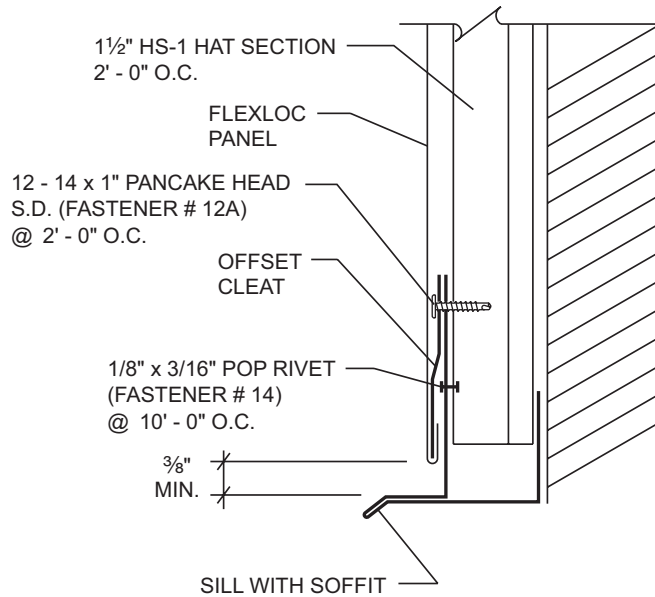
1. Field cut last panel as required.
2. Install drop from cut panel as a spacer, to substructure with 12 - 14 x 1" pancake head self-drilling fasteners 2'-0" o.c. Pop rivet last panel to spacer.
3. Attach continuous cleat to panel with 12 - 14 x 1" pancake head self-drilling fasteners at 2'-0" o.c..
4. Install coping by engaging open hem on front side of coping onto continuous cleat. Install 1/4"-14 x 7/8" Long-Life Lap Tek at 1'-0" o.c. to back side of coping.

# PRODUCT INFORMATION

## HORIZONTAL FASCIA DETAILS



**SILL WITH SOFFIT**



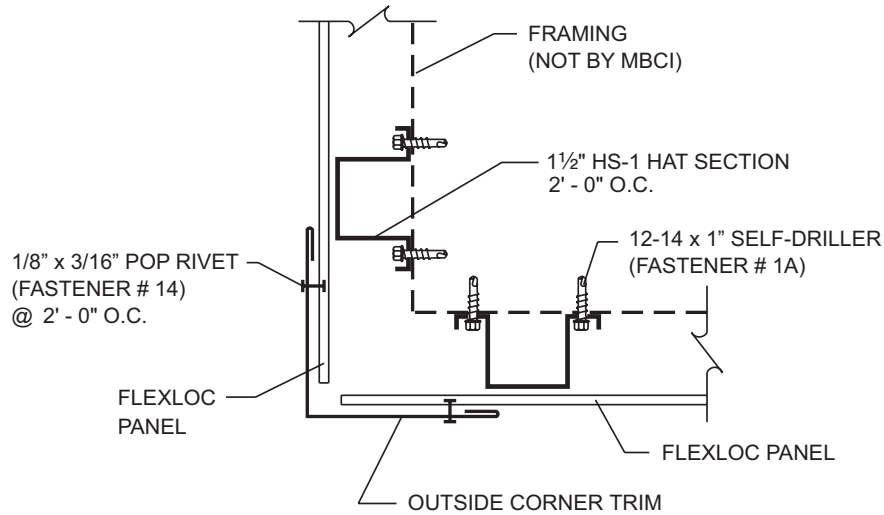
**SILL WITHOUT SOFFIT**

**NOTES:**

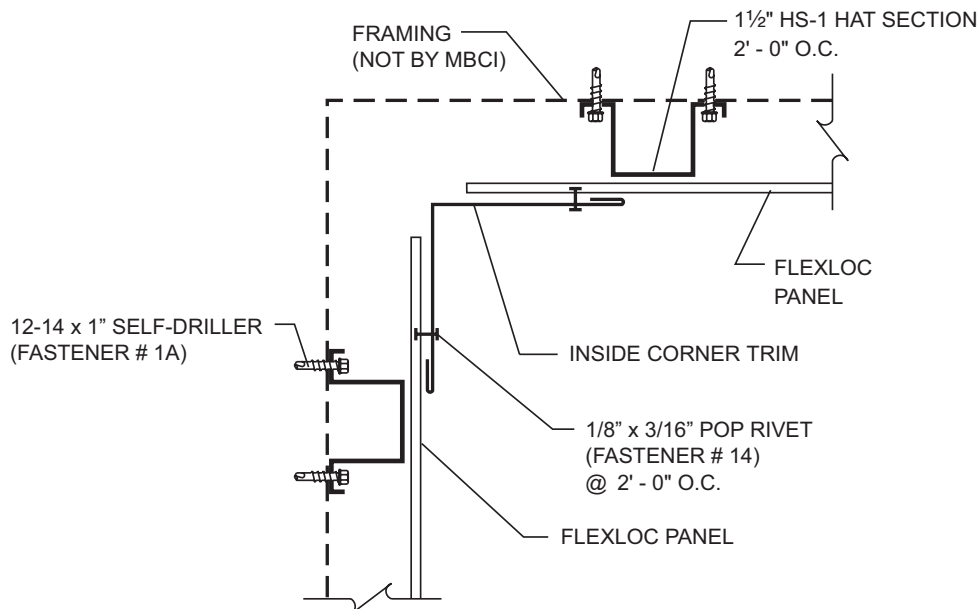
1. Pop rivet sill trim to substructure with two pop rivets per 10' - 0" piece.
2. Install offset cleat to substructure with 12 - 14 x 1" pancake head self-drilling fasteners at 2'-0" o.c. Leave a 3/8" gap between sill trim and offset cleat to allow panel to be engaged onto offset cleat.

# PRODUCT INFORMATION

## HORIZONTAL FASCIA DETAILS



## OUTSIDE CORNER



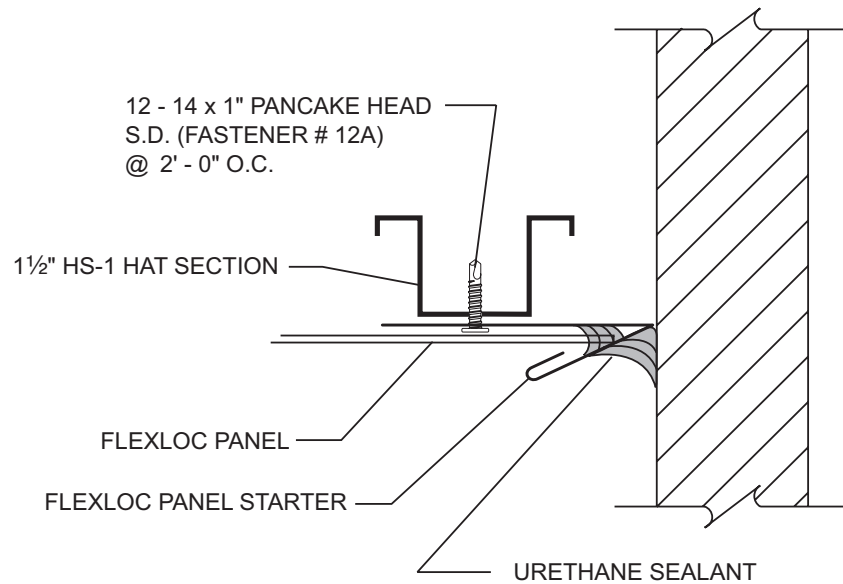
## INSIDE CORNER

### NOTES:

1. Install panels on both sides of corner.
2. Pop rivet corner trim to panels.

# PRODUCT INFORMATION

## HORIZONTAL FASCIA DETAILS



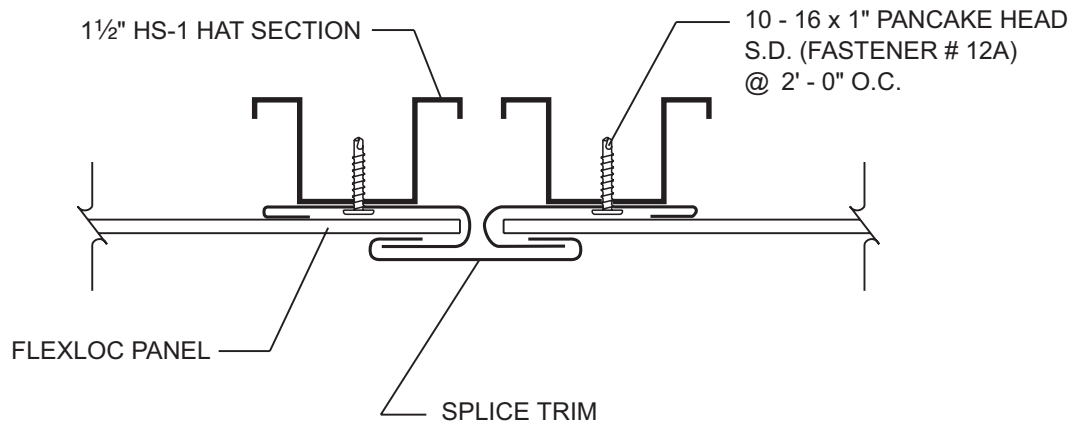
## PANEL TERMINATION DETAIL

### NOTES:

1. Install panel starter to substructure with 12 - 14 x 1" pancake head self-drilling fasteners at 2'-0" o.c.
2. Cut panels as required and insert panel end into FlexLoc panel starter.

# PRODUCT INFORMATION

## HORIZONTAL FASCIA DETAILS



## SPLICE DETAIL

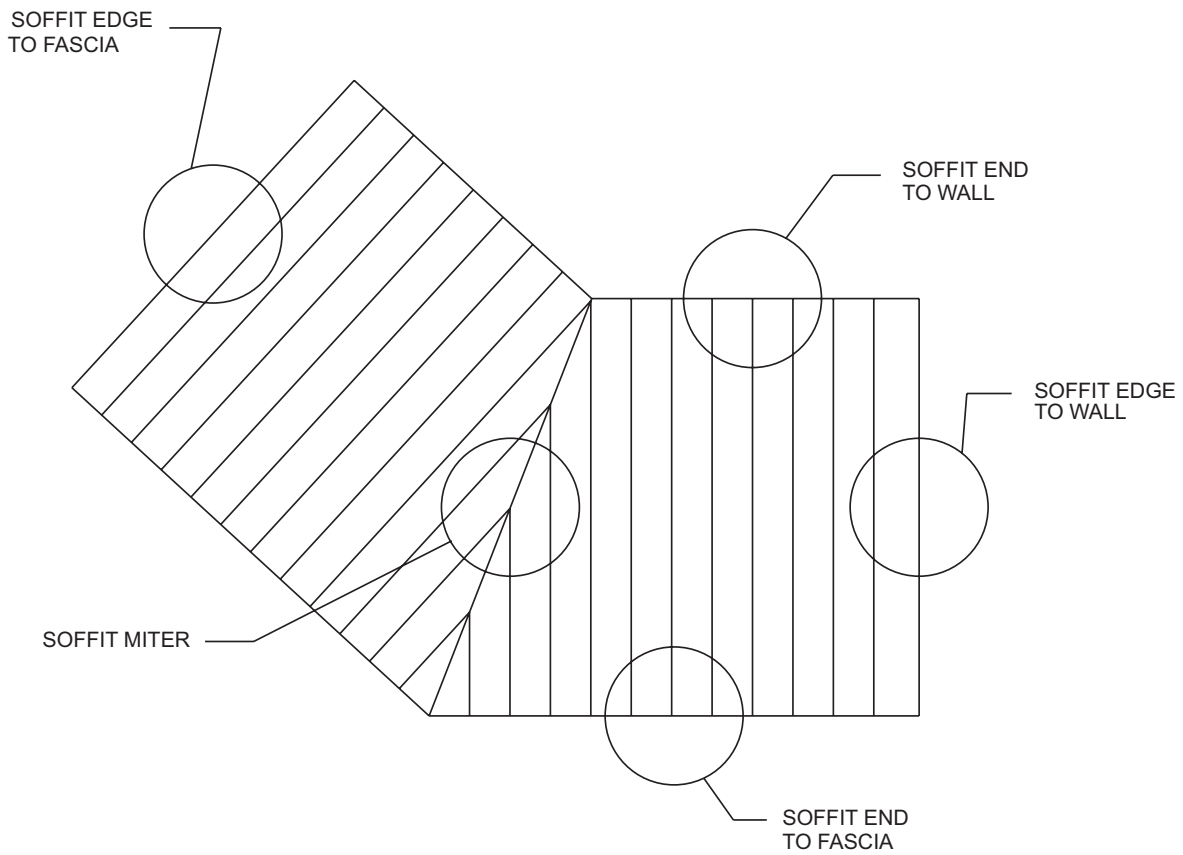
**NOTES:**

1. Install panel splice trim to roof with 12 - 14 x 1" pancake head self-drilling fasteners 2'-0" on center. Slide panels into open hem of splice trim. **Do not install panel clips closer than 1'-0" from end of panels.**



# PRODUCT INFORMATION

## PLAN VIEW OF SOFFIT

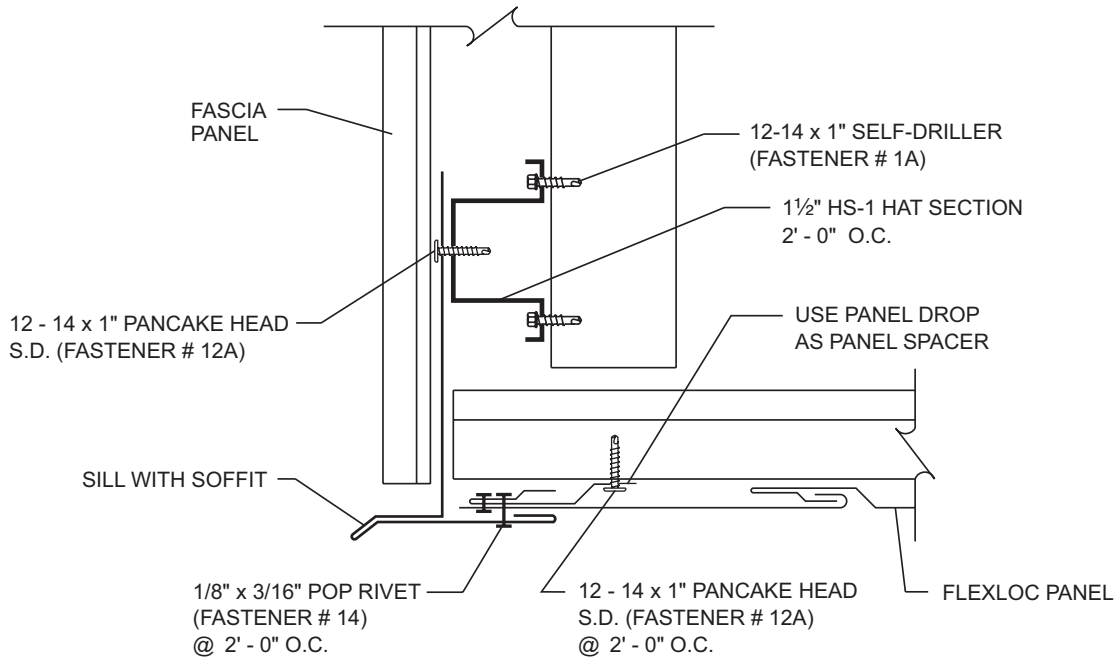


**NOTES:**

- 1. Panels may be installed from either direction.

# PRODUCT INFORMATION

## SOFFIT DETAILS



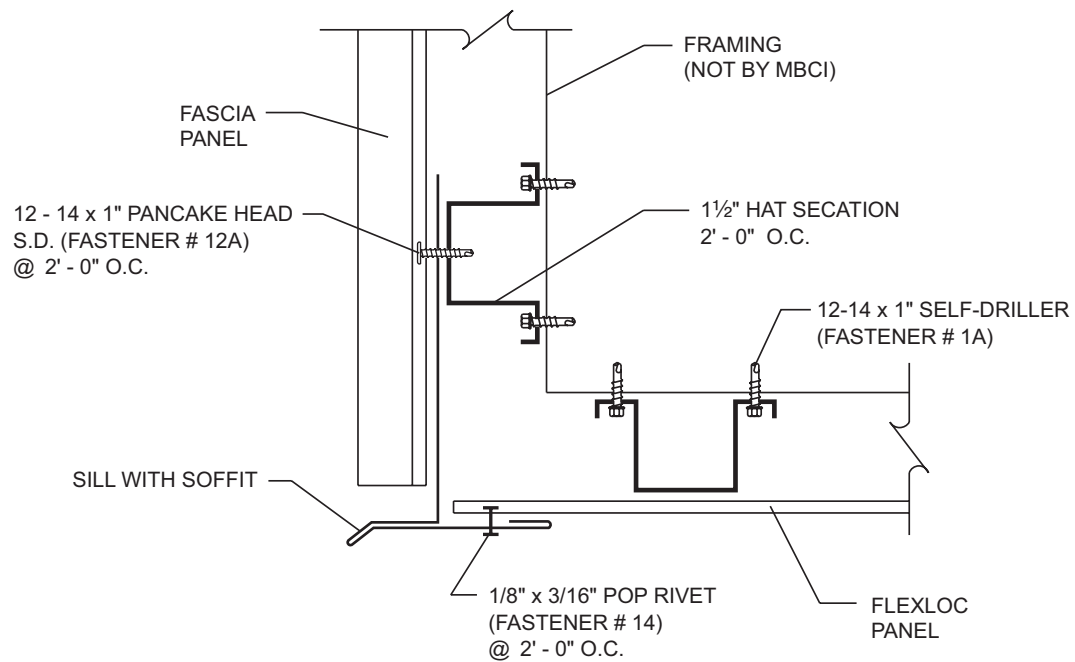
## SOFFIT EDGE TO FASCIA DETAIL

### NOTES:

1. Attach drop from cut panel as a spacer, to HS-1 hat section with 12 - 14 x 1" pancake head self-drilling fastener at each support.
2. Cut last soffit panel as required and pop rivet to panel spacer.
3. Pop rivet sill with soffit trim to panel at 2'-0" o.c.

# PRODUCT INFORMATION

## SOFFIT DETAILS



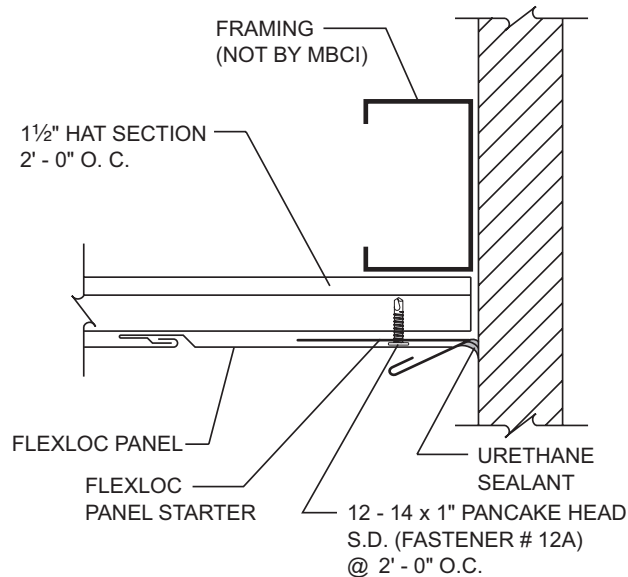
## SOFFIT END TO FASCIA DETAIL

**NOTES:**

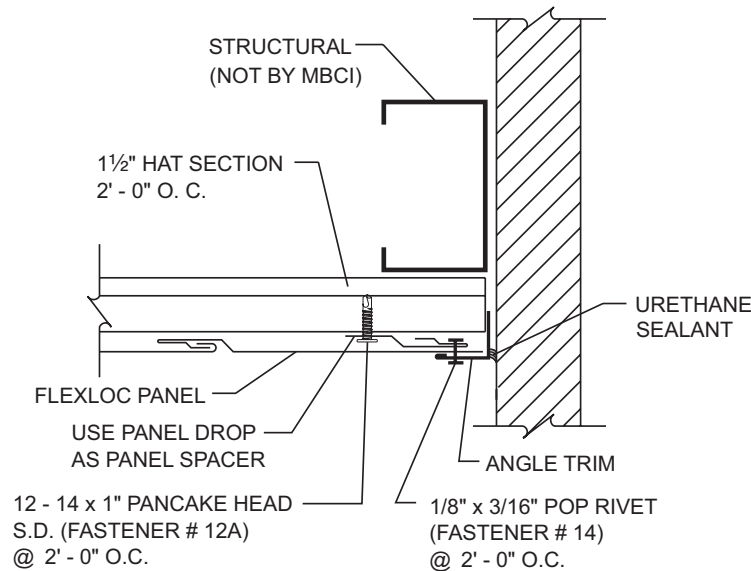
1. Attach sill with soffit to substructure with 12 - 14 x 1" pancake head self-drilling fasteners at 2'-0" o.c.
2. Pop rivet sill with soffit to FlexLoc panel at 2'-0" o.c.

# PRODUCT INFORMATION

## SOFFIT DETAILS



## SOFFIT EDGE TO WALL DETAIL



## ALTERNATE DETAIL

### NOTES:

#### Soffit Edge to Wall Detail

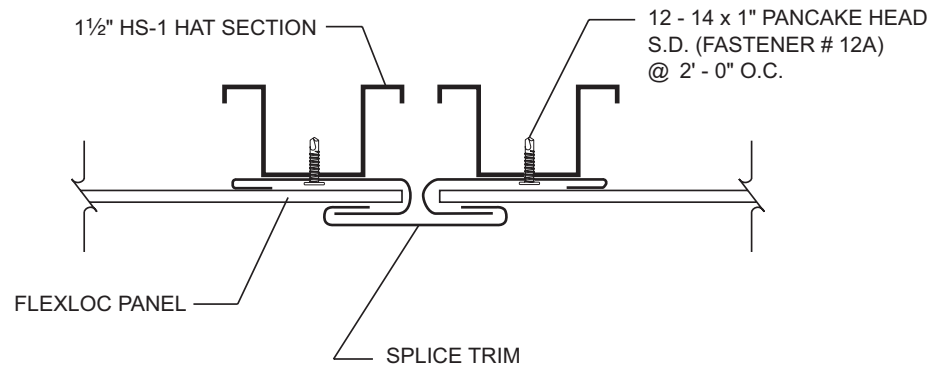
1. Attach panel starter to hat section with 12 - 14 x 1" pancake head self-drilling fastener at each support.
2. Cut panel as required and insert into FlexLoc panel starter.

#### Alternate Detail

1. Attach panel spacer to hat section with 12 - 14 x 1" pancake head self-drilling fastener at each support.
2. Attach sill with soffit to substructure with 12 - 14 x 1" pancake head self-drilling fasteners at 2'-0" o.c.
3. Attach panel to drop and angle trim to panel with pop rivets at 2'-0" o.c.

# PRODUCT INFORMATION

## SOFFIT DETAILS



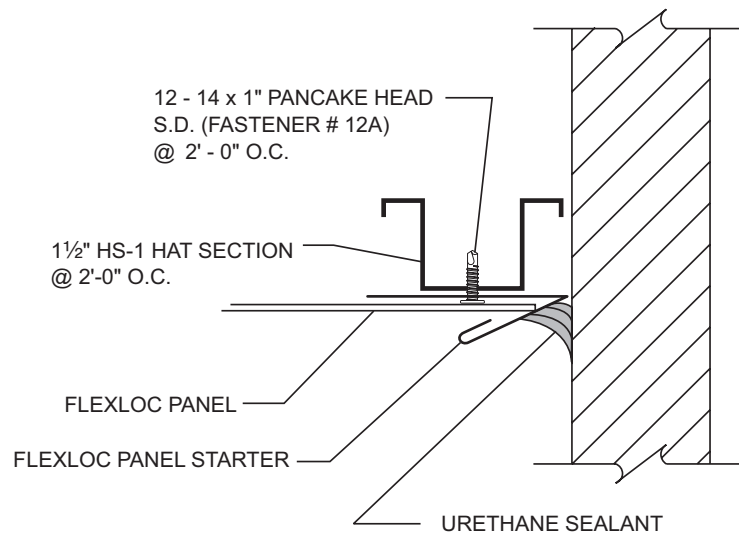
## MITER DETAIL

### NOTES:

1. Install panel splice trim to roof with 12 - 14 x 1" pancake head self-drilling fasteners 2'-0" on center. Slide panels into open hem of splice trim. **Do not install panel clips closer than 1'-0" from end of panels.**

# PRODUCT INFORMATION

## SOFFIT DETAILS



## SOFFIT END TO WALL DETAIL

**NOTES:**

1. Attach FlexLoc panel starter to hat section with a 12 - 14 x 1" pancake head self-drilling fastener 2'-0" o.c.
2. Insert panel into FlexLoc panel starter trim as installing panels.

# NOTES



*Metal Roof and Wall Systems*

**For the most current information available, visit our Web site at [www.mbc.com](http://www.mbc.com)**

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Houston, TX 77238  
281-407-6915

**Adel, GA**  
1601 Rogers Road  
P.O. Box 1107  
Adel, GA 31620  
888-514-6062

**Atlanta, GA**  
2280 Monier Avenue  
P.O. Box 44729  
Atlanta, GA 30336  
678-337-1619

**Atwater, CA**  
550 Industry Way  
P.O. Box 793  
Atwater, CA 95301  
209-445-3891

**Ennis TX**  
1804 Jack McKay Blvd.  
P.O. Box 1210  
Ennis, TX 75120  
469-256-8255

**Indianapolis, IN**  
1780 McCall Drive  
P.O. Box 657  
Shelbyville, IN 46176  
317-364-4329

**Lubbock, TX**  
5711 East FM-40  
P.O. Box 10133  
Lubbock, TX 79408  
806-224-2724

**Memphis, TN**  
300 Highway 51 North  
P.O. Box 366  
Hemando, MS 38632  
662-298-2337

**Oklahoma City, OK**  
7000 S. Eastern Avenue  
P.O. Box 95998  
Oklahoma City, OK 73143  
405-492-6968

**Phoenix, AZ**  
660 South 91st Avenue  
P.O. Box 739  
Tolleson, AZ 85353  
480-630-3022

**Rome, NY**  
6168 State Route 233  
P.O. Box 4141  
Rome, NY 13442  
315-371-4330

**Salt Lake City, UT**  
1155 West 2300 North  
P.O. Box 16027  
Salt Lake City, UT 84116  
385-715-2952

**San Antonio, TX**  
8677 I-10 East  
P.O. Box 69  
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