



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.

© MBCI 2019, part of the Cornerstone Building Brands family.

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.** 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 or contact your local MBCI Sales Representative.

TABLE OF CONTENTS

PRODUCT INFORMATION

Architect/Engineer Information	FL-4
General Description	FL-5
Product Checklist	FL-6 - 7
Clip Spacing/Panel Engagement	FL-8

DETAILS

Barrel Roofs	
1.1 Isometric Detail Guide	FL-9
1.2 Crown Detail	FL-10
1.3 Splice Detail	FL-11
1.4 Starter/Sill Detail	FL-12
1.5 Rake Detail	FL-13
Vertical Fascia	
2.1 Isometric Detail Guide	FL-14
2.2 Coping Detail	FL-15
2.3 Sill Details	FL-16
2.4 Corner Details	FL-17
2.5 Panel Termination Details	FL-18
Horizontal Fascia	
3.1 Isometric Detail Guide	FL-19
3.2 Coping Detail	FL-20
3.3 Sill Detail	FL-21
3.4 Corner Details	FL-22
3.5 Panel Termination Detail	FL-23
3.6 Splice Detail	FL-24
Soffit	
4.1 Soffit Plan	FL-25
4.2 Fascia Detail	FL-26
4.3 Fascia Detail	FL-27
4.4 Wall Detail	FL-28
4.5 Miter Detail	FL-29
4.6 Wall Detail	FL-30

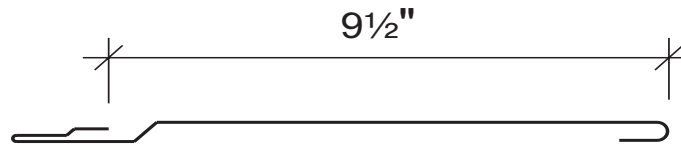
PRODUCT INFORMATION

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 - 8 1/2", 9 1/2", or 10 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>FlexLoc Panel</p> <p style="text-align: right;"><input type="checkbox"/></p>	<p>Fasteners</p> <p> Fastener #12A <input type="checkbox"/></p> <p>10 - 16 x 1" #2 Quadrex Drive Pancake Hd S.D.</p> <p> Fastener #13A <input type="checkbox"/></p> <p>10 - 12 x 1" #2 Quadrex Drive Pancake Type "A"</p> <p> Fastener #14 <input type="checkbox"/></p> <p>1/8" x 3/16" Pop Rivet</p>	<p>Fasteners</p> <p> Fastener #11 <input type="checkbox"/></p> <p>1/4" x 1 1/4" Masonry Anchor</p> <p> Fastener #1A <input type="checkbox"/></p> <p>12 - 14 x 1" S.D.</p> <p> Fastener #4 <input type="checkbox"/></p> <p>1/4" - 14 x 7/8" Long-Life Lap Tek S.D.</p>
<p>FlexLoc Clip</p> <p style="text-align: right;">HW-4900 <input type="checkbox"/></p>	<p>SB Clip</p> <p>10 - 12 x 1" Pancake Head S.D.</p> <p style="text-align: right;">HW-4500 <input type="checkbox"/></p>	<p>SB Batten</p> <p style="text-align: right;">FL-560 <input type="checkbox"/></p>
<p>Double Bead Tape Sealer</p> <p style="text-align: right;">HW-500 <input type="checkbox"/></p>	<p>Urethane Sealant</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-542 <input type="checkbox"/></p>	<p>Crown Trim</p> <p style="text-align: right;">10'-2" <input type="checkbox"/></p>
<p>Sill with Soffit</p> <p style="text-align: right;">T-5191 10'-2" <input type="checkbox"/></p>	<p>Sill without Soffit</p> <p style="text-align: right;">10'-2" <input type="checkbox"/></p>	<p>Angle Trim</p> <p style="text-align: right;">T-5051 10'-2" <input type="checkbox"/></p>

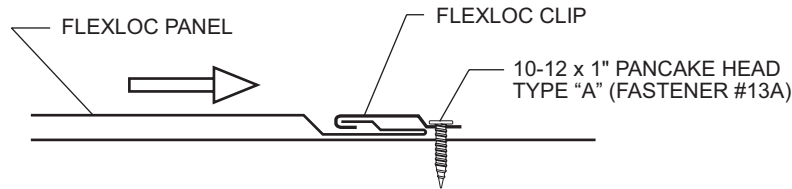
PRODUCT INFORMATION

PRODUCT CHECKLIST

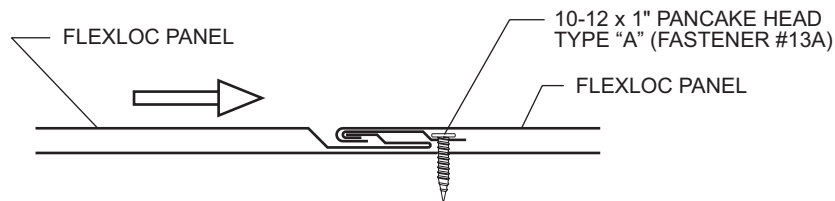
<p>Sill Trim</p> <p>T-5181 10'-2" <input type="checkbox"/></p>	<p>Panel Splice Trim</p> <p>Contact MBCI for lead time. HW-1200 10'-2" <input type="checkbox"/></p>	<p>Continuous Cleat</p> <p>T-5121 10'-2" <input type="checkbox"/></p>
<p>Offset Cleat</p> <p>T-5131 10'-2" <input type="checkbox"/></p>	<p>Factory 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

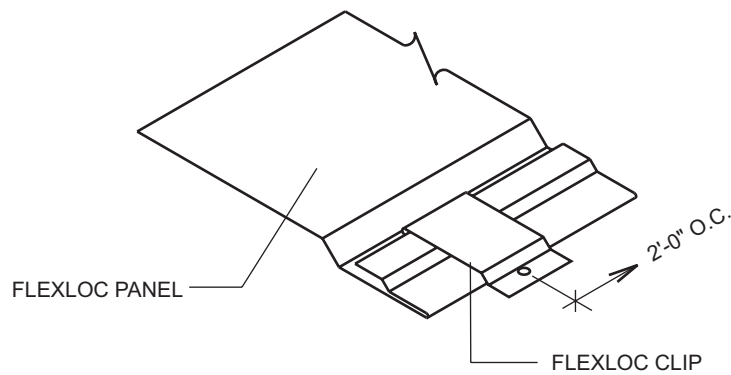
CLIP DETAIL



CLIP ATTACHMENT



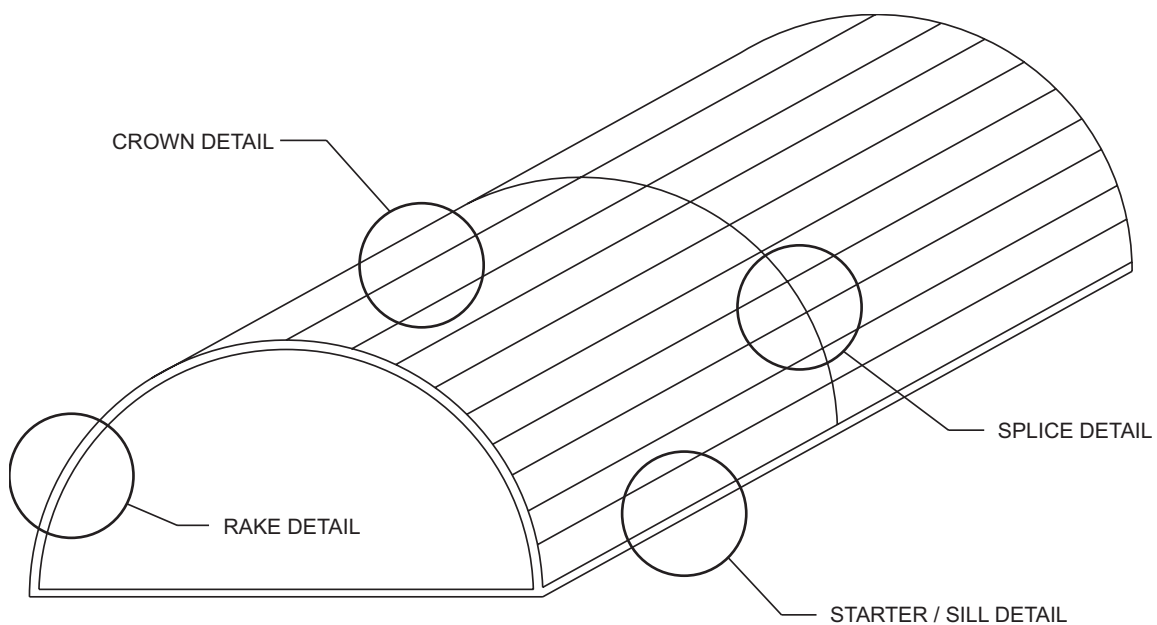
PANEL ENGAGEMENT DETAIL


NOTES:

1. Panel clips to be installed 2'-0" on center unless instructed otherwise on construction drawings.
2. Typical clip fastener is one 10 - 12 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

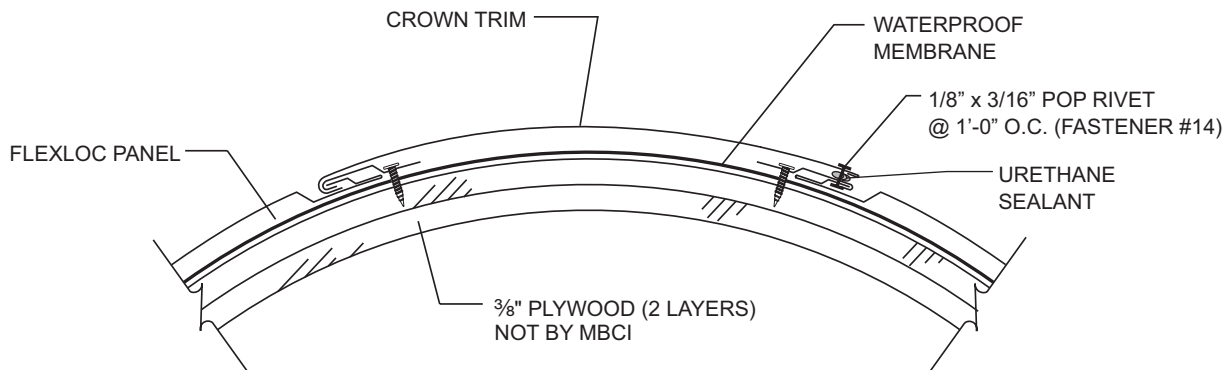


NOTES:

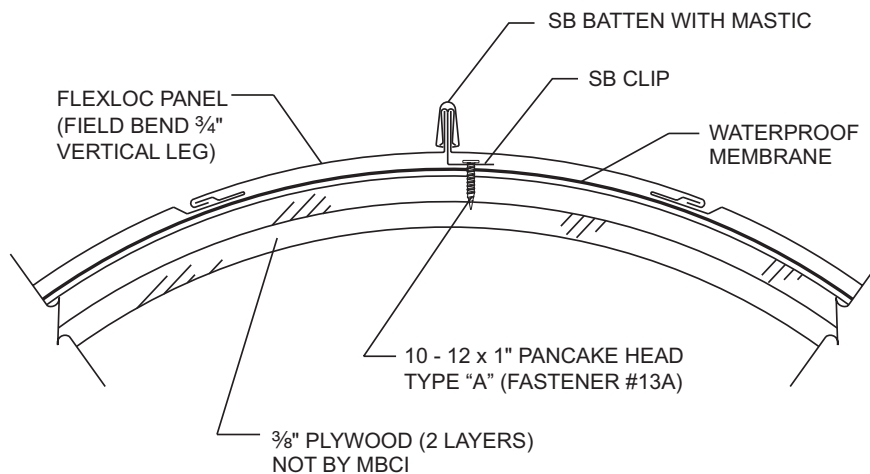
1. The following barrel roof details are based on the panels being installed horizontally. When installed horizontally, the panels do not need to be factory curved.
2. Always install panels beginning at bottom and working toward the top. This will prevent water from ponding in the panel seam.

PRODUCT INFORMATION

BARREL ROOF DETAILS



STANDARD CROWN DETAIL



OPTIONAL CROWN DETAIL

NOTES:

Standard Detail

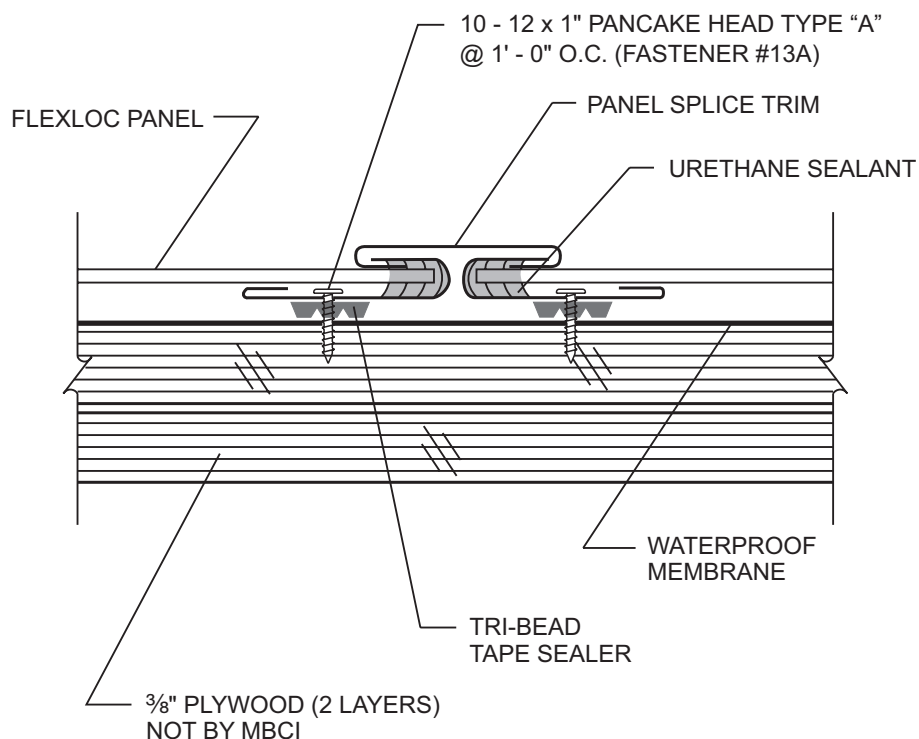
1. Install panels up to crown on both sides of barrel roof.
2. Install urethane sealant continuous on the male leg of one top panel.
3. Hook open side of cap trim onto male leg of one panel and slide end of cap trim into rake trim receiver. Pop rivet opposite side of cap trim (the side with the urethane 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



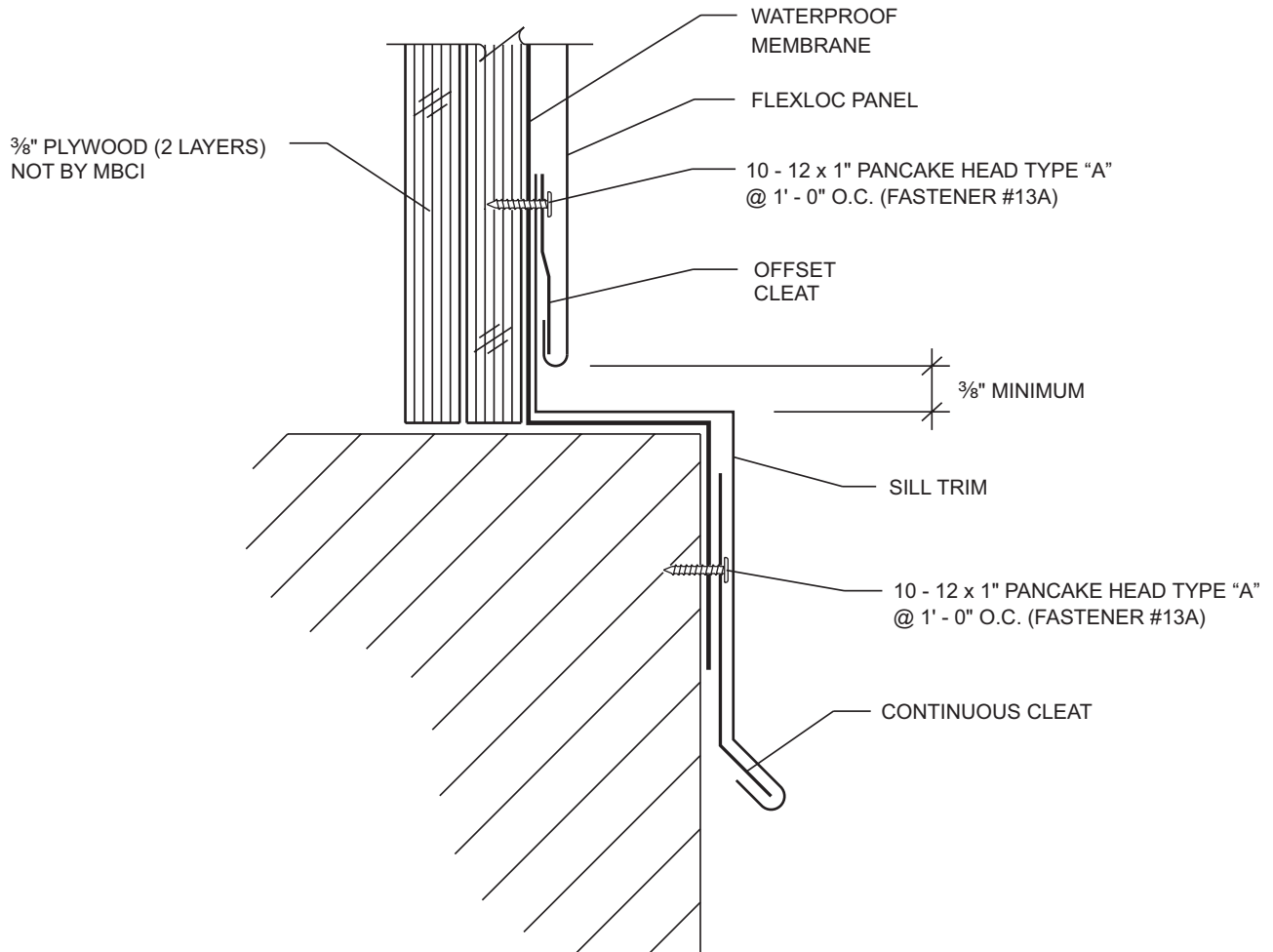
SPLICE DETAIL

NOTES:

1. Install double 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 10 - 12 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



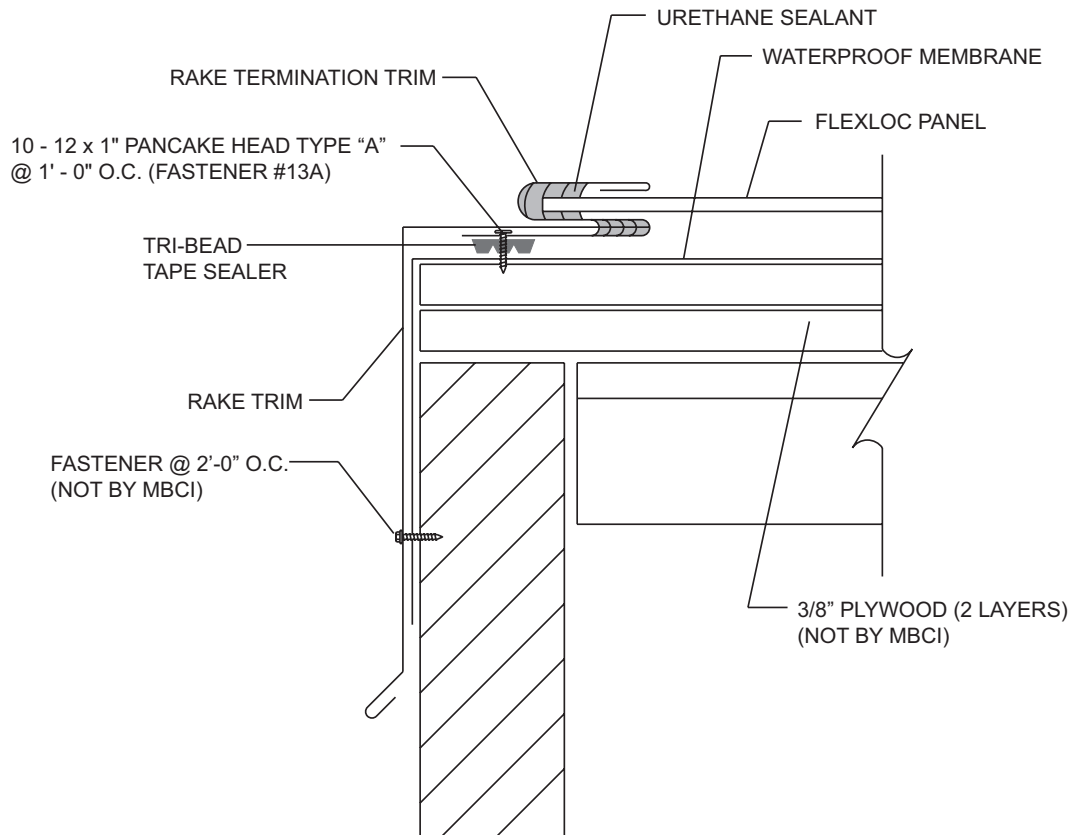
STARTER/SILL DETAIL

NOTES:

1. Install sill trim to substructure with 10 - 12 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 10 - 12 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



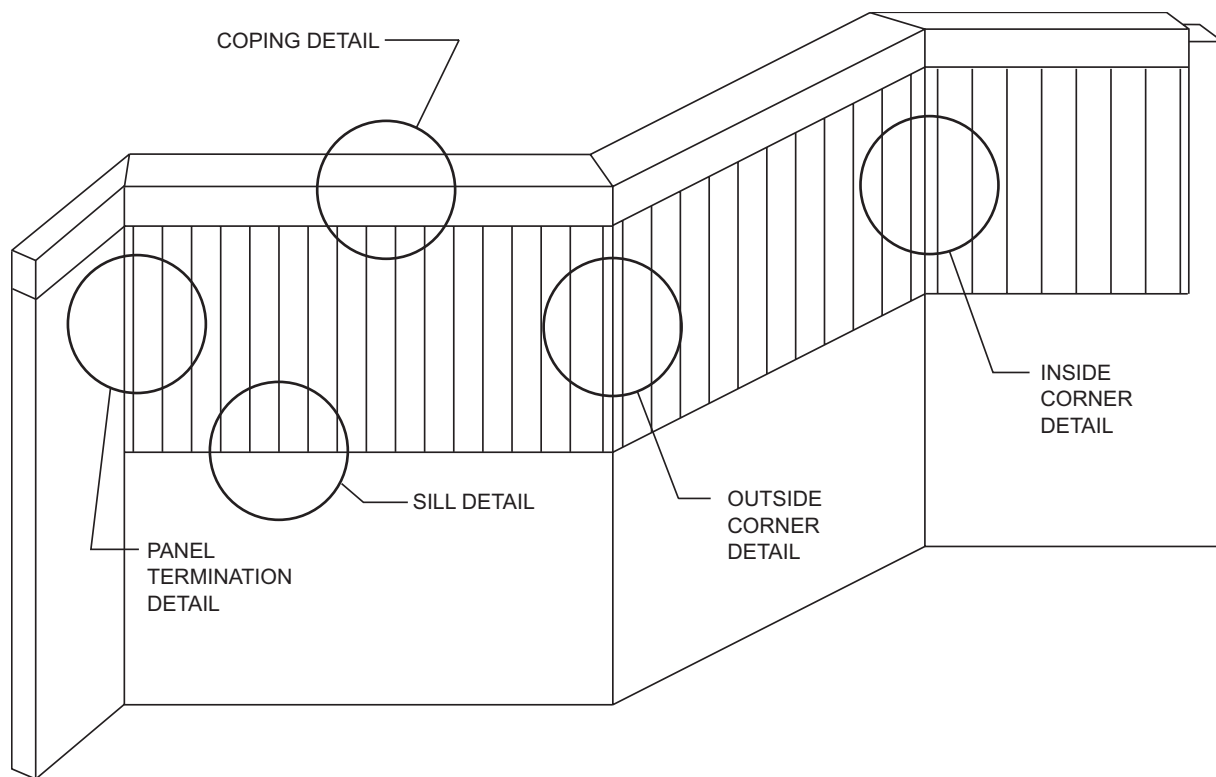
RAKE DETAIL

NOTES:

1. Install panels before installing rake termination trim. **Do not install clips closer than 1'-0" from end of panel.**
2. Install double 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 10 - 12 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

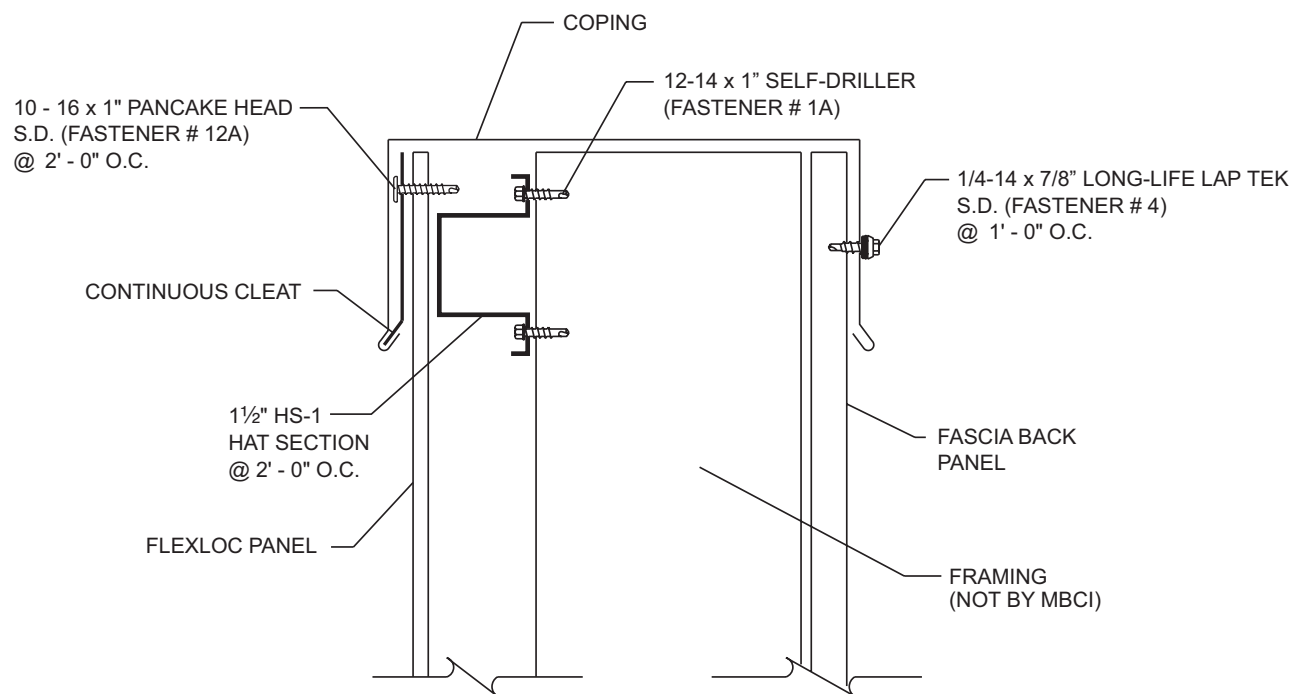


NOTES:

1. Panels may be installed from either direction.

PRODUCT INFORMATION

VERTICAL FASCIA DETAILS



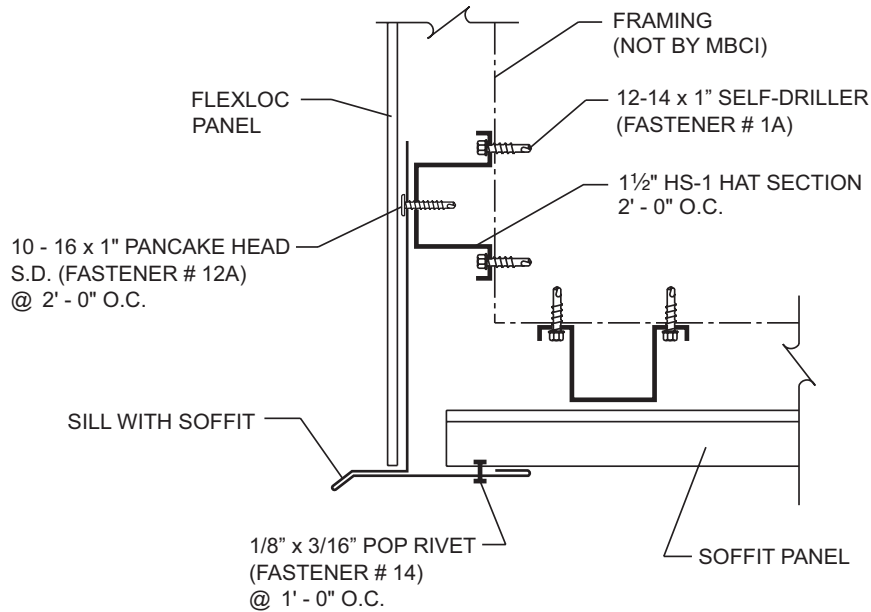
COPING DETAIL

NOTES:

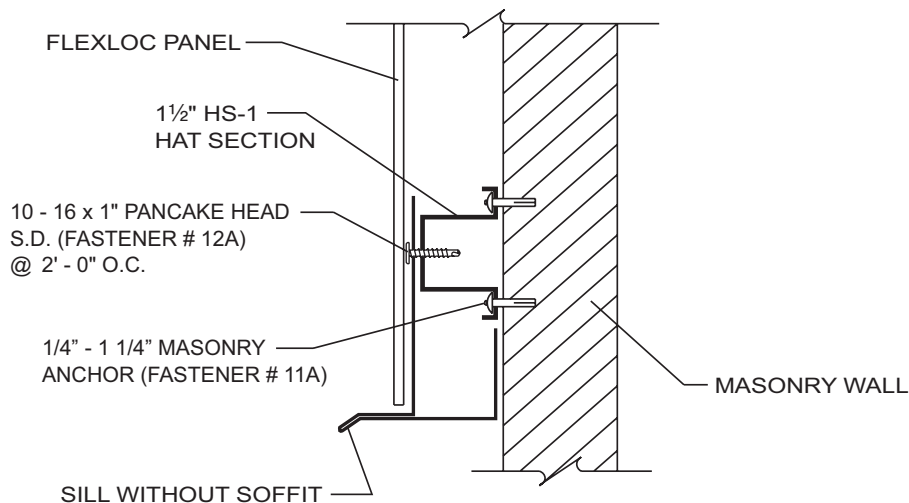
1. Install continuous cleat to FlexLoc panels with 10 - 16 x 1" pancake head self-drilling fasteners at 2'-0" o.c.
2. Install coping by engaging open hem in front onto continuous cleat. Install 1/4 - 14 x 7/8" Long-Life Lap Tek S.D. at 1'-0" o.c. to back side of coping.
3. Lap coping trim 3". Seal joints with urethane sealant between the two pieces of coping and pop rivet at 2" on center.

PRODUCT INFORMATION

VERTICAL FASCIA DETAILS



SILL WITH SOFFIT



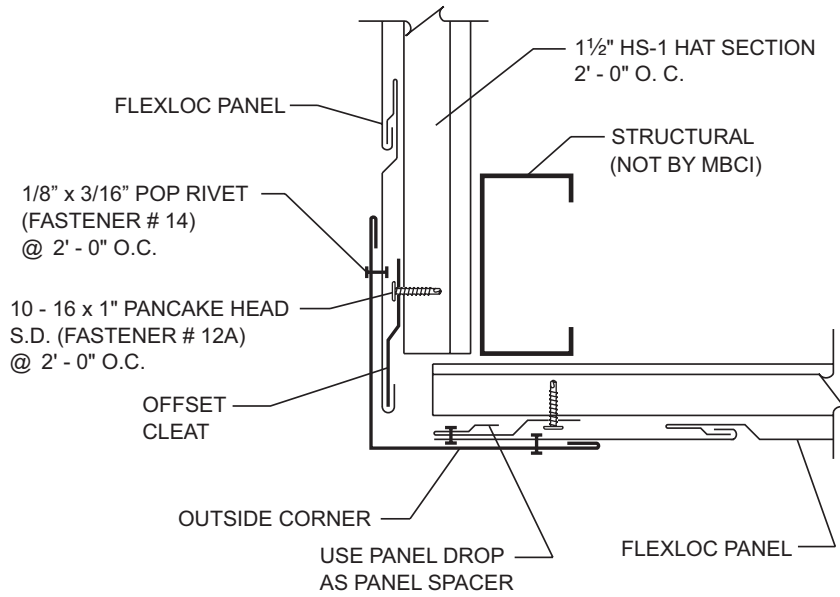
SILL WITHOUT SOFFIT

NOTES:

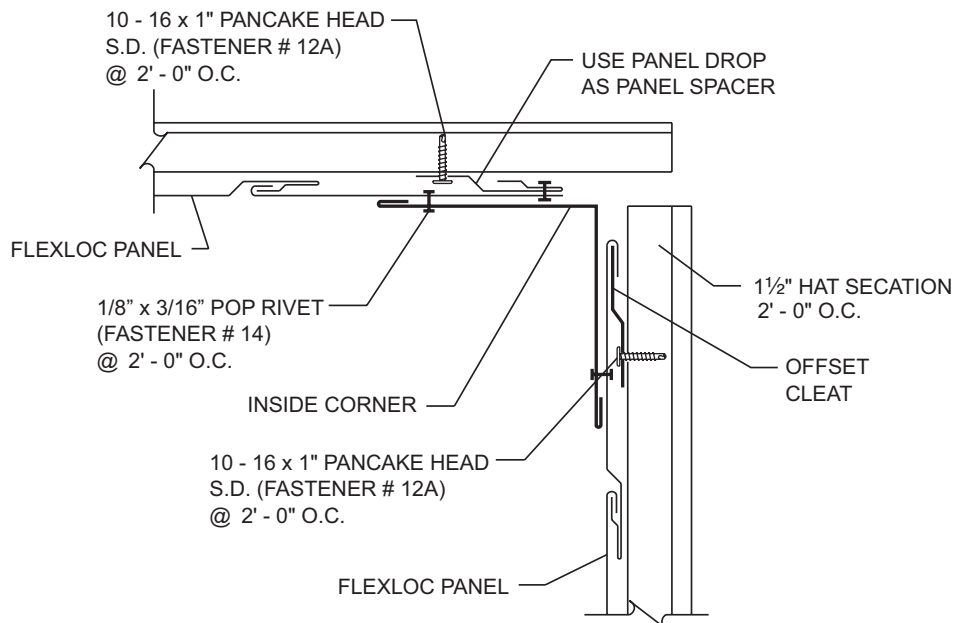
1. Attach sill trim to substructure with 10 - 16 x 1" pancake head self-drilling fasteners at 2'-0" o.c.
2. Install fascia panels to substructure allowing bottom of fascia panel to set gently on top of sill trim so as not to force it down.

PRODUCT INFORMATION

VERTICAL FASCIA DETAILS



OUTSIDE CORNER



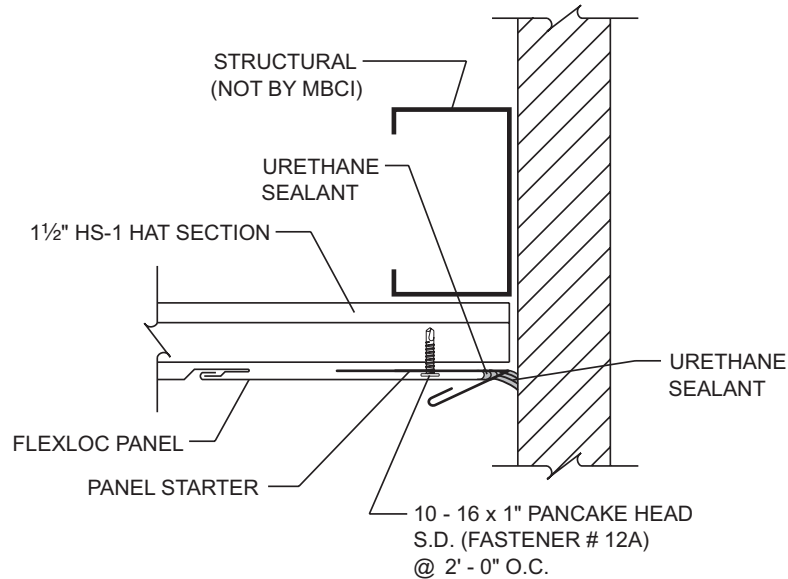
INSIDE CORNER

NOTES:

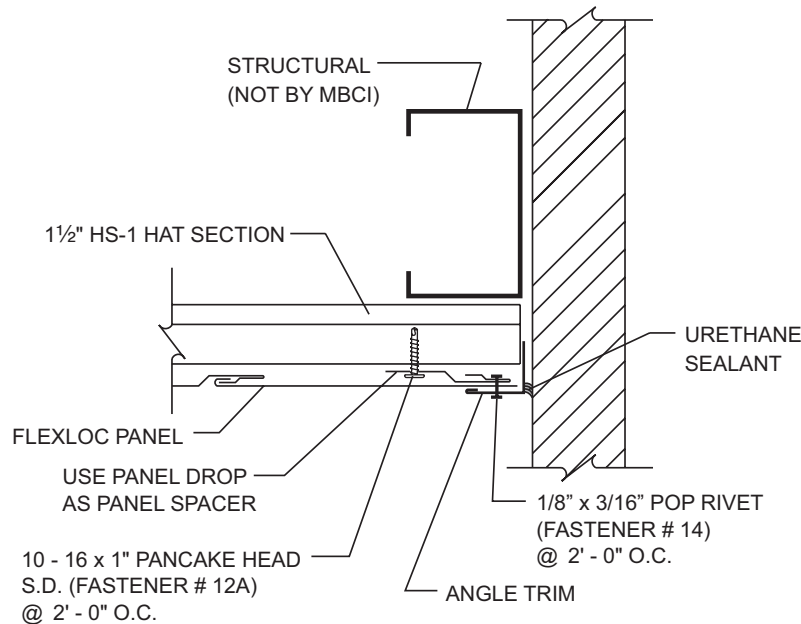
1. Field cut panels at corner as required.
2. Install drop from cut panel as a spacer to support end of last panel.
3. Install corner trim to panels with pop rivets at 2'-0" o.c.

PRODUCT INFORMATION

VERTICAL FASCIA DETAILS



PANEL TERMINATION DETAIL



ALTERNATE PANEL TERMINATION DETAIL

NOTES:

Panel Termination Detail

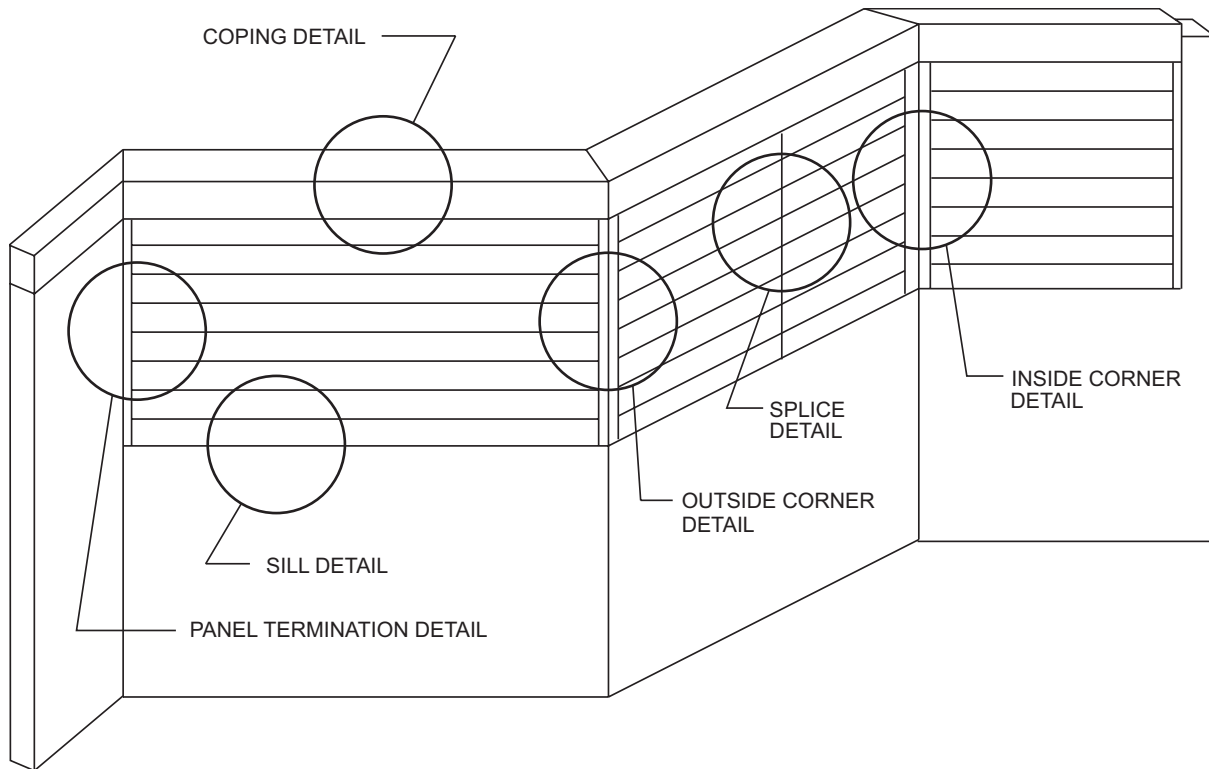
1. Install panel starter with 10 - 16 x 1" pancake head self-drilling fasteners.
2. Install urethane sealant into open hem of starter trim.
3. Field cut panel and slide cut end into panel starter.

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

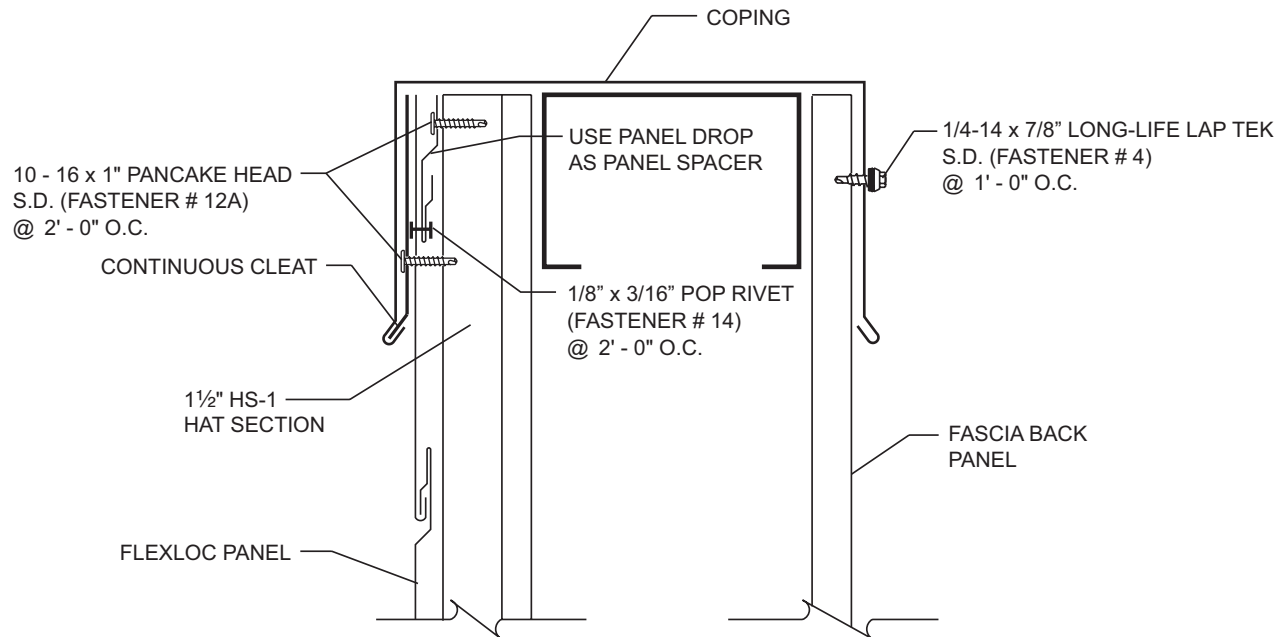


NOTES:

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

PRODUCT INFORMATION

HORIZONTAL FASCIA DETAILS



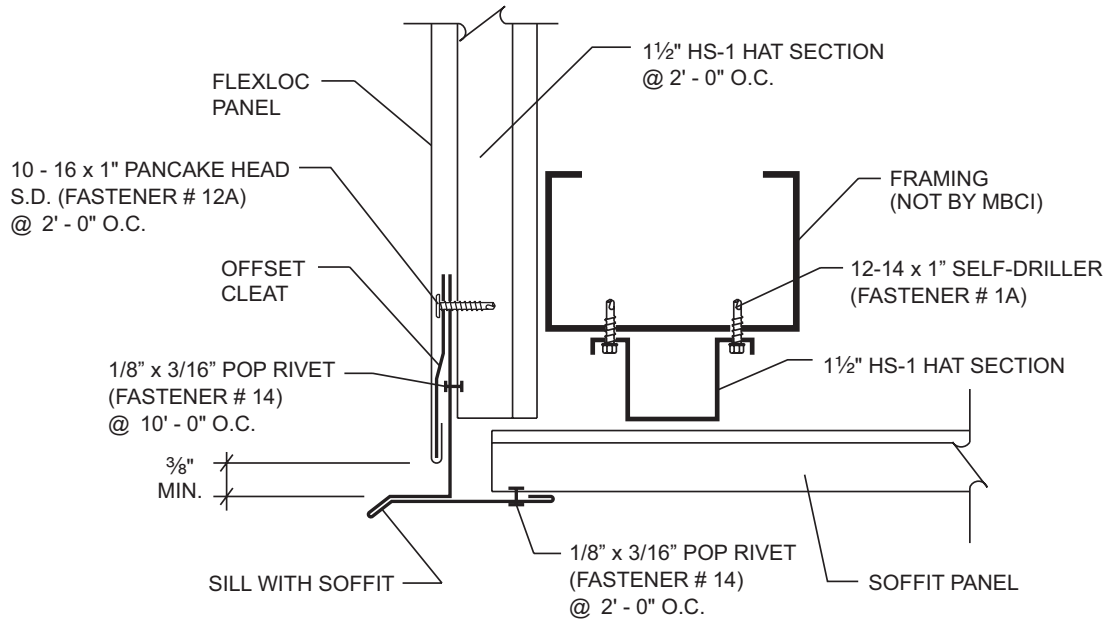
COPING DETAIL

NOTES:

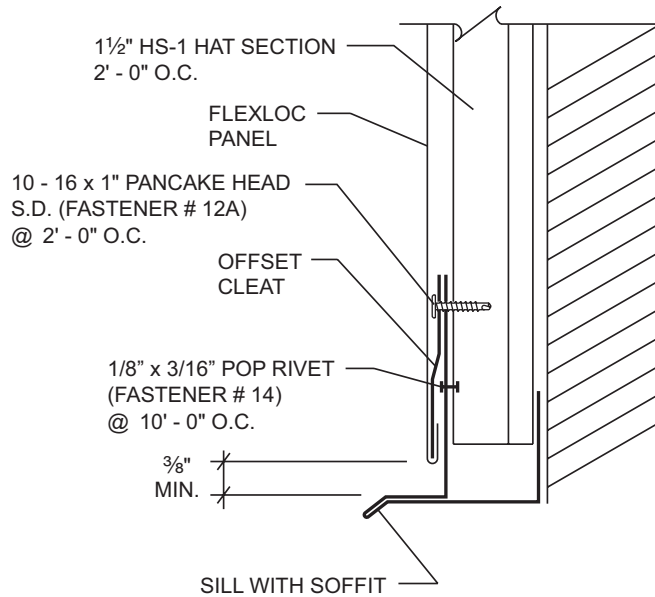
1. Field cut last panel as required.
2. Install drop from cut panel as a spacer, to substructure with 10 - 16 x 1" pancake head self-drilling fasteners 2'-0" o.c. Pop rivet last panel to spacer.
3. Attach continuous cleat to panel with 10 - 16 x 1" pancake head self-drilling fasteners at 2'-0" o.c..
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



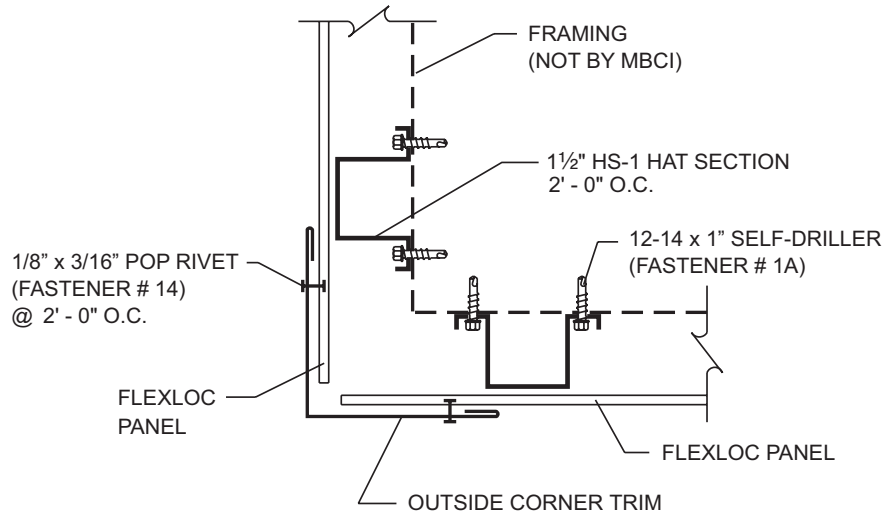
SILL WITHOUT SOFFIT

NOTES:

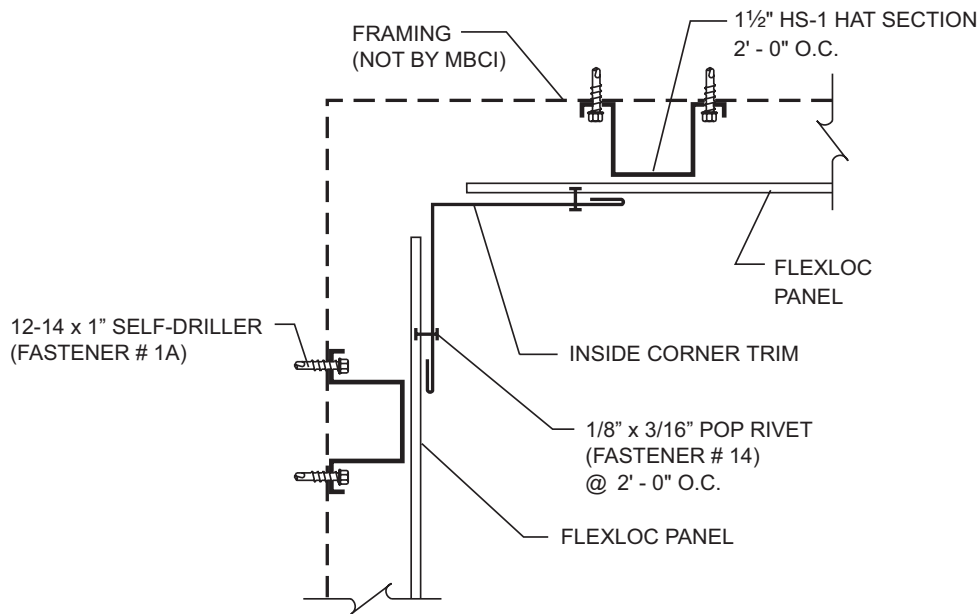
1. Pop rivet sill trim to substructure with two pop rivets per 10' - 0" piece.
2. Install offset cleat to substructure with 10 - 16 x 1" pancake head self-drilling fasteners at 2'-0" o.c. Leave a 3/8" gap between sill trim and offset cleat to allow panel to be engaged onto offset cleat.

PRODUCT INFORMATION

HORIZONTAL FASCIA DETAILS



OUTSIDE CORNER



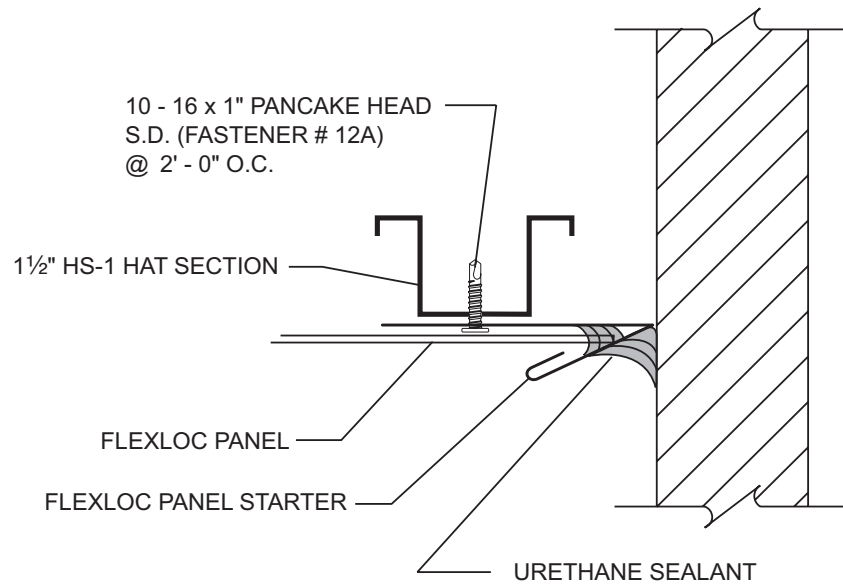
INSIDE CORNER

NOTES:

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

PRODUCT INFORMATION

HORIZONTAL FASCIA DETAILS



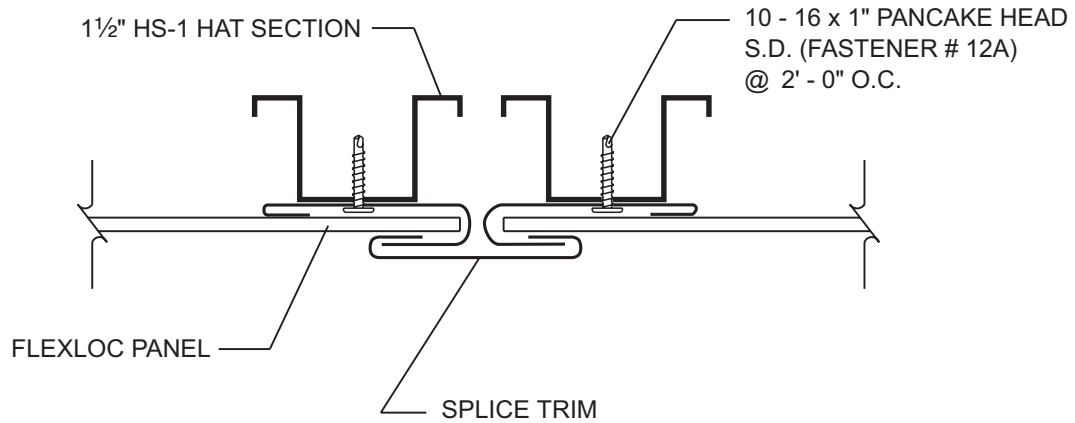
PANEL TERMINATION DETAIL

NOTES:

1. Install panel starter to substructure with 10 - 16 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



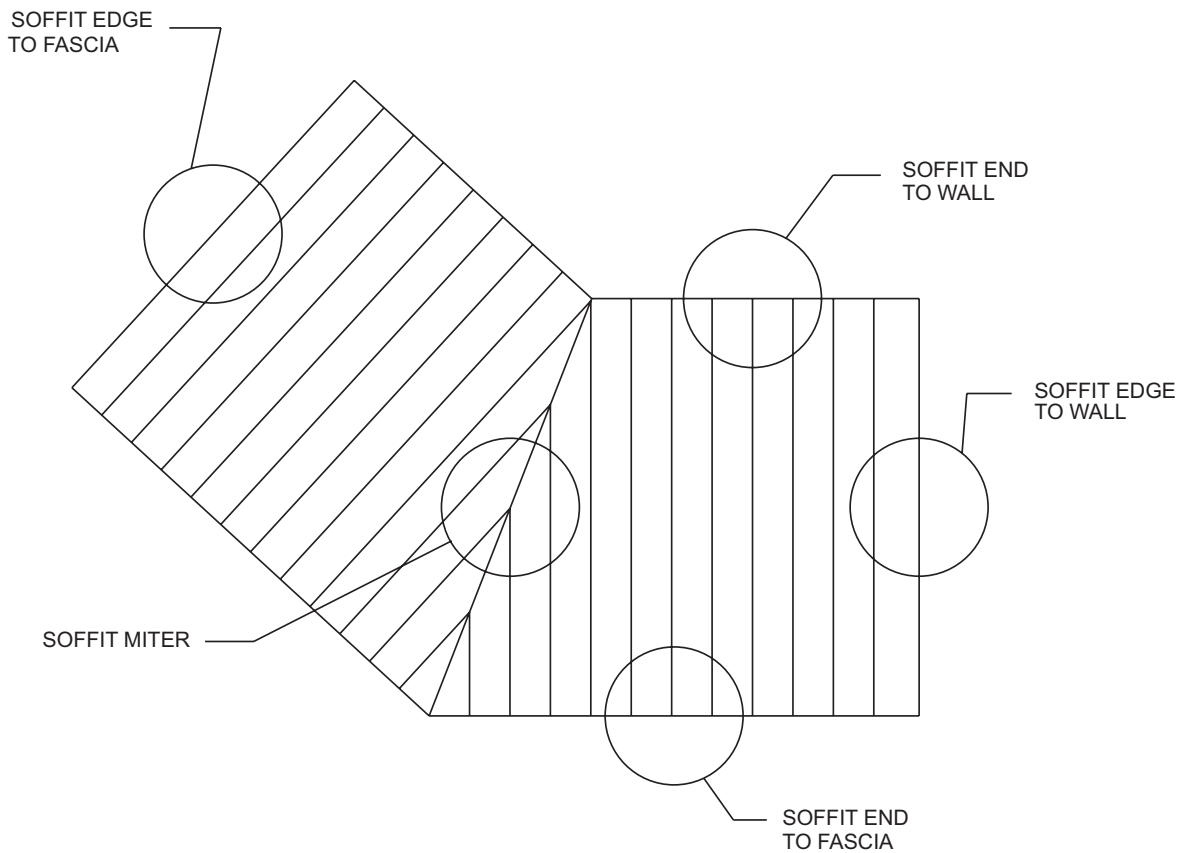
SPLICE DETAIL

NOTES:

1. Install panel splice trim to roof with 10 - 16 x 1" pancake head self-drilling fasteners 1'-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

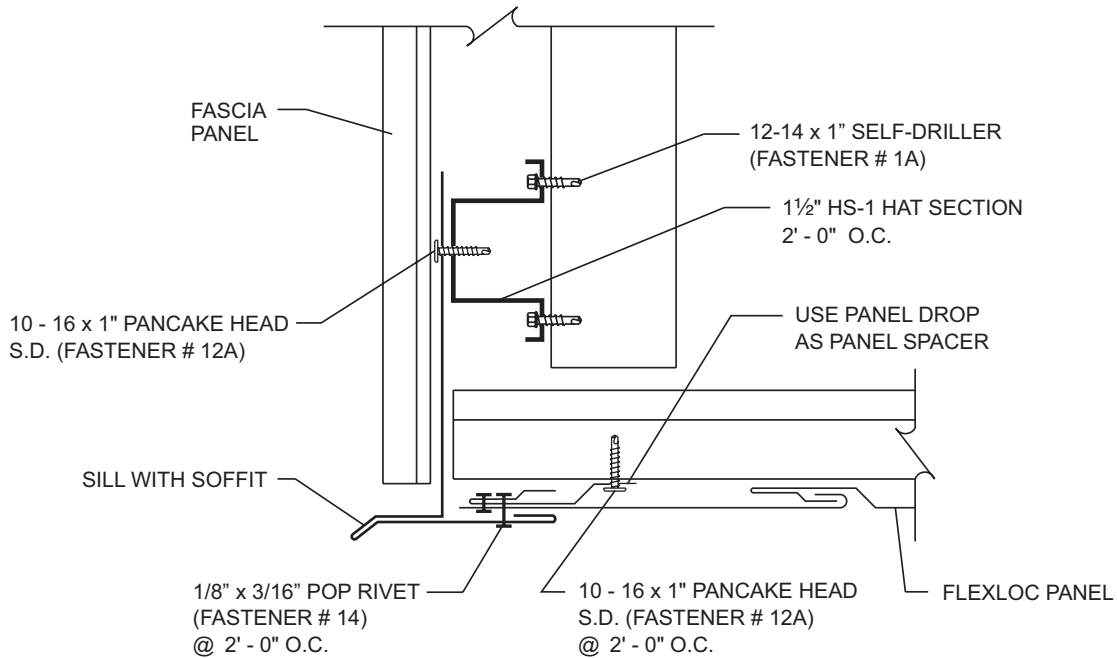


NOTES:

- 1. Panels may be installed from either direction.

PRODUCT INFORMATION

SOFFIT DETAILS



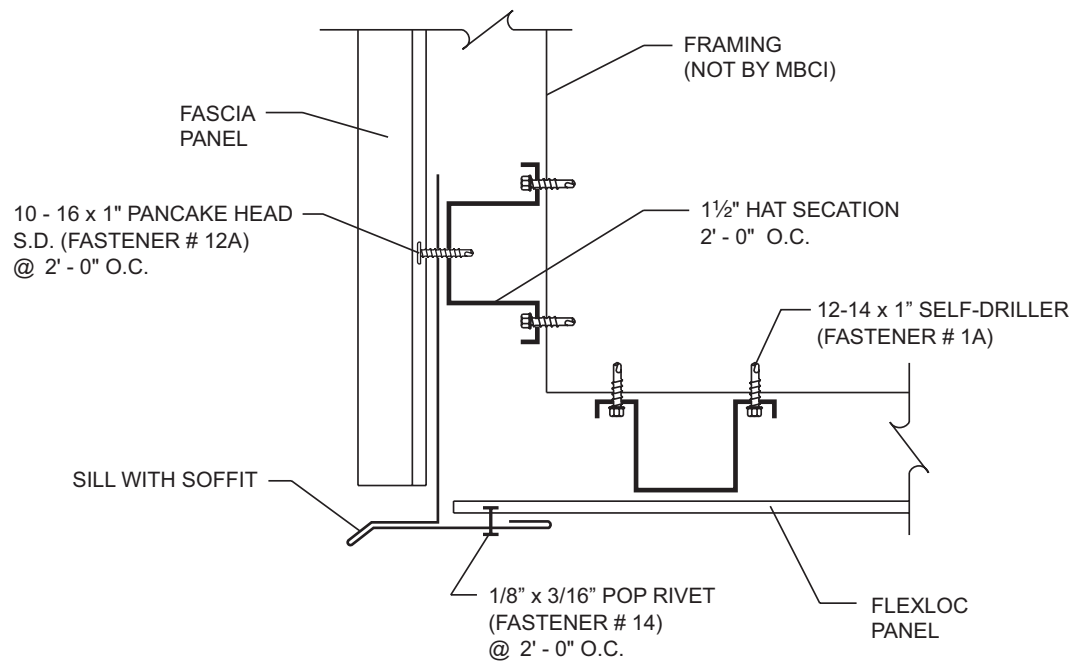
SOFFIT EDGE TO FASCIA DETAIL

NOTES:

1. Attach drop from cut panel as a spacer, to HS-1 hat section with 10 - 16 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



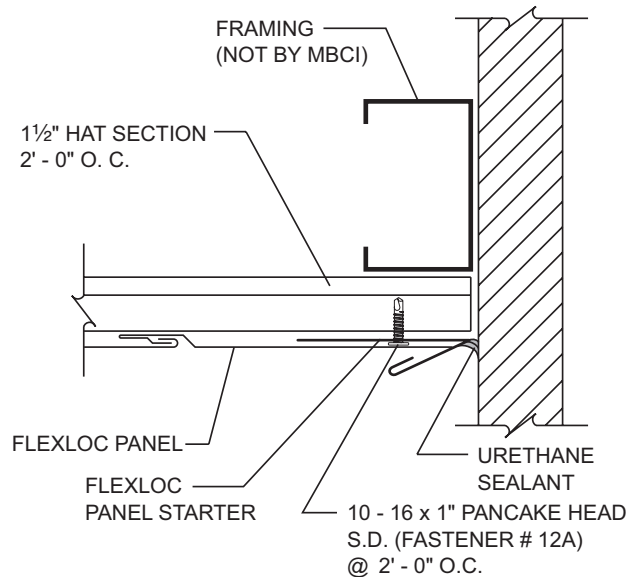
SOFFIT END TO FASCIA DETAIL

NOTES:

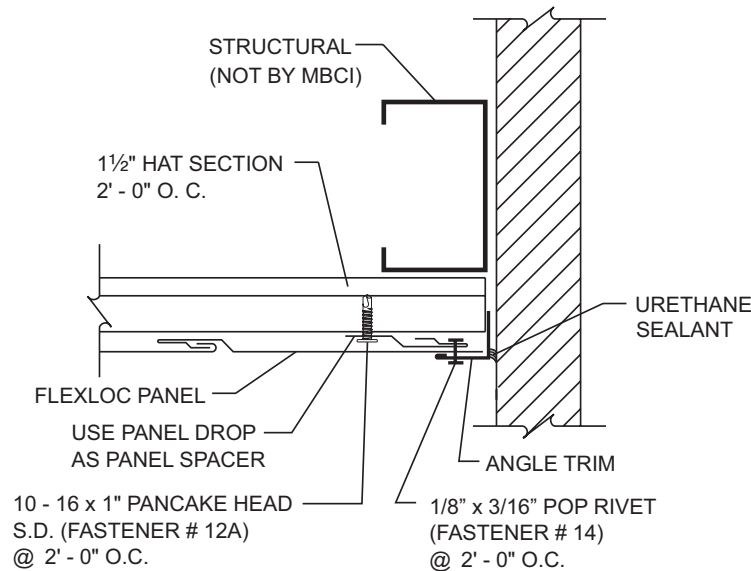
1. Attach sill with soffit to substructure with 10 - 16 x 1" pancake head self-drilling fasteners at 2'-0" o.c.
2. Pop rivet sill with soffit to FlexLoc panel at 2'-0" o.c.

PRODUCT INFORMATION

SOFFIT DETAILS



SOFFIT EDGE TO WALL DETAIL



ALTERNATE DETAIL

NOTES:

Soffit Edge to Wall Detail

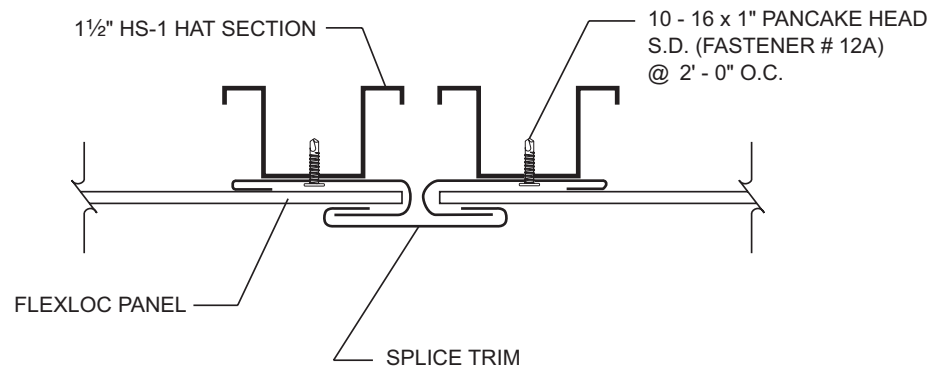
1. Attach panel starter to hat section with 10 - 16 x 1" pancake head self-drilling fastener at each support.
2. Cut panel as required and insert into FlexLoc panel starter.

Alternate Detail

1. Attach panel spacer to hat section with 10 - 16 x 1" pancake head self-drilling fastener at each support.
2. Attach sill with soffit to substructure with 10 - 16 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



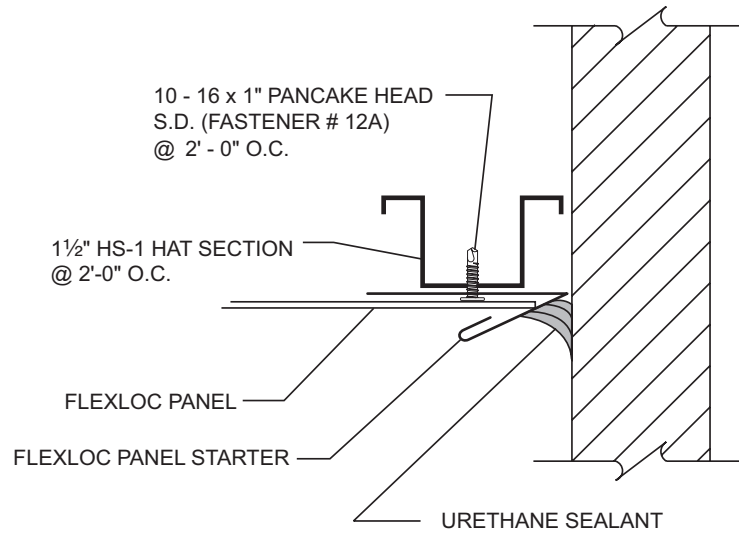
MITER DETAIL

NOTES:

1. Install panel splice trim to roof with 10 - 16 x 1" pancake head self-drilling fasteners 1'-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 10 - 16 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

Houston, TX
14031 West Hardy
P.O. Box 38217
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
Converse, TX 78109
210-888-9768

