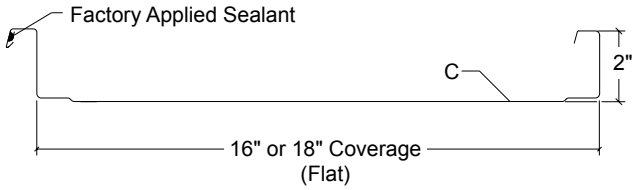
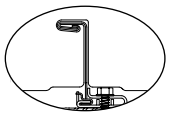
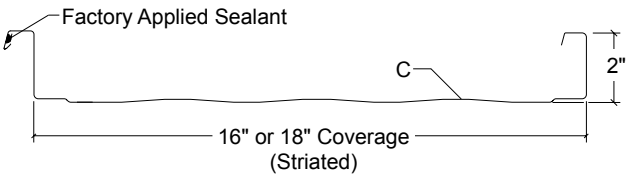
MAGNA-LOC TABLE OF CONTENTS

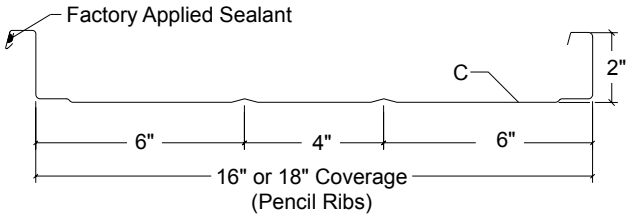
PANEL PROFILES




90° Seam


180° Seam





SLOPE

The minimum recommended slope for any Magna-Loc roofing panel is 1/2:12, where valley conditions exist the recommended minimum slope is 3:12.

SUBSTRATE

Magna-Loc is designed to be utilized over open structural framing, but can easily be used with a solid substrate. The recommended solid substrate is 5/8" plywood with a 30 pound felt moisture barrier. To avoid panel distortion, use a properly aligned and uniform substructure.

COVERAGE

Magna-Loc panels are available in 16" and 18" coverage with a 2" rib height.

LENGTH

Lengths under 5'-0" on panels with striations and lengths under 7'-0" for flat or pencil ribbed panels are available with some cutting restrictions. Maximum recommended panel length is 45'-0". Longer panels require additional consideration in packaging, shipping, and erection. Please consult your Metal Sales branch for recommendations (see PGI-2 and 3 for locations).

AVAILABILITY

Magna-Loc panels are available in 24 and 22 gauge. Minimum quantities may apply.

APPLICATION

Commercial, Industrial, and Architectural panel.

PERFORMANCE TEST

FM 1-90, UL 580, ASTM E 1592, ASTM E 1646, ASTM E 1680, UL 790, UL 2218, and Florida Building Code (FBC).

FASTENING SYSTEM

Concealed Clip System (floating or fixed).

FASTENERS

The fastener selection guide should be consulted for choosing proper fasteners for specific applications. Quantity and type of fastener must meet necessary loading and code requirements (see PGI-12-14).

MATERIALS

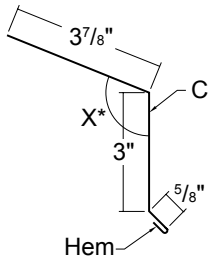
Steel grade 50, per ASTM A-792

FINISH

- *Acrylic Coated Galvalume® (ACG) / ASTM A-792 - AZ55
- Pre-painted Galvalume / ASTM A-792 - AZ50
- **Fluorocarbon (PVDF)

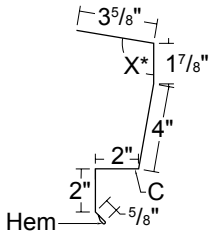
* Differential appearance of Acrylic Coated Galvalume roofing materials is not a cause for rejection.
** Meets both Kynar 500 and Hylar 5000 specifications.

EAVE



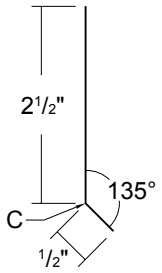
*Length 10'-2" - *Specify Slope Angle*

MAGNA-LOC SCULPTURED EAVE



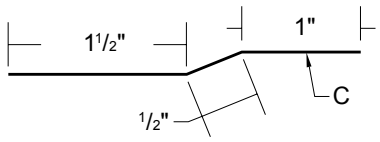
*Length 10'-2", 20'-3" - *Specify Slope Angle*

CLEAT



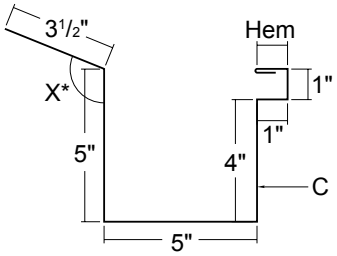
Length 10'-2"

OFFSET CLEAT



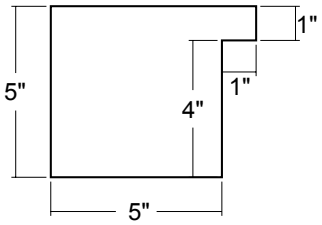
Length 10'-2"

BOX GUTTER

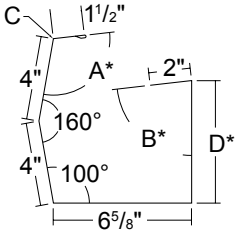


*Length 10'-2", 20'-3" - *Specify Slope Angle*

BOX GUTTER END

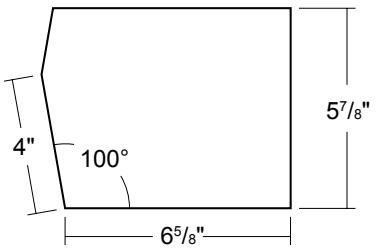


MAGNA-LOC SCULPTURED GUTTER

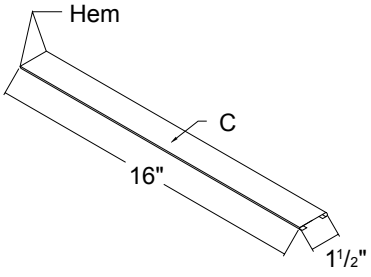


Length 10'-2", 20'-3"
Specify Slope Angle For A and B, and Length for D.

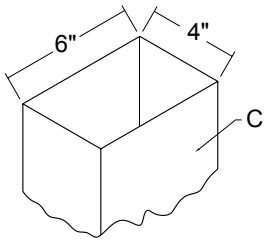
MAGNA-LOC SCULPTURED GUTTER END



UNIVERSAL GUTTER/ DOWNSPOUT STRAP

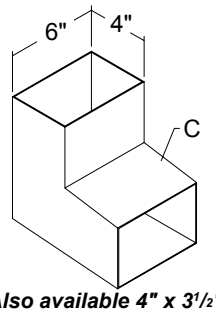


DOWNSPOUT 6" x 4"



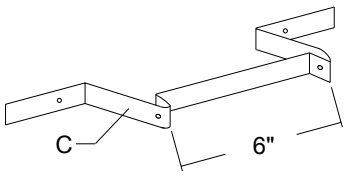
Length 10'-2", 20'-3"
(Also available 4" x 3 1/2")

95° ELBOW 6" x 4"



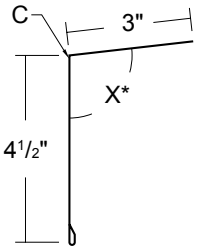
(Also available 4" x 3 1/2")

DOWNSPOUT BRACKET



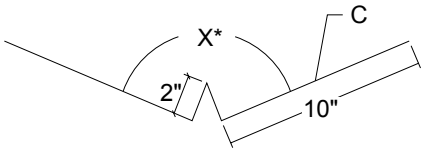
(Also available 4")

GUTTER DRIP



*Length 10'-2" - *Specify Slope Angle*

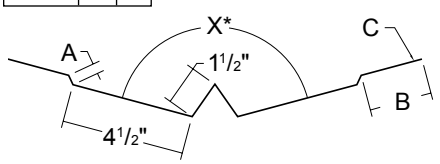
VALLEY



*Length 10'-2", 20'-3" - *Specify Slope Angle*

SSR 4.5" DROP VALLEY

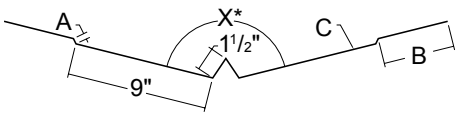
SYSTEM	A	B
LOW	3/8"	4 1/2"
HIGH	1 3/8"	3 1/2"



*Length 10'-2", 20'-3" - *Specify Slope Angle*

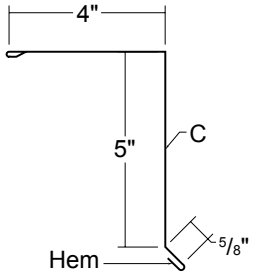
SSR 9" DROP VALLEY

SYSTEM	A	B
LOW	3/8"	10"
HIGH	1 3/8"	9"



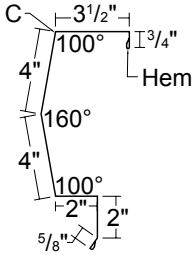
*Length 10'-2", 20'-3" - *Specify Slope Angle*

RAKE



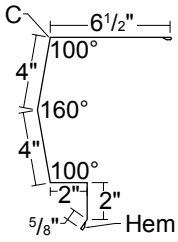
Length 10'-2", 20'-3"

SSR SCULPTURED RAKE (ON MODULE)



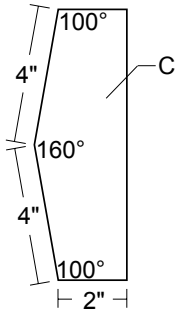
Length 10'-2", 20'-3"

SSR SCULPTURED RAKE (OFF MODULE)

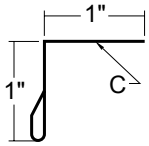


Length 10'-2", 20'-3"

SSR SCULPTURED RAKE END

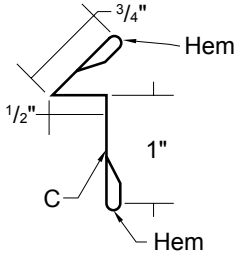


SSR RAKE CLEAT



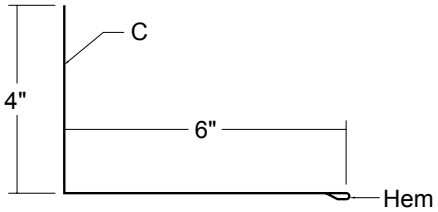
Length 10'-2"

SSR RAKE SLIDE



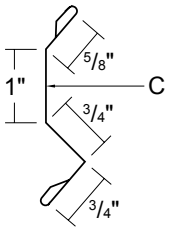
Length 10'-2"

SSR RAKEWALL



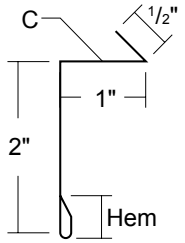
Length 10'-2"

COUNTER FLASHING



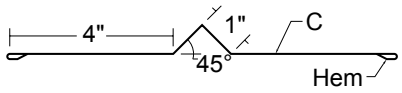
Length 10'-2"

REGLET FLASHING



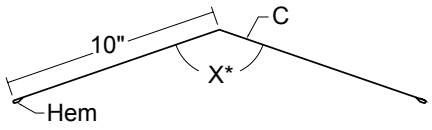
Length 10'-2"

EXPANSION JOINT FLASHING



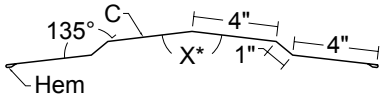
Length 10'-2"

20" RIDGE /HIP COVER



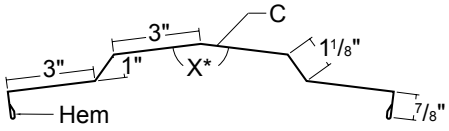
*Length 10'-2", 20'-3" - *Specify Slope Angle*

SSR RIDGE



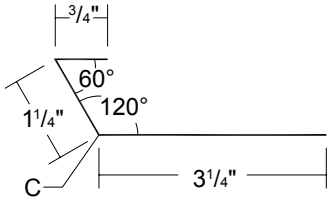
*Length 10'-2", 20'-3" - *Specify Slope Angle*

VENTED RIDGE COVER



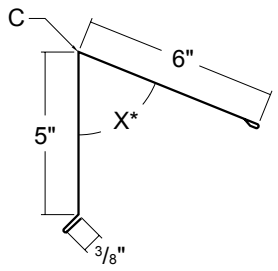
*Length 10'-2", 20'-3" - *Specify Slope Angle*

VENT DRIP



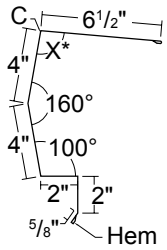
Length 10'-2"

PEAK



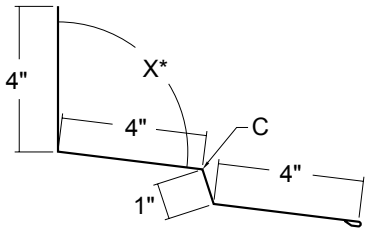
*Length 10'-2", 20'-3" - *Specify Slope Angle*

SSR SCULPTURED HIGH SIDE EAVE



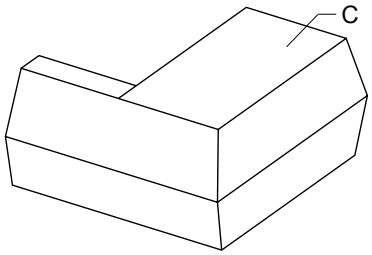
*Length 10'-2", 20'-3" - *Specify Slope Angle*

SSR HIGH SIDE PITCH BREAK

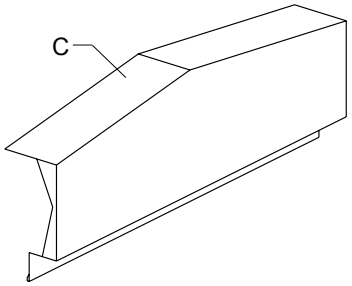


*Length 10'-2", 20'-3" - *Specify Slope Angle*

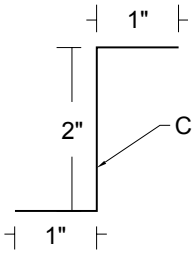
SSR SCULPTURED CORNER BOX



SSR SCULPTURED PEAK BOX

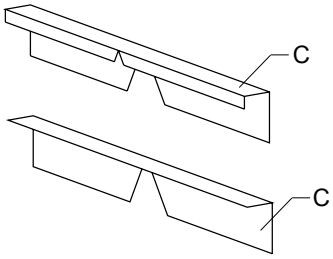


MAGNA-LOC Z-CLOSURE

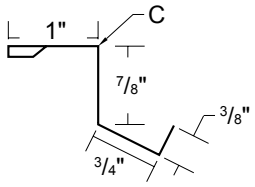


Length 10'-2"

MAGNA-LOC RIB-COVER



SSR GUTTER SUPPORT

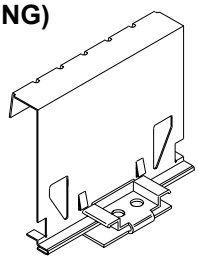


Length 10"

C- Indicates color side of flashing.

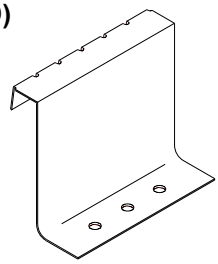
MAGNA-LOC ACCESSORY PROFILES

MAGNA-LOC CLIP (FLOATING)



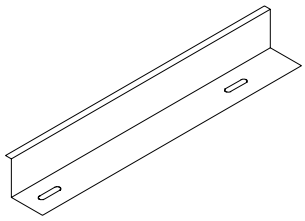
Height 2 3/8", 3 3/8"

MAGNA-LOC CLIP (FIXED)



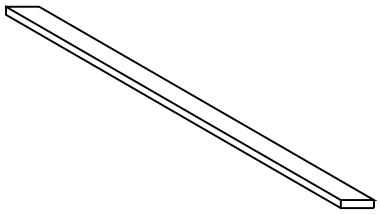
Height 2 1/8", 2 3/8"

FLOATING RAKE ZEE



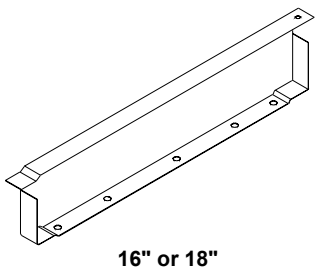
Length 10'-0"
Height 2", 2 3/8", 3 3/8"
Galvanized

ENDLAP PAD



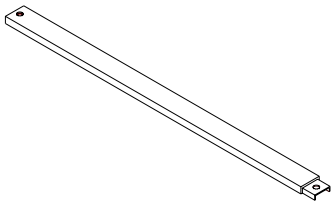
1 1/2" x 3/32" x 20" - (16" Panel)
1 1/2" x 3/32" x 26 1/4" - (18" Panel)
Butyl - Gray

END DAM



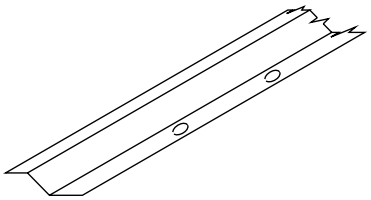
16" or 18"
Galvanized or Painted

BACK-UP CHANNEL



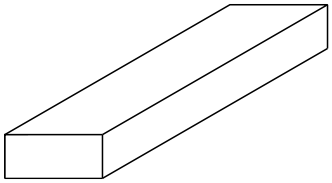
Length 48" and 72"
Galvanized

EAVE PLATE



Length 10'-0"
Height 3/8", 1 3/8"
Galvanized

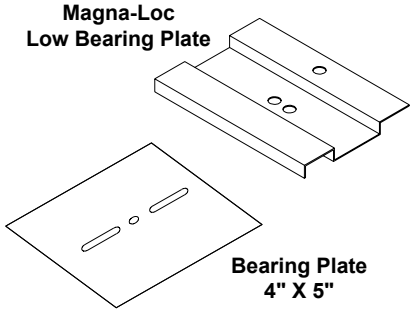
THERMAL BLOCK



1" x 3" x 24" - (18" Panel)
1" x 3" x 16" - (16" Panel)
Polystyrene Foam

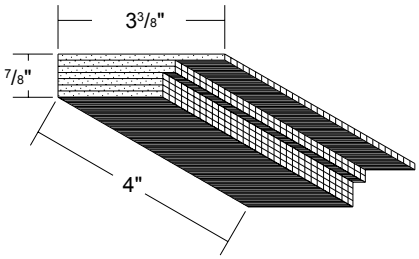
BEARING PLATES

Magna-Loc
Low Bearing Plate

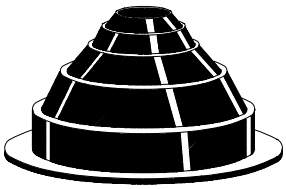


Bearing Plate
4" X 5"

VENT MATERIAL

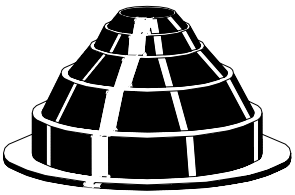


RUBBER ROOF JACK



MINI (1/4" to 1 1/8" O.D. Pipe)
#2 (1 3/4" to 3" O.D. Pipe)
#4 (3" to 6" O.D. Pipe)
#6 (6" to 9" O.D. Pipe)
#8 (7" to 13" O.D. Pipe)

RETRO ROOF JACK

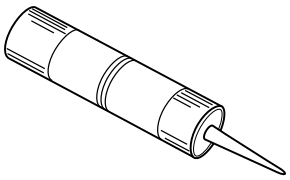


#801RETRO (3/4" to 2 3/4" O.D. Pipe)
#802RETRO (2" to 7 1/4" O.D. Pipe)
#803RETRO (3 1/4" to 10" O.D. Pipe)

RUBBER ROOF FLASH KIT

12" x 50'-0" Flash Kit
18" x 50'-0" Flash Kit

TUBE SEALANT

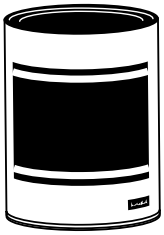


10.3 oz. Cartridge
Urethane

TAPE SEALANT

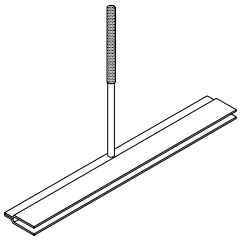
7/8" X 3/16" X 25'
Double Bead
Butyl - Gray

TOUCH-UP PAINT

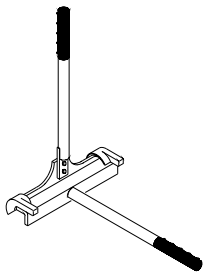


Available in Pints or 2 oz Bottles
PVDF / MS Colorfast45

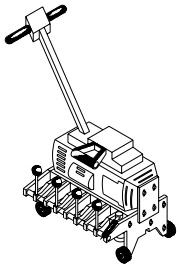
METAL PANEL HEMMING TOOL



HAND CRIMPER



MECHANICAL SEAMER



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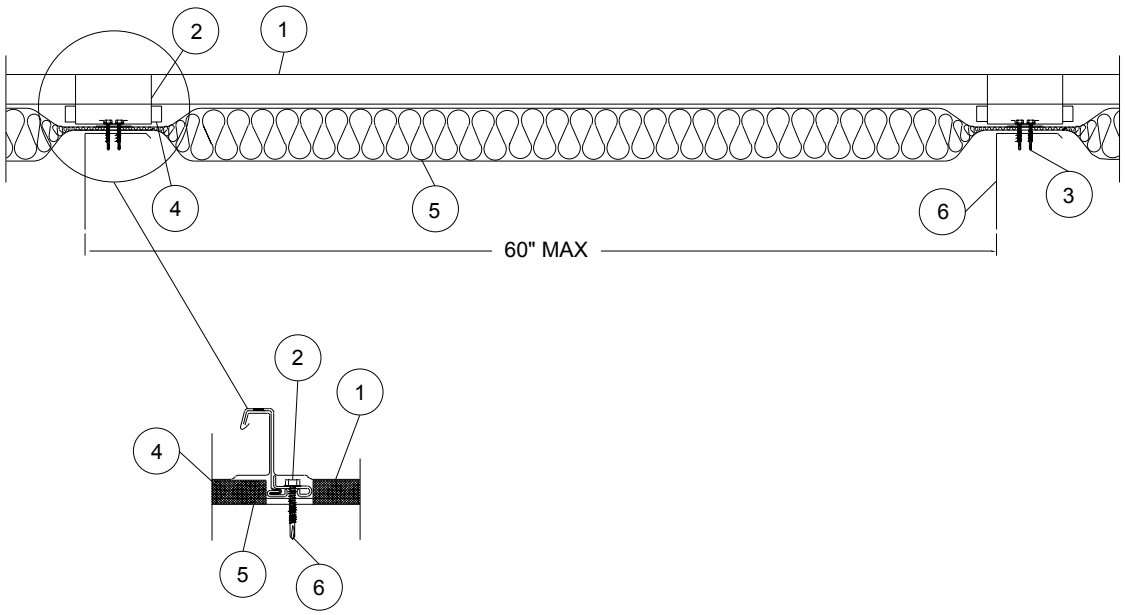


MAGNA-LOC

Construction No. 506
October 16, 2001
Uplift - Class 90
Fire Not Investigated

1. Metal Roof Deck Panels* No. 24 MSG min thick coated steel. Panel width, max 18 in., min 12 in.; rib height 2 in. Panels continuous over two or more spans. The panel flat area may have optional striations or minor corrugations placed at various locations in the panel flat area beginning min of 2 in. from side ribs. The upper flange of the panel rib may be horizontal, or optionally formed down to form an angle of 0 degree to 90 degree between the vertical segment and the top flange of the rib. End lap to occur adjacent to and within 12 in. of purlin (Item 6) with panels overlapped 2 in. min. An end lap back-up-plate (Item 2A) to be used. A bead of sealant may be used at panel end laps and side ribs. Ribs to be seamed with an electric or hand seaming tool to form a flange with a tight hem. Seaming process to include the upper portion of the Panel Clips (Item 2).

METAL SALES MANUFACTURING CORPORATION - "Magna-Loc 18", "Magna-Loc 16"

2. Roof Deck Fasteners* (Panel Clips) Located at side of panels over purlins (Item 6). (Max spacing 60 in. OC). When wood thermal block (Item 4A) is used, clips to be located on top. Either of the following:

Fixed Clip (Not Shown) - One piece assembly fabricated from No. 22 MSG min thick steel, 3-1/2 in. wide.

Floating Clip - Two piece assembly with a base fabricated from No. 16 MSG min thick steel, 2 in. wide and a top fabricated from No. 22 MSG min thick steel, 4-5/16 in. wide.

2A. End Lap Back-Up-Plate (Not shown) - No. 16 MSG min thick coated steel channel, 3 in. wide with two 3/8 in. deep legs. Max length 74 in. Located under the panel end lap (50 ksi min yield strength).

2B. Roof Deck Fasteners*(Cinch Plate) (Optional) - (Not Shown) - width 1-5/16 in., length 18 in. max. Fabricated from No. 20 MSG min thick stainless steel. Located over end lap.

2C. End Lap Back-Up-Plate (Optional) - (Not shown) - No. 16 MSG min thick coated steel. Width 11, 13 or 19 in., length 7 in. Two 3/4 in. by 3/4 in. tabs and a 1 in. deep vertical leg located at upslope edge of panel. Used with Item 2A when Item

*2B is not used (50 ksi min yield strength).

3. Fasteners (Screws) For panel clip-to-purlin attachment to be No. 1/4-14 by min 1 in. long self drilling, self-tapping hex-washer-head plated steel screws. Two fasteners used per clip. Fasteners used at end lap to be one of the following: No. 1/4-14 by 1 in. long Type AB point, self-drilling, self-tapping hex-washer-head plated or stainless steel screws or No. 12-14 by 1-1/4 in. long self-drilling self-tapping hex-washer-head plated steel screws. Spacing for 16 in. wide panels to be a 1, 3, 4, 4, 3 in. pattern; spacing for 18 in. wide panels to be a 1-1/2, 3-1/2, 4, 4, 3-1/2, 1-1/2 in. pattern. When optional cinch plate (Item 2B) is used, four fasteners to be required, inserted into factory punched guide holes.

4. Thermal Spacer (Optional) - Polyisocyanurate - 3/8 in. min, 2-3/8 in. max thick, 4 in. min width, length sized to fit between panel clips (Item 2).

5. Insulation (Optional) - Any compressible blanket insulation 8 in. max thick before compression, or 6 in. max thick when located between Thermal Spacer (Item 4) or Thermal Block (Item 4A) and purlin (Item 6).

6. Purlins No. 16 MSG min thick steel (50 ksi min yield strength). Max spacing 60 in. OC.

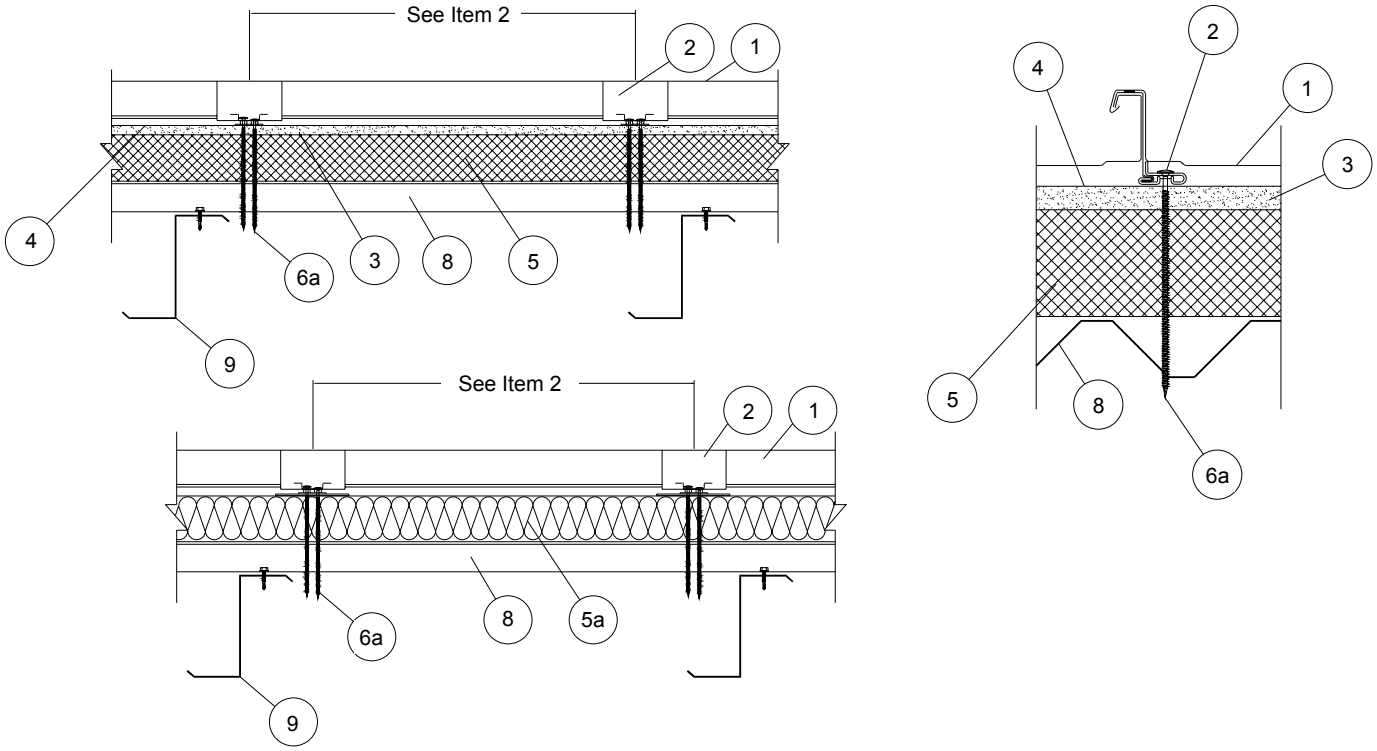
Refer to General Information, Roof Deck Constructions for items not evaluated.

***Bearing the UL Classification Mark**

Underwriters Laboratories Inc. ®

LISTED

UL 580 Wind Uplift Information (cont.)



MAGNA-LOC

Construction No. 506A
October 16, 2001
Uplift - Class 90
Fire Not Investigated

1. Metal Roof Deck Panels* No. 24 MSG min coated steel. Max panel width 18 in.; min 12 in. Rib height 2 in. Panels continuous over three or more clips (Item 2). The panel flat area may have optional striated or minor ribs placed at various locations in the panel flat area beginning min of 2 in. from side ribs. The upper flange of the panel rib may be horizontal, or optionally formed down to produce an angle of 0 to 90° between the vertical segment and the top flange of the rib. Panel end lap 2 in. min. An end lap back-up plate (Item 2A) to be used at panel end lap. A bead of sealant may be used at panel end lap and side ribs. Ribs to be seamed with an electric or hand seaming tool to form a flange with a tight hem. Seaming process to include the upper portion of the panel clips (Item 2) .

METAL SALES MANUFACTURING CORPORATION - "Magna-Loc 16", "Magna-Loc 18"

2. Roof Deck Fasteners* - (Panel Clips) Located at side of panels (Item 1) over substructure (Item 3, 3A, 3B or 3C) and fastened through substructure to liner panel (Item 8) with max spacing of 48 in. OC or over sub-purlins (Item 7) with max spacing of 48 in. OC; or when panel clips are fastened directly to plywood (Item 3B) as described in Item 6B, max spacing to be 36 in. OC.

Fixed Clip (Not Shown) - One piece assembly fabricated from No. 22 MSG min thick steel, 3-1/2 in. wide.

Floating Clip Two piece assembly with a base fabricated from No. 16 MSG min thick steel, 2 in. wide and a tab fabricated from No. 22 MSG min thick steel, 4-1/4 in. wide.

2A.End Lap Back-Up Plate (Not Shown) - No. 16 MSG min thick coated steel channel, 3 in. wide with two 3/8 in. deep legs. Max length 74 in. Located under the panel (Item 1) end lap (50 ksi min yeild strength).

2B.End Lap Back-Up-Plate (Optional) (Not Shown) - No. 16 MSG min thick coated steel. Width 11, 13 or 19 in., length 7 in. Two 3/4 in. by 3/4 in. tabs and a 1 in. deep vertical leg located at upslope edge of panel (50 ksi min yield strength).

2C. Roof Deck Fasteners*(Cinch Plate)-(Optional)-(Not Shown) width 1-15/16 in., length 18 in. max. Fabricated from No. 20 MSG min thick stainless steel. Located over end lap.

3. Substructure - (Gypsum Board) (Optional) - Min thick 1/2 in. To be placed on top of either the liner panel (Item 8) or rigid insulation (Item 5). Combined thickness of the gypsum board and rigid insulation not to exceed 4 in. All joints to be taped with 2.5 in. wide joint tape.

3A. Substructure - (Plywood) (Optional) - (Not Shown) - Plywood decking, used in lieu of gypsum board (Item 3), to be nom 1/2 in. thick, exposure 1 sheathing, 40/20, CD. Located over rigid insulation (Item 5). Combined thickness of the plywood and rigid insulation not to exceed 4 in.

3B. Substructure - (OSB) (Optional) - (Not Shown) - OSB decking, used in lieu of gypsum board (Item 3), to be nom 1/2 in. thick. Located over rigid insulation (Item 5). Combined thickness of the OSB and rigid insulation not to exceed 4 in.

3C. Substructure - (Bearing Plate) (Optional) - Bearing plate to be used in lieu of gypsum board (Item 3) to be 4 by 4 in. by No. 18 MSG min thick coated steel (33 ksi min yield strength). Used under each clip (Item 2) over rigid insulation (Item 5) only when rigid insulation is located directly under panel (Item 1).

MAGNA-LOC

Construction No. 506A (cont.)
October 16, 2001
Uplift - Class 90
Fire Not Investigated

4. Vapor Barrier (Optional) - Single ply, used between the substructure (Items 3, 3A or 3B) and panel (Item 1). To be min 30 lb roofing felt.

5. Foamed Plastic - (Rigid Insulation) (Optional) Max thickness 3-1/2 in. when gypsum board (Item 3), plywood (Item 3A) or OSB (Item 3B) is used and 6 in. when bearing plates (Item 3C) are used. Min bearing strength to be 20 psi. 1.8 pcf min density.

5A. Insulation (Optional) - Compressible blanket insulation 8 in. max thickness before compression. Used with sub-purlins (Item 7) only.

6. Fasteners - (Screws) Fasteners used to attach panel clips (Item 2) to sub-purlins (Item 7) to be No. 1/4-14 by 1 in. long self-drilling, self-tapping, hex-washer-head, plated steel screws. Two fasteners per clip.

Fasteners used at end lap of panel (Item 1) to be one of the following: No. 1/4-14 by 1 in. long, Type AB point self-drilling, self-tapping, hex-washer-head, plated or stainless steel screws or No. 12-14 by 1-14 in. long self-drilling, self-tapping, hex-washer-head, plated steel screws. Spacing for 12 in. wide panel to be 1, 3, 4, 4, 3, 1 in. pattern. Spacing for 16 in. wide panels to be 1, 3, 4, 4, 3, 1 in. pattern; spacing for 18 in. wide panels to be 1-1/2, 3-1/2, 4, 4, 3-1/2, 1-1/2 in. pattern.

6A. Fasteners - (Screws) Fasteners used to attach panel clips (Item 2) through gypsum board, plywood, OSB, or bearing plate (Item 3, 3A, 3B, or 3C, respectively) and foamed plastic (Item 5) into liner panel (Item 8) to be No. 12-13, No. 3 Phillips drive, truss head, coated steel screws. Fastener length to penetrate liner panel min 1/2 in. Two fasteners per clip.

Note: The panel clips may be fastened directly to the bearing plate using two No. 10-16 by 1 in. long self-drilling, self-tapping, pancake head No. 2 Phillips drive coated steel screws. The panel clip/bearing plate combination is to be fastened to the liner panel using two No. 12-13 truss head screws described above, inserted through guide holes in the bearing plates and into the liner panel. Min penetration 1/2 in.

6B. Fasteners - (Screws) (Not Shown) - Fasteners used to attach plywood Substructure (Item 3A) through rigid insulation (Item 5) to liner panel (Item 8) to be No. 14-13, No. 3 Phillips drive truss head screws. Fastener length to penetrate liner panel min 1/2 in. Total of 33 fasteners per 4 by 8 ft plywood sheet to be used. Fasteners located in five rows along the 4 ft length in a 3-9-12-12-9-3 in. pattern. The two outer rows are in a 3-9-12-12-12-12-12-12-9-3 in. pattern and the three center rows are in a 2-21-24-24-21-3 in. pattern. All spacing from board edges. Fasteners used to attach panel clips (Item 2) to plywood (when plywood is fastened to liner panel as indicated above) to be No. 10-12 by 1 in. long pancake head wood screw with No. 2 Phillips drive, or No. 10-12 by 1 in. long hex-head wood screw. Two fasteners per clip.

7. Sub-Purlin No. 16 MSG min thick coated steel (50 ksi min yield strength). Hat section, min 3/4 in. deep, 2 in. wide or Zee section, 2 in. wide, flanges 2 in. deep. Max spacing between sub-purlins to be 48 in. OC.

Note: Screws used to attach sub-purlin to liner panel to be No. 12-13, No. 3 Phillips drive, truss head, coated steel. Max fastener spacing to be 12 in. OC for Zee section with fasteners located in center of lower flange. For hat section, two screws, spaced 24 in. OC, located at each side of channel to be used.

8. Liner Panel - (Steel Deck) No. 22 MSG min thick coated steel. Fabricated to various profiles (33 ksi min yield strength). Steel deck depth and profile, support spacing (max 6 ft), method of positioning (end and side laps), and fastening of deck to supports to be per deck manufacturer's and local code requirements for uplift loading.

9. Liner Panel Supports - Purlins No. 16 MSG min thick steel (50 ksi min yield strength). Spacing to depend on design considerations for uplift loading: max 6 ft, 0 in. OC.

Joists (Optional) - (Not Shown) - Open web steel joist having a min No. 16 MSG upper flange (50 ksi min yield strength) or a min 1/8 in. thick upper flange (33 ksi min yield strength). Max spacing 6 ft, 0 in. OC. Refer to general information, Roof Deck Construction, (Roofing Materials and System Directory) for items not evaluated.

***Bearing the UL Classification Mark**

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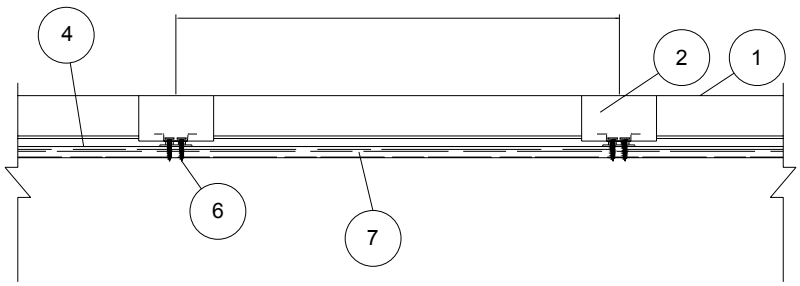

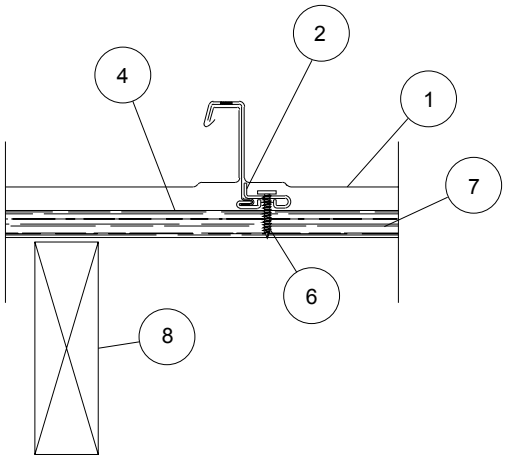

MAGNA-LOC

Construction No. 506B
October 16, 2001
Uplift - Class 90
Fire Not Investigated

1. Metal Roof Deck Panels* No. 24 MSG min coated steel. Max panel width 18 in.; min 12 in. Rib height 2 in. Panels continuous over three or more clips (Item 2). The panel flat area may have optional striated or minor ribs placed at various locations in the panel flat area beginning min of 2 in. from side ribs. The upper flange of the panel rib may be horizontal, or optionally formed down to produce an angle of 0 to 90° between the vertical segment and the top flange of the rib. Panel end lap 2 in. min. An end lap back-up plate (Item 2A) to be used at panel end lap. A bead of sealant may be used at panel end lap and side ribs. Ribs to be seamed with an electric or hand seaming tool to form a flange with a tight hem. Seaming process to include the upper portion of the panel clips (Item 2) .

METAL SALES MANUFACTURING CORPORATION - "Magna-Loc 16", "Magna-Loc 18"

2. Roof Deck Fasteners - (Panel Clips) Located at side of panels (Item 1) over substructure (Item 3, 3A, 3B or 3C with max spacing of 36 in. OC), or plywood decking (Item 7 with max spacing of 36 in. OC). Either of the following:

Fixed Clip (Not Shown) - One piece assembly fabricated from No. 22 MSG min thick steel, 3-1/2 in. wide.

Floating Clip Two piece assembly with a base fabricated from No. 16 MSG min thick steel, 2 in. wide and a tab fabricated from No. 22 MSG min thick steel, 4-1/4 in. wide.

2A. End Lap Back-Up Plate (Not Shown) - No. 16 MSG min thick coated steel channel, 3 in. wide with two 3/8 in. deep legs. Max length 74 in. Located under the panel (Item 1) end lap (50 ksi min yield strength).

2B. End Lap Back-Up-Plate (Optional) (Not Shown) - No. 16 MSG min thick coated steel. Width 11, 13 or 19 in., length 7 in. Two 3/4 in. by 3/4 in. tabs and a 1 in. deep vertical leg located at upslope edge of panel (50 ksi min yield strength).

2C. Roof Deck Fasteners*(Cinch Plate)-(Optional)-(Not Shown) width 1-5/16 in. length 18 in. max. Fabricated from No. 20 MSG min thick stanless steel. Located over end lap.

3. Substructure - (Gypsum Board) (Optional) - Min thick 1/2 in. To be placed on top of either the plywood decking (Item 7) or rigid insulation (Item 5). Combined thickness of the gypsum board and rigid insulation not to exceed 4 in. All joints to be taped with 2.5 in. wide joint tape.

3A. Substructure - (Plywood) (Optional) - (Not Shown) - Plywood decking, used in lieu of gypsum board (Item 3), to be nom 1/2 in. thick, exposure 1 sheathing, 40/20, CD. Located over rigid insulation (Item 5). Combined thickness of the plywood and rigid insulation (Item 5) not to exceed 4 in.

3B. Substructure - (OSB) (Optional) - (Not Shown) - OSB decking, used in lieu of gypsum board (Item 3), to be nom 1/2 in. thick. Located over rigid insulation (Item 5) . Combined thickness of the OSB and rigid insulation not to exceed 4 in.

3C. Substructure - (Bearing Plate) (Optional) - (Not Shown) - Bearing plate to be used in lieu of gypsum board (Item 3) to be 4 by 4 in. by No. 18 MSG min thick coated steel (33 ksi min yield strength). Used under each clip (Item 2) over rigid insulation (Item 5) only when rigid insulation is located directly under panel (Item 1).

4. Vapor Barrier (Optional) - Single ply, used between the substructure (Items 3, 3A or 3B) or plywood decking (Item 7) and panels (Item 1). To be min 30 lb roofing felt.

MAGNA-LOC

Construction No. 506B (cont.)
October 16, 2001
Uplift - Class 90
Fire Not Investigated

5. Foamed Plastic - (Rigid Insulation) - (Optional) Max thickness 3-1/2 in. when gypsum board (Item 3), plywood (Item 3A) or OSB (Item 3B) is used and 6 in. when bearing plates (Item 3C) are used. Min bearing strength to be 20 psi. 1.8 pcf min density.

6. Fasteners - (Screws) Fasteners used to attach panel clips (Item 2) to plywood substructure (Item 3A) or plywood decking (Item 7) to be No. 10-12 pancake head, No. 2 Phillips drive, A-point, coated steel screw. Fastener length to penetrate plywood min 1/2 in. Two fasteners per clip.

6A. Fasteners - (Screws) Fasteners used to attach panel clips (Item 2) through gypsum board, OSB or bearing plate (Item 3, 3B, or 3C, respectively) and foam plastic insulation (Item 5) into plywood deck (Item 7) to be No. 10-12 pancake head, No. 2 Phillips drive, A-point, steel screw. Two screws used per clip.

Note: The panel clips may be fastened to the bearing plate using two No. 10-16 by 1 in. long self-driving, self-tapping, pancake head No. 2 Phillips drive coated steel screws. The panel clip/bearing plate combination is to be fastened to the plywood deck using two No. 12-13 No. 3 Phillips Drive coated steel truss head screws, inserted through a guide hole in the clip and bearing plate and into the plywood deck.

6B. Fasteners - (Screws) (Not Shown) - Fasteners used to attach plywood Substructure (Item 3A) through rigid insulation (Item 5) into plywood deck (Item 7) to be No. 14-13, No. 3 Phillips drive truss head screws. Fastener length to penetrate plywood deck min 1/2 in. Total of 33 fasteners per 4 by 8 ft plywood sheet to be used. Fasteners located in five rows along the 4 ft length in a 3-9-12-12-9-3 in. pattern. The two outer rows are in a 3-9-12-12-12-12-12-12-9-3 in. pattern and the three center rows are in a 3-21-24-24-21-3 in. pattern. All spacing from board edges.

6C. Fasteners - (Screws) (Not Shown) - Fasteners used at end laps of panel (Item 1) to be one of the following: No. 1/4-14 by 1 in. long, Type AB point self-drilling, self-tapping, hex-washer-head, plated or stainless steel screws or No. 12-14 by 1-1/2 in. long self-drilling, self-tapping, hex-washer-head, plated steel screws. Spacing for 16 in. wide panels to be 1, 3, 4, 4, 3 in. pattern; spacing for 18 in. wide panels to be 1-1/2, 3-1/2, 4, 4, 3-1/2, 1-1/2 in. pattern.

7. Plywood Deck Plywood decking to be graded per PS83 specifications, 19/32 in. thick, exposure 1, APA rated sheathing, 40/20 in. OC, square edged. Butt ends not blocked.

8. Purlins - Deck Supports Spaced a max of 24 in. OC. Any of the following types may be used:

A. No. 22 MSG min thick coated steel. (33 ksi min yield strength.)
B. Graded dimension lumber, No. 2 or better.

8A. Plywood Fasteners (Not Shown) - Fasteners used to attach the plywood deck (Item 7) to the supports (Item 8) to be as follows:

a. For plywood-to-wood supports, No. 8-18 by 1-7/8 in. long bugle-head steel screws with a No. 2 Phillips drive, a "Hi-Low" thread pattern and an "S-Point".

b. As an alternate to Item a, No. 8d common deformed shank nails may be used.

c. For plywood-to-steel supports for a steel thickness less than No. 20 MSG, No. 7-19 by 1-1/4 in. long bugle-head steel screws with a No. 2 Phillips head drive, a "Hi-Low" thread pattern and an "S-Point". For a steel thickness greater than No. 20 MSG to No. 16 MSG, No. 6-20 by 1-1/4 in. long in. long bugle-head steel screws with a No. 2 Phillips drive and an S12 (Tek/3) point.

Spacing - For all fastener types to be 6 in. OC at the plywood edges and 12 in. OC in the interior.
Refer to general information, Roof Deck Construction, (Roofing Materials and System Directory) for items not evaluated.

***Bearing the UL Classification Mark**

MAGNA-LOC

UL 263 Fire Resistance Ratings

Metal Roof Deck Panels

Metal Sales Manufacturing Corporation has obtained fire resistance ratings for various products conducted according to test criteria set forth by 'Underwriters Laboratories' "Standard Fire Tests of Building Construction and Material" (ANSI/UL 263). This test procedure is identical to ASTM E-119 and NFPA 251.

The fire resistance rating is for the total assembly and not just the external metal panel. Ratings are expressed in hours and vary depending upon the assemblies.

In general, the test criteria is to evaluate the assembly's ability to continue to support the superimposed loads and resist the passage of flame, high temperatures, or hot gases which will ignite combustible materials. The test assemblies are identified by an alpha-numeric design number.

For detail information on specific assemblies and hourly ratings see UL Fire Resistance Directory.

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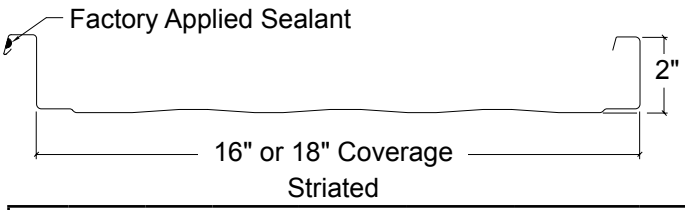
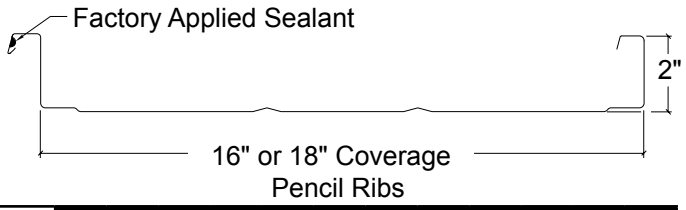
LISTED

Magna-Loc

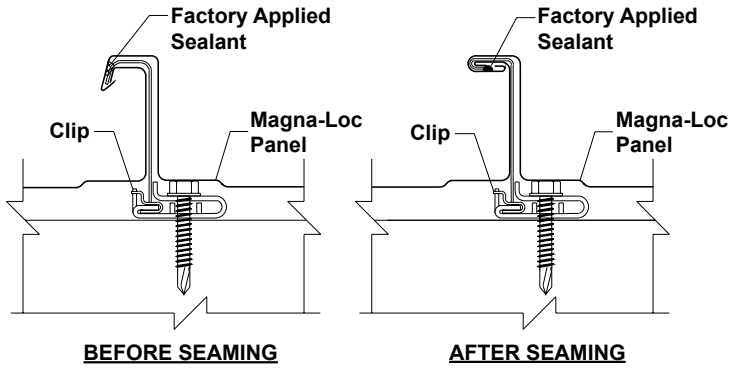




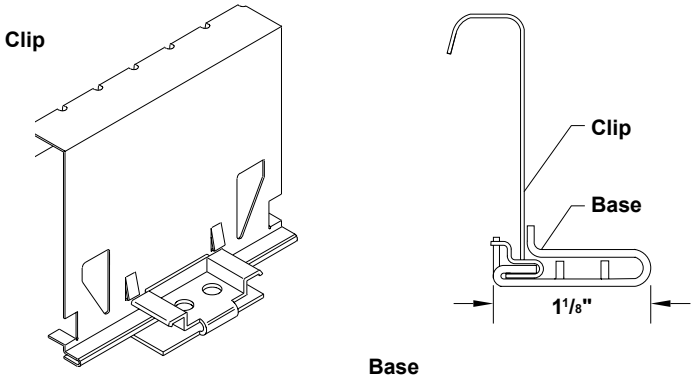
SECTION PROPERTIES								ALLOWABLE UNIFORM LOADS psf (3 or More Equal Spans)											
Ga.	Width in	Yield ksi	Weight psf	Top In Compression		Bottom In Compression		Inward Load						Outward Load					
				Ixx in^4/ft	Sxx in^3/ft	Ixx in^4/ft	Sxx in^3/ft	2.5'	3'	3.5'	4'	4.5'	5'	2.5'	3'	3.5'	4'	4.5'	5'
24	16"	50	1.25	0.1785	0.1013	0.0855	0.0754	161	126	101	82	68	57	111	99	87	75	63	51
22	16"	50	1.63	0.2468	0.1419	0.1178	0.1066	257	197	155	125	103	86	119	110	101	92	83	74
20	16"	33	2.02	0.3165	0.1831	0.1643	0.1474	252	189	147	117	93	76	392	283	213	166	133	109
24	18"	50	1.21	0.1620	0.0900	0.0760	0.0669	144	112	89	73	61	51	68	62	56	50	43	37
22	18"	50	1.58	0.2233	0.1255	0.1047	0.0947	233	176	138	111	91	74	78	73	68	62	57	52
20	18"	33	1.96	0.2893	0.1640	0.1460	0.1310	224	168	131	104	83	67	350	253	191	149	119	97

1. Theoretical section properties have been calculated per AISI 2001 "Specification for the Design of Cold-formed Steel Structural Members." Ixx and Sxx are effective section properties for deflection and bending.
2. Allowable load is calculated in accordance with AISI 2001 specifications considering bending, shear, combined bending and shear, deflection, and ASTM 1592 testing for 24 ga and 22 ga. Allowable load considers the worst case of 3 and 4 equal span conditions. Allowable load does not address web crippling or fasteners/support connection or testing for 20 ga and panel weight is not considered.
3. Deflection consideration is limited by a maximum deflection ratio of L/180 of span.
4. Allowable loads do not include a 1/3 stress increase in uplift.

ATTACHMENT DETAILS



PANEL CLIP



GENERAL INFORMATION

▶ Slope
The minimum recommended slope for the Magna-Loc roof panel is 1/2:12.

▶ Substructure
Magna-Loc is designed to be utilized over open structural framing or a solid substrate.

▶ Clips
Clip spacing is based upon the spacing of structural framing members and loading requirements.

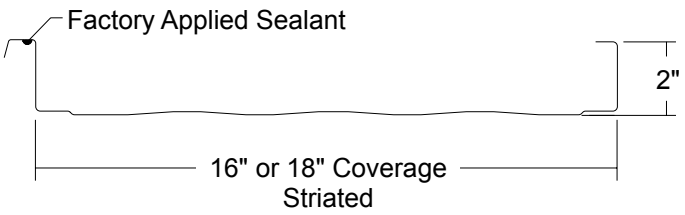
▶ Coverage
Magna-Loc panels are available in a 2" seam height with a 16" or 18" width coverage.

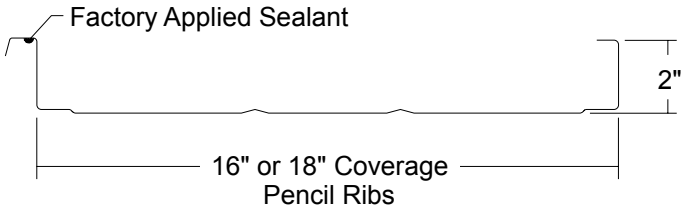
▶ Length
Minimum factory cut length is 5'-0" (with striations), 7'-0" (without striations). Maximum recommended panel length is 45'-0". Longer panels require additional consideration in packaging, shipping, and erection. Please consult Metal Sales for recommendations.

▶ Fasteners
The fastener selection guide should be consulted for choosing the proper fastener for specific applications. Quantity and type of fastener must meet necessary loading and code requirements.
NOTE: All panels are subject to surface distortion due to improperly applied fasteners. Overdriven fasteners will cause stress and induce oil canning across the face of the panel at or near the point of attachment.

▶ Availability
Finishes: Acrylic Coated Galvalume® and PVDF (Kynar 500).
Gauges: 24 ga standard, 22 ga and 20 ga optional

Magna-Loc 180

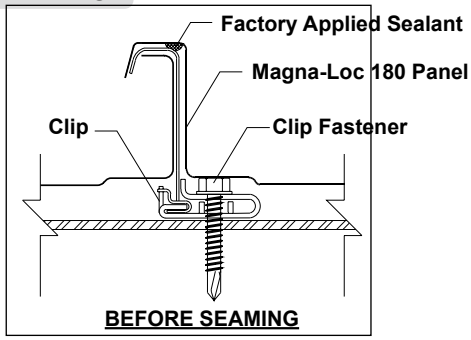




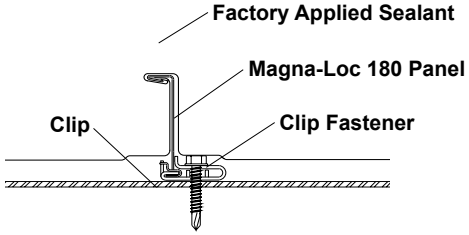
SECTION PROPERTIES								ALLOWABLE UNIFORM LIVE LOADS PSF (3 or More Equal Spans)											
Ga.	Width (in.)	Yield KSI	Weight PSF	Top in Compression		Bottom in Compression		Inward (Gravity / Deflection) Load						Outward Uplift (Stress) Load					
				Ixx In^4/ft	Sxx In^3/ft	Ixx In^4/ft	Sxx In^3/ft	1'	2'	2.5'	3'	4'	5'	1'	2'	2.5'	3'	4'	5'
24	16"	50	1.24	0.1403	0.0772	0.0720	0.0656	1166	352	232	164	94	60	146	119	105	92	64	37
24	18"	50	1.21	0.0691	0.0320	0.0640	0.0583	1000	250	160	111	63	40	115	95	85	75	46	30

1. Theoretical section properties have been calculated per AISI 2001 "Specification for the Design of Cold-formed Steel Structural Members." Ixx and Sxx are effective section properties for deflection and bending.
2. Allowable load is calculated in accordance with AISI 2001 specifications considering bending, shear, combined bending and shear, deflection, and ASTM 1592 testing. Allowable load considers the worst case of 3 and 4 equal span conditions. Allowable load does not address web crippling or fasteners/support connection and panel weight is not considered.
3. Deflection consideration is limited by a maximum deflection ratio of L/180 of span.
4. Allowable loads do not include a 1/3 stress increase in uplift.

ATTACHMENT DETAILS

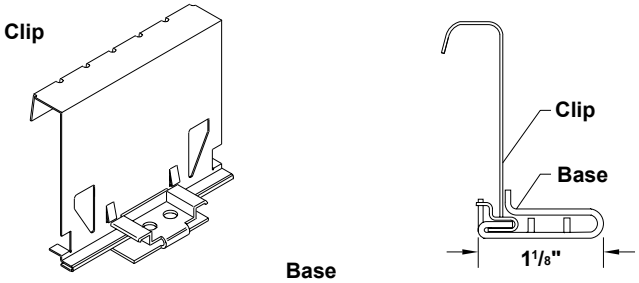


BEFORE SEAMING



AFTER SEAMING

PANEL CLIP



GENERAL INFORMATION

Slope
The minimum recommended slope for the Magna-Loc 180 roof panel is 1/2:12.

Substructure
Magna-Loc 180 is designed to be utilized over open structural framing or a solid substrate.

Clips
Clip spacing is based upon the spacing of structural framing members and loading requirements.

Coverage
Magna-Loc 180 panels are available in a 2" seam height with a 16" or 18" width coverage.

Length
Minimum factory cut length is 5'-0" (with striations), 7'-0" (without striations). Maximum recommended panel length is 45'-0". Longer panels require additional consideration in packaging, shipping, and erection. Please consult Metal Sales for recommendations.

Fasteners
The fastener selection guide should be consulted for choosing the proper fastener for specific applications. Quantity and type of fastener must meet necessary loading and code requirements.
NOTE: All panels are subject to surface distortion due to improperly applied fasteners. Overdriven fasteners will cause stress and induce oil canning across the face of the panel at or near the point of attachment.

Availability
Finishes: Acrylic Coated Galvalume® or various Kynar 500 (PVDF) colors.
Gauge: 24ga

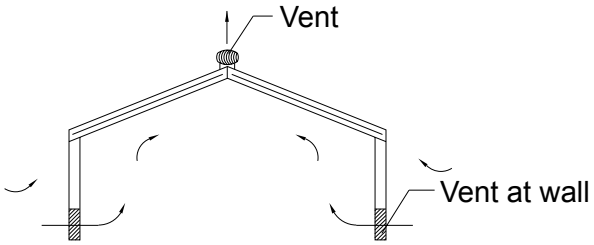
VENTILATION

Proper design and installation of vapor barriers and ventilation systems are important to prevent condensation and the resulting problems of moisture damage and loss of insulation efficiency.

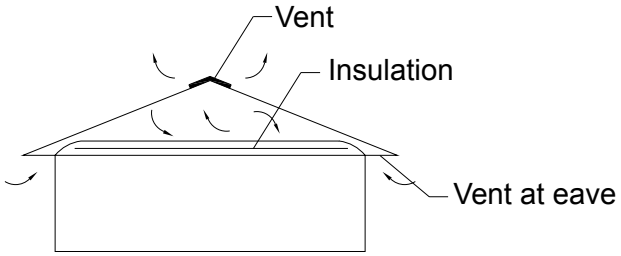
Condensation occurs when moisture laden air comes in contact with a surface temperature equal to or below the dew point of the air. This phenomenon creates problems that are not unique with metal buildings; these problems are common to all types of construction.

The underside of the metal roof on a typical metal building (no attic) should be protected from condensation by insulating with a faced insulation. This should reduce the potential of condensation forming on the underside of the panels.

On buildings that have an attic space or are being retrofitted with a metal roofing system, vents should be placed at both the eave and peak of the roof in order to prevent a buildup of moisture (humidity) in the attic space.



Typical Metal Building (No Attic)



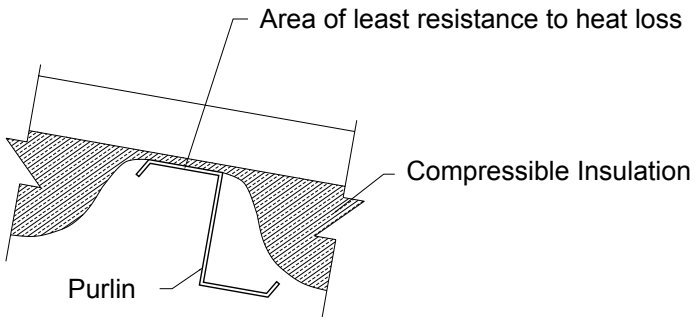
Building with Attic or Retrofitted

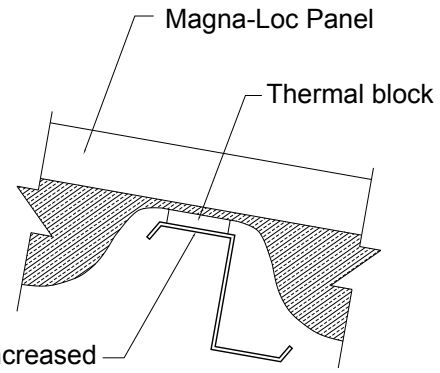
INSULATION

In most cases insulation is installed directly under roof panels. Insulation is recommended on all applications to act as a sound barrier, prevent condensation, and increase insulating value of a roof system. If insulation is not used some mans of damping the sound should be used

Many different types of insulation can be used with the metal roof panels. Blanket, batt, rigid, and reflective insulation are just to name a few. Please contact your insulation supplier for specific recommendations on installation of insulation and vapor barriers.

When applying a compressible type of insulation over open framing members. Rigid thermal blocks can be used to help eliminate heat lost at purlin locations.





CAUTION

Use extreme care when working next to insulation. The insulation will provide a false sense of security by hiding the view of the ground below the insulation.

SYSTEM EXPANSION / CONTRACTION

Steel roofing panels are subject to dimensional changes after installation due to exposure to varying temperatures. The greatest influence is solar energy. Steel roofing absorbs various amounts of heat depending upon color, finish, angle of exposure, and time of exposure.

The relationship of ambient temperature to building structural temperature must be considered when designing a Magna-Loc roof system. The floating clips for the Magna-Loc panels are designed for expansion and contraction of the panels in the longitudinal direction. Lateral expansion and contraction is accommodated by the configuration of the panel cross section and causes negligible panel movement.

When the total length of panel run exceeds the capability of the clips to accommodate the thermal movement, expansion joints must be designed into the structure.

SELECTION OF SYSTEM COMPONENTS

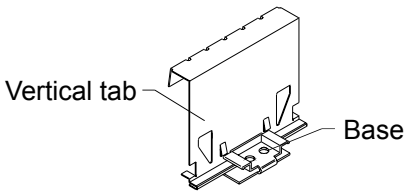
The Magna-Loc roof system can be installed with components that allow the panels to either float independently or fix permanently to the substructure. Choice of system will depend upon building design and regional temperature range (from summer highs to winter lows).

SYSTEM COMPONENTS

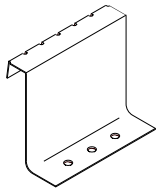
SYSTEM	CLIP	EAVE PLATE	RAKE ZEE	THERMAL BLOCK	INSULATION
UTILITY	2 1/8" UTILITY (FIXED ONLY)	NONE REQUIRED	2 1/8" UTILITY	NONE REQUIRED	1/2" TO 4" BLANKET
LOW	2 3/8" LOW (FLOATING OR FIXED)	3/8" LOW	2 3/8" LOW	NONE REQUIRED	4" TO 6" BLANKET
HIGH	3 3/8" HIGH (FLOATING)	1 3/8" HIGH	3 3/8" HIGH	1"	4" TO 6" BLANKET

Magna-Loc Floating Clips- The floating clips allow the roof surface (panels) to move independently of the roof substructure to allow for thermal expansion and contraction. These clips are designed with a vertical tab that slides along the base section of the clip.

Magna-Loc Fixed Clips- Fixed clips may be used on panel runs of less than 20'-0", unless considerable thermal expansion or contraction is a consideration. When utilizing a Fixed Utility Clip, a pancake headed fastner must be used.



MAGNA-LOC FLOATING CLIP**



MAGNA-LOC FIXED CLIP

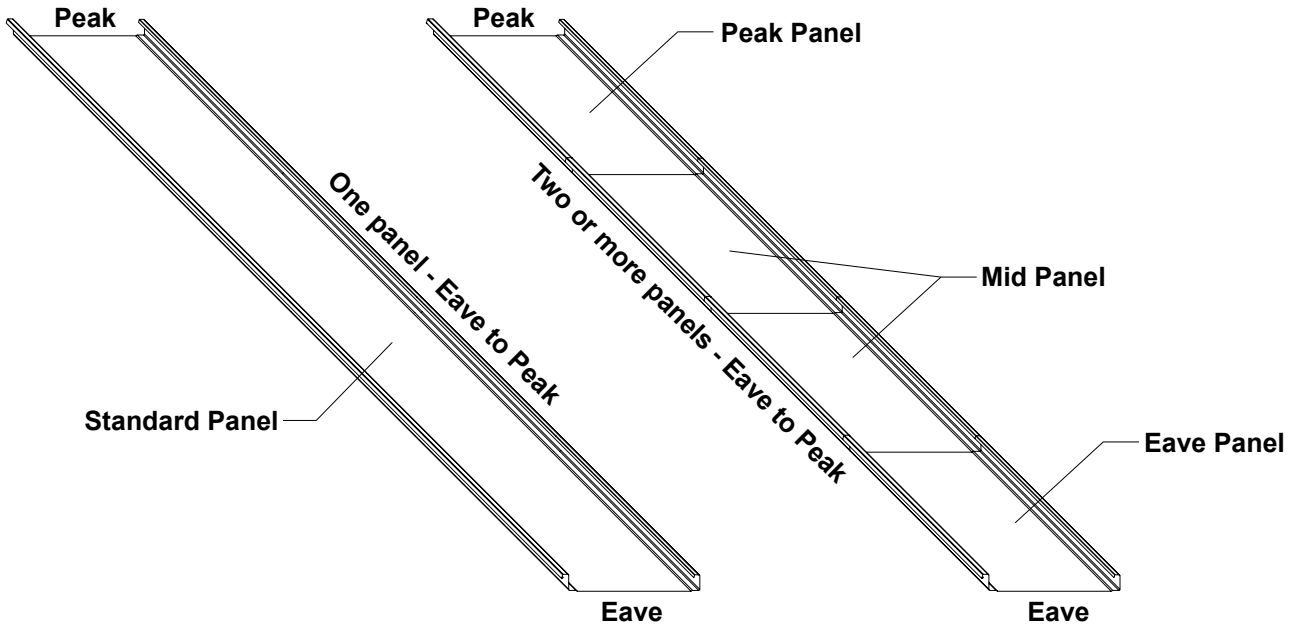
The following chart should be used to determine proper fasteners required for clip installation on the selected applications. (See Product General Information page PGI-12 for other fasteners available.)

APPLICATION	INSTALLATION REQUIREMENTS		**CLIP SPACING	TYPE OF FASTENER	NUMBER REQUIRED
CLIPS OVER PURLINS (16 GA. MIN)	STANDARD	24 GAUGE	**5'-0" O.C.	1/4"-14 x 1 1/2" SELF DRILLER N/W	2 FASTENERS
	STANDARD	22 GAUGE	**5'-0" O.C.	1/4"-14 x 1 1/2" SELF DRILLER N/W	2 FASTENERS
CLIPS OVER 5/8" WOOD DECK	STANDARD	24 GAUGE	**3'-0" O.C.	#10 X 1" PANCAKE HEAD WOOD	2 FASTENERS
	STANDARD	22 GAUGE	**3'-0" O.C.	#10 X 1" PANCAKE HEAD WOOD	2 FASTENERS
CLIP OVER RIGID INSULATION / METAL DECK	STANDARD	24 GAUGE	**4'-0" O.C.	1/4"-13 DECK SCREW*	2 FASTENERS
	STANDARD	22 GAUGE	**4'-0" O.C.	1/4"-13 DECK SCREW*	2 FASTENERS

* Length of Deck Screw will vary depending on the total thickness of the rigid insulation and metal (see page PGI-12).
** Based on UL-580. Subject to project loading, closer clip spacing may be required. Contact your local Metal Sales branch representative for more information (see pages PGI-2 and 3).

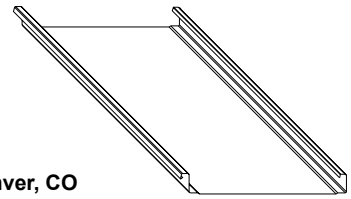
Factory Notched Panels - Metal Sales can provide factory notched panel ends to eliminate material-build up or reliance on field notching for weathertight seams at panel endlaps.

Factory Pre-punched Panels - Metal Sales can provide panels that have been factory punched with holes for proper placement of fasteners at panel endlaps.



STANDARD PANEL:

- Used when endlapping of panels is not required
- One panel from eave to peak of roof
- No notching
- No punching

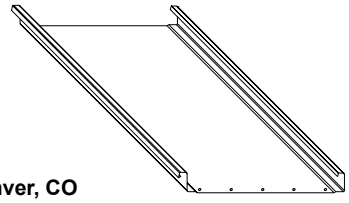


*Denver, CO
**Sellersburg, IN; Fontana, CA

PEAK PANEL:

- Used when endlapping of panels is required
- Used as upper panel of endlapping run
- Pre punched holes for endlap fastener placement
- No notching

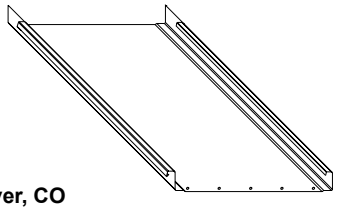
*Panel is notched and punched both ends or neither



*Denver, CO
**Sellersburg, IN; Fontana, CA

MID PANEL:

- Used on runs where more than (2) panels are needed from eave to peak
- Not required if only (2) panels are used from eave to peak
- Notched for panel endlapping
- Pre-punched holes for endlap fastener placement

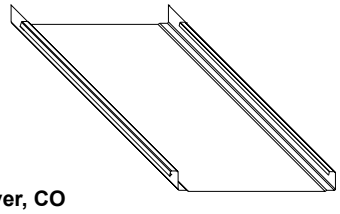


*Denver, CO
**Sellersburg, IN; Fontana, CA

EAVE PANEL:

- Used when endlapping of panels is required
- Used as lower panel of endlapping run
- Notched for panel endlapping
- No punching

*Panel is notched and punched both ends or neither
**Notch trailing end only



*Denver, CO
**Sellersburg, IN; Fontana, CA

SEAMING PANELS

Note: The Magna-Loc panel system requires the use of a mechanical seamer for proper installation. The mechanical seamer runs from ridge to eave with Magna-Loc panels laid from left to right. This necessary seamer is designed to seam the panel clips and the vertical legs of the panel together for weathertightness and resistance to wind uplift loads.

- **Rental or purchase of the Magna-Loc mechanical seamer and hand crimpers for field seaming are the responsibility of the installer. Mechanical seamers and hand crimpers can be acquired from Seamer Tools, Inc. Phone No. 662.895.1222.**

- Read the field manual that is enclosed in the case with the seamer. The operator should adhere to all instructions for proper use of the seamer. Failure to follow the required instructions may result in damage to the panel and/or seamer. Metal Sales Manufacturing Corporation will not be responsible for damage incurred by improper use of the seamer.

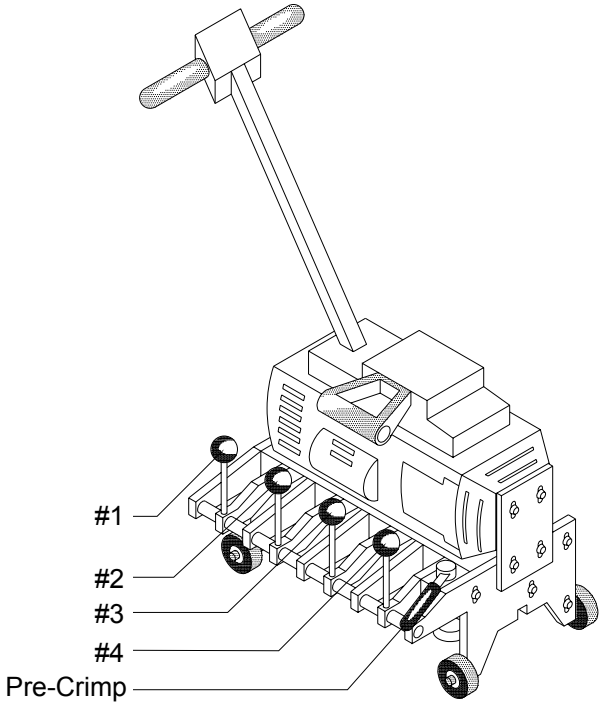
- All panel sidelaps should be seamed with mechanical seamer as soon as possible, after the panels have been installed. Hand crimping the panel sidelaps 8" at the eave, endlap, and ridge locations of the panel will help keep the panels in place during normal erection, but will not prevent the panels from being blown off the roof by moderate strong winds. **DO NOT hand-crimp panel at any clips or locations other than the ridge, endlap, and eave locations.**

- At endlap conditions, panels must be hand-crimped only. Mechanical seaming of panels will cause rib distortion due to multiple thicknesses along the endlap.

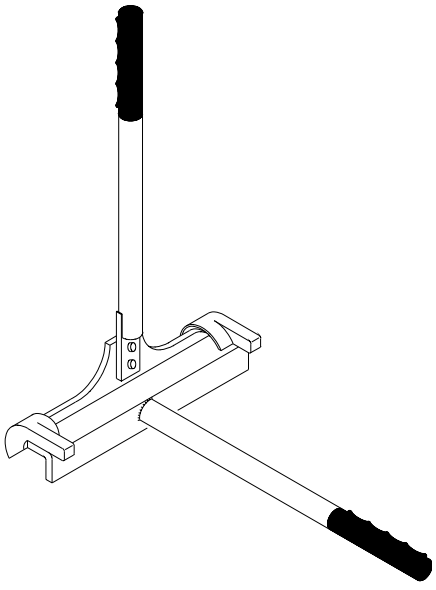
- Run sufficient power to the roof to operate the seamer. If the job site is a long distance from the roof or if the roofs large, consider using a portable generator placed on the roof near the seam.

- Do not overload or damage the roof with the generator unit. Be sure to follow OSHA and local electrical codes when installing generator.

- Prior to seaming panels check all seams making sure they are properly engaged. All dirt, debris, and excess sealant should be removed from flat part of panel and seams.



MECHANICAL SEAMER



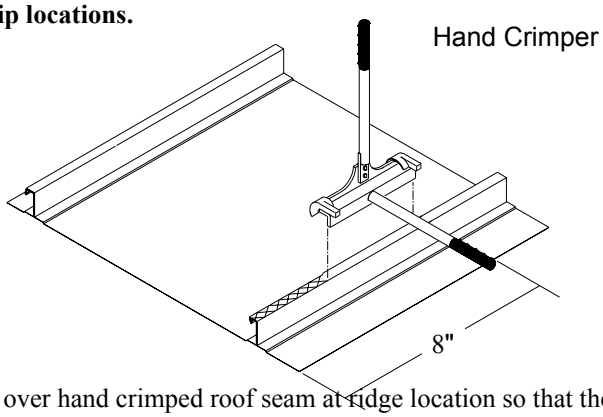
HAND CRIMPER

SEAMING PANELS (CONT.)

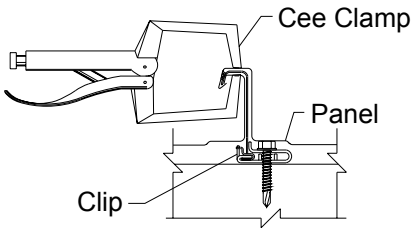
Note: When panels are installed from left to right, electric seamer operates from ridge to eave.

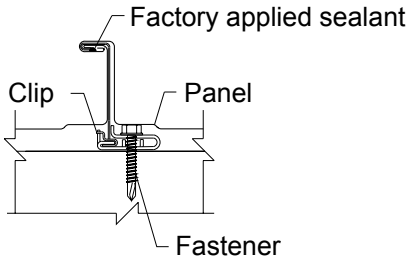
Steps:

1. To start seaming, first hand crimp 8" of seam at eave, endlap, and ridge locations only.
   DO NOT hand crimp at clip locations.

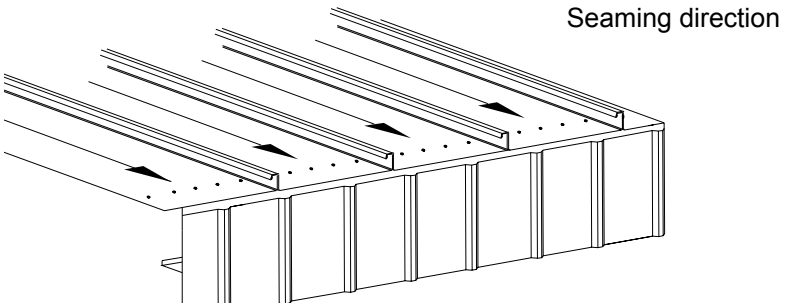


2. Position mechanical seamer over hand crimped roof seam at ridge location so that the levers are on the same side of the seam that is to be crimped by the mechanical seamer.
3. Engage roller levers in the following order: #1, #2, #3, #4, and then the precrimp roller lever. Precrimp lever may need to





be held down to avoid scratching of panel.
4. Prior to running seamer, check to make sure that Magna-Loc panels are fully engaged along the entire run of the panel.



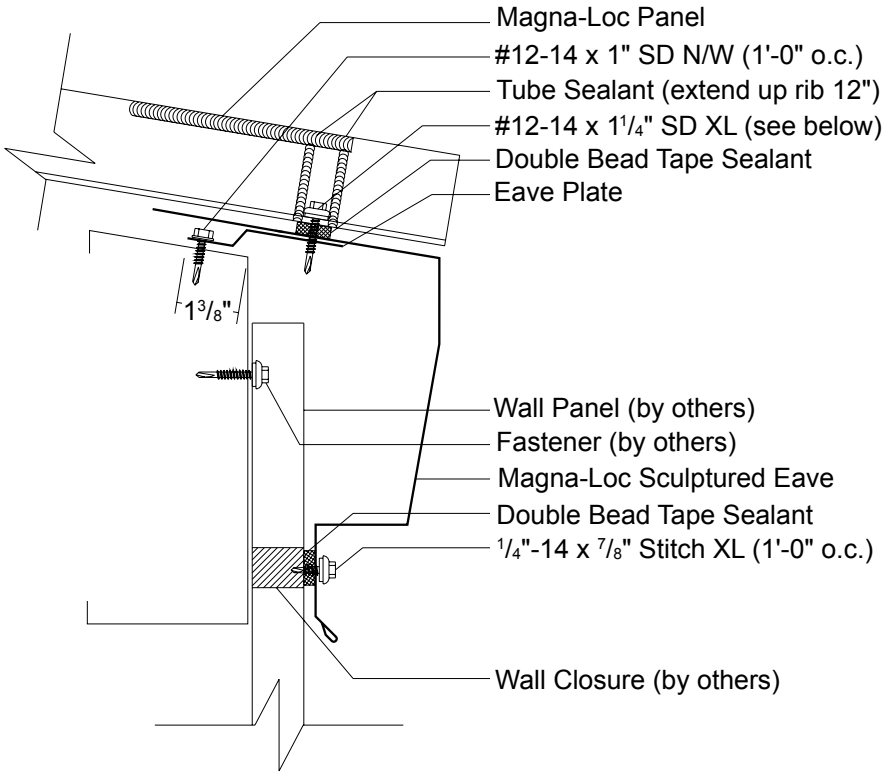
Small c-clamps may be required on the horizontal portion of the seam to hold panel seam engaged while seaming.
5. Turn on the power to seamer and walk with the seamer as it seams the panel. Stop the seamer in the first few feet to ensure proper seam is being achieved. Turn the mechanical seamer off before the hand crimped endlap or eave portion of the panel. If Magna-Loc roof panels have been endlaped, mechanical seamer must be stopped, moved, and restarted over the hand crimped area of the endlap. Remaining seam between hand crimped portion and mechanically seamed portion may have to be hand crimped for continuous tight seam.
6. At the end of the first run, remove mechanical seamer and return to step #1 for remaining panels.
7. At completion of seaming, repack tool and return to Seamer Tools, Inc. 8265 Highway 178, Olive Branch, MS 38654. Phone No. 662.895.1222, Fax No. 662.890.4775.

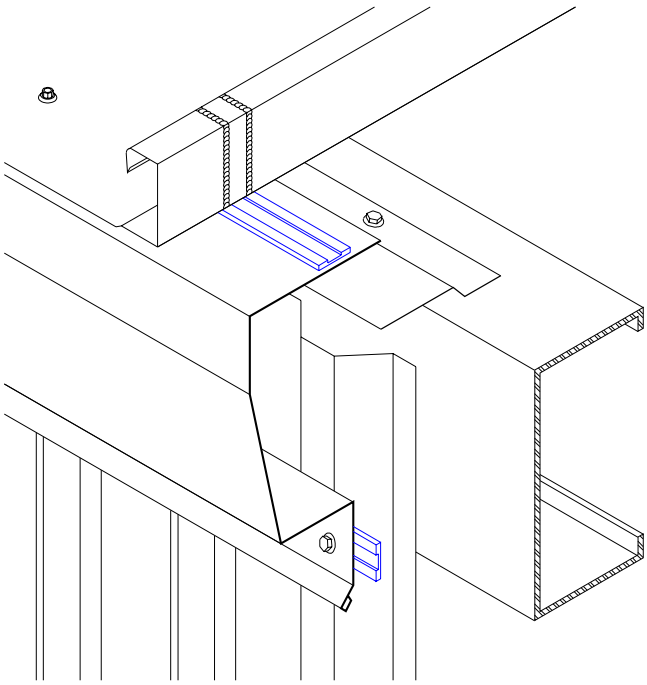
CAUTION

Do not run the seamer off the end of the panel. If the seamer is run off the end of the roof it could cause injury to personnel and damage the roof or the seamer (see seamer instructions enclosed in the case for additional information about the proper handling of the seamer).

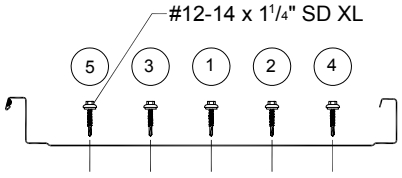
Sculptured Eave Detail

1/2:12 SLOPE MINIMUM





NOTE
Eave plate not used with utility clip.

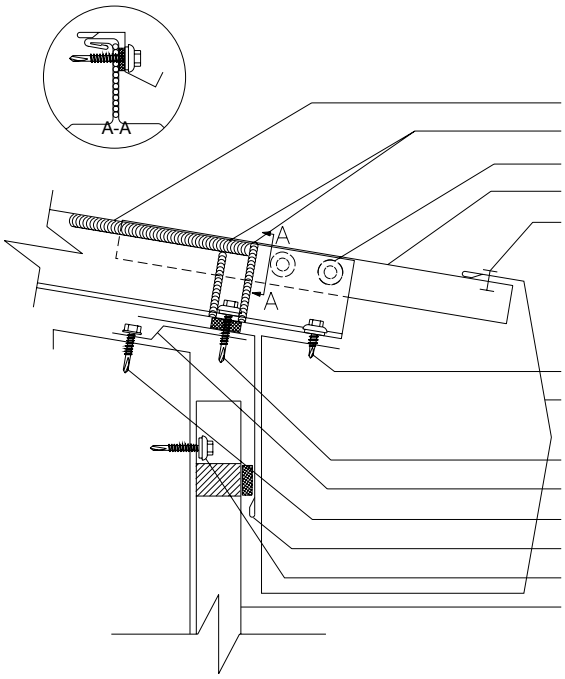


Magna-Loc Fastening Pattern

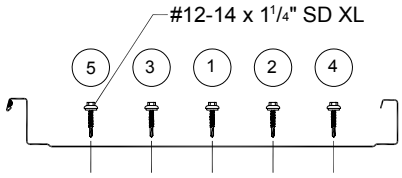
MAGNA-LOC Sculptured Gutter Detail

1/2:12 SLOPE MINIMUM

CAUTION
In locations where heavy rainfall or severe ice and snow may occur, Metal Sales' standard gutters may not be suitable for use.



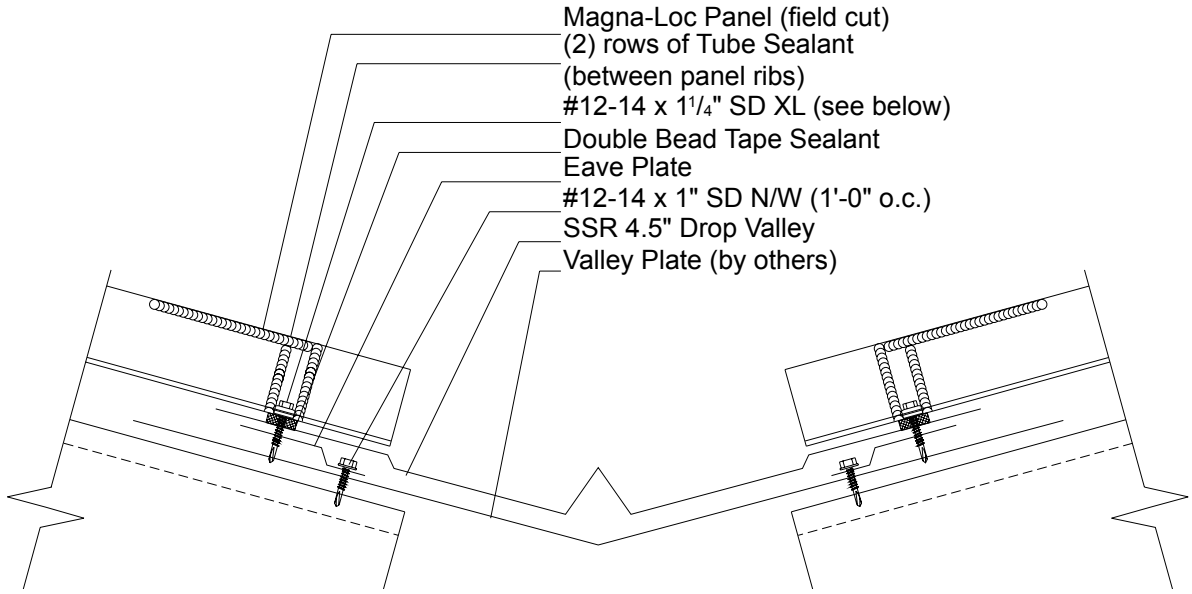
Magna-Loc Panel
Tube Sealant (between panel ribs)
#12-14 x 1 1/4" SD XL (2 per support)
SSR Gutter Support (every other panel)
1/8" x 3/16" Pop Rivet (every support)
1/4"-14 x 7/8" Stitch XL (2 per panel)
SSR Sculptured Gutter
#12-14 x 1 1/4" SD XL (see below)
Eave Plate
#12-14 x 1" SD N/W (1'-0" o.c.)
Gutter Drip
Wall Panel (by others)



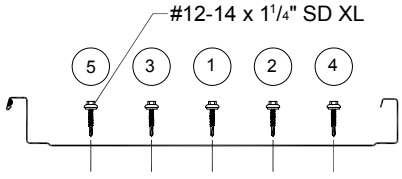
Magna-Loc Fastening Pattern

MAGNA-LOC 4.5" Drop Valley Detail

3:12 SLOPE MINIMUM

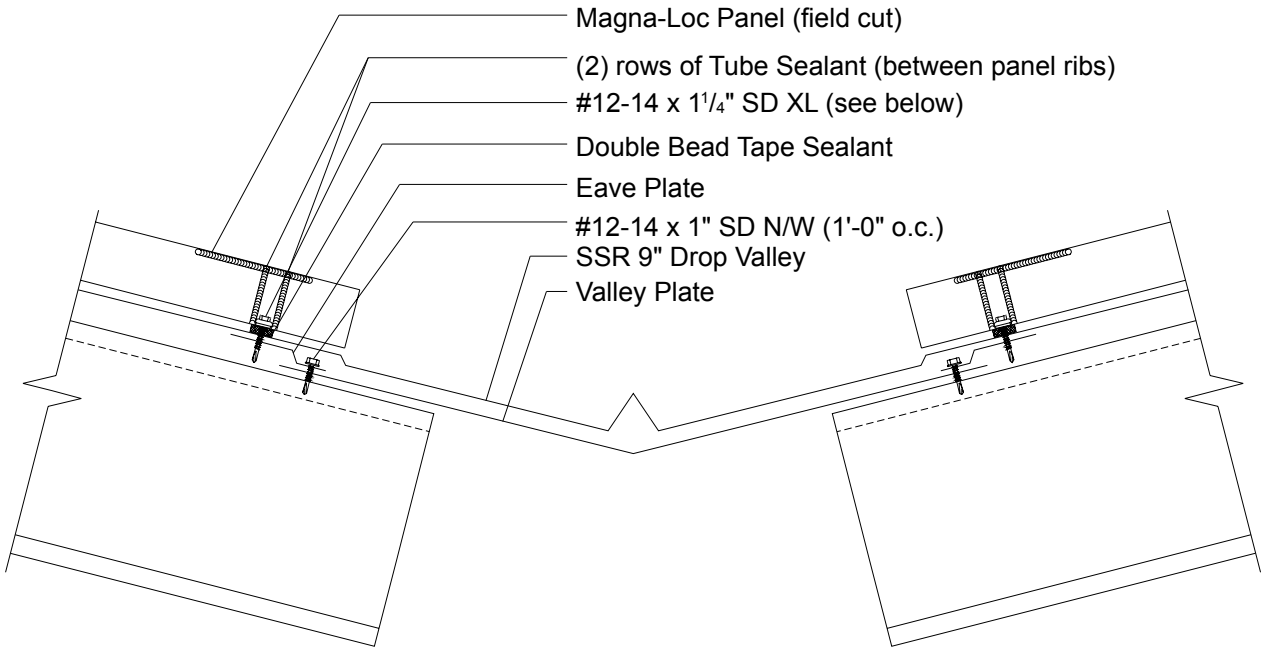


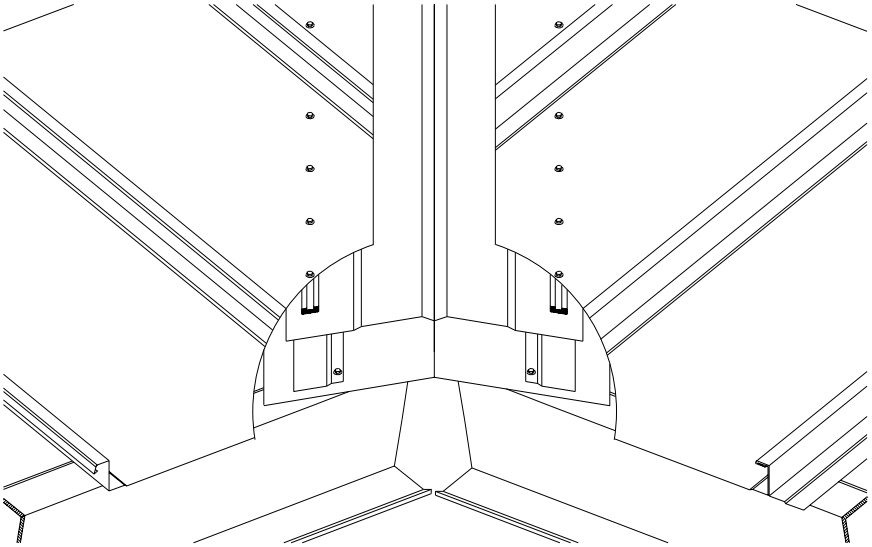
Magna-Loc Panel (field cut)
(2) rows of Tube Sealant
(between panel ribs)
#12-14 x 1 1/4" SD XL (see below)
Double Bead Tape Sealant
Eave Plate
#12-14 x 1" SD N/W (1'-0" o.c.)
SSR 4.5" Drop Valley
Valley Plate (by others)

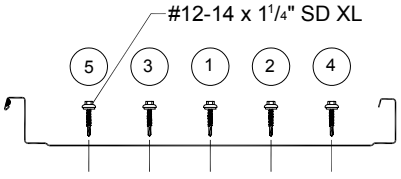


Magna-Loc Fastening Pattern

3:12 SLOPE MINIMUM



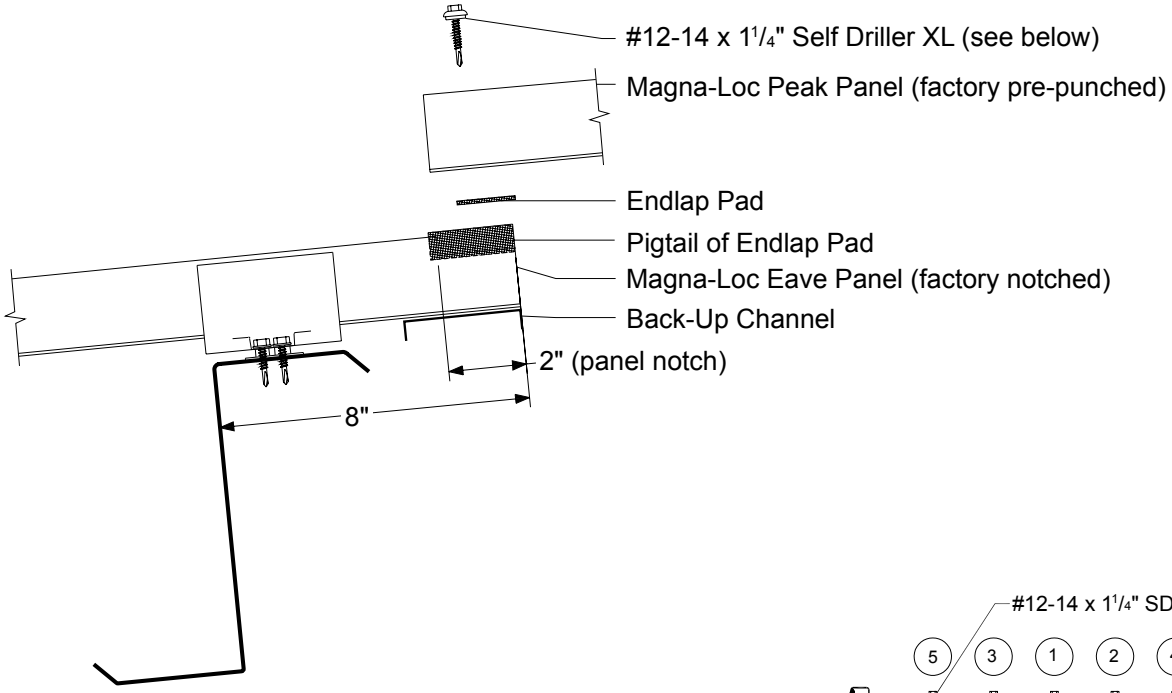


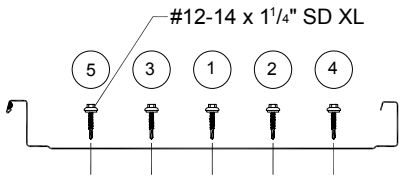


Magna-Loc Fastening Pattern

MAGNA-LOC ENDLAP DETAIL

1/2:12 SLOPE MINIMUM

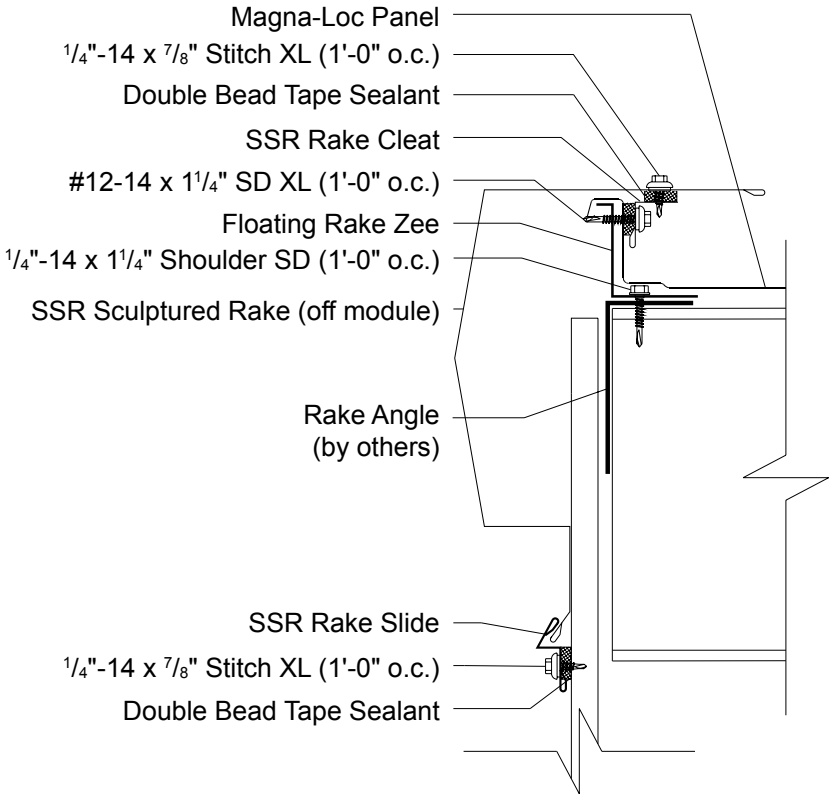




Magna-Loc Fastening Pattern

MAGNA-LOC SSR SCULPTURED RAKE (ON MODULE) DETAIL

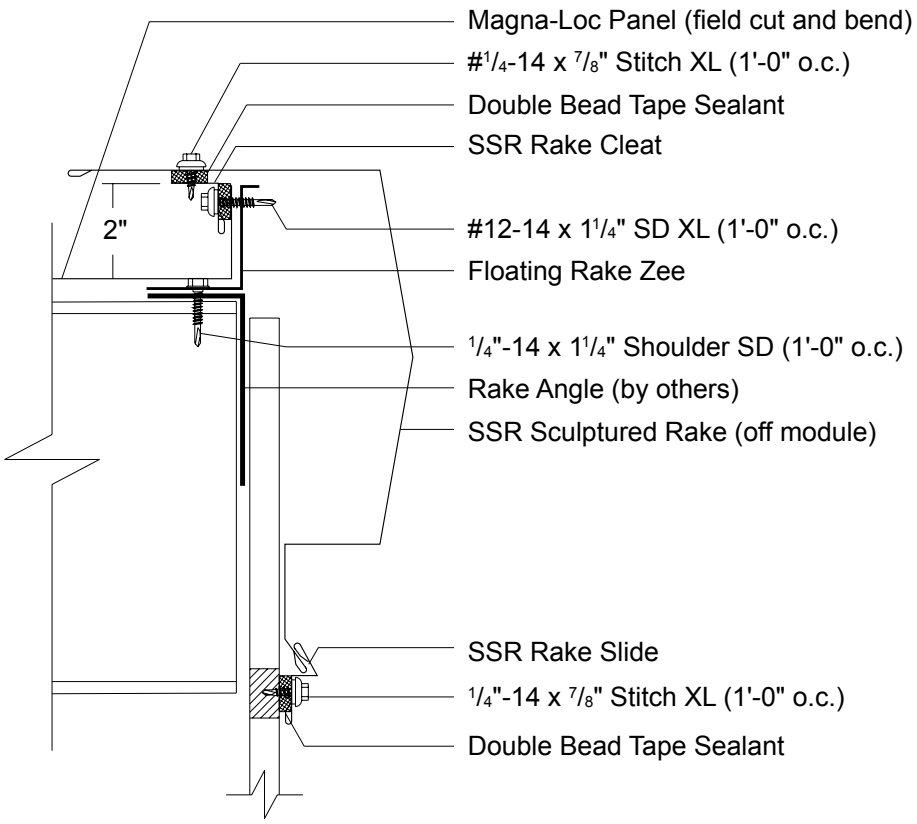
1/2:12 SLOPE MINIMUM

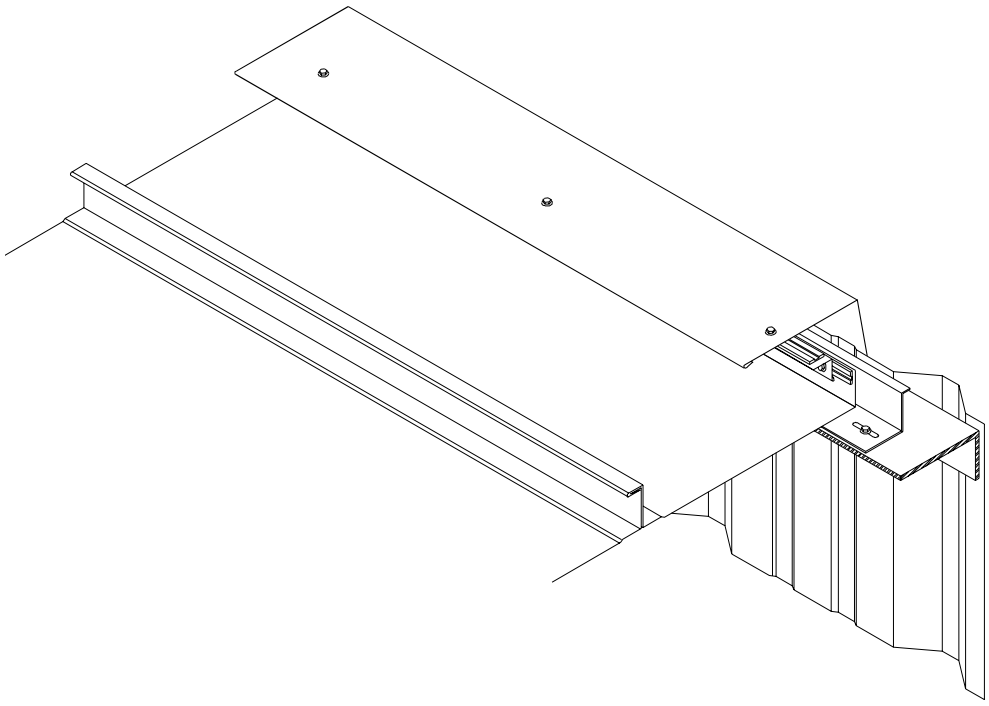


SSR Sculptured Rake (Off Module) Detail

1/2:12 SLOPE MINIMUM

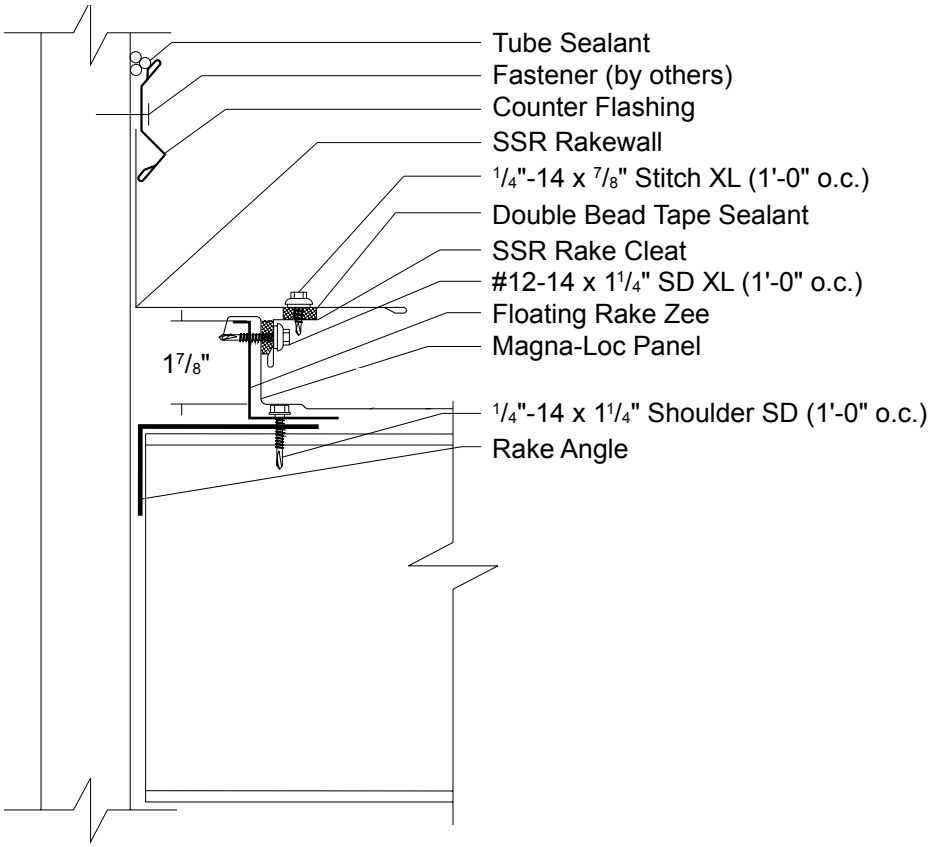
CAUTION
Note: If panel does terminate on module then Rake Cleat is not needed.





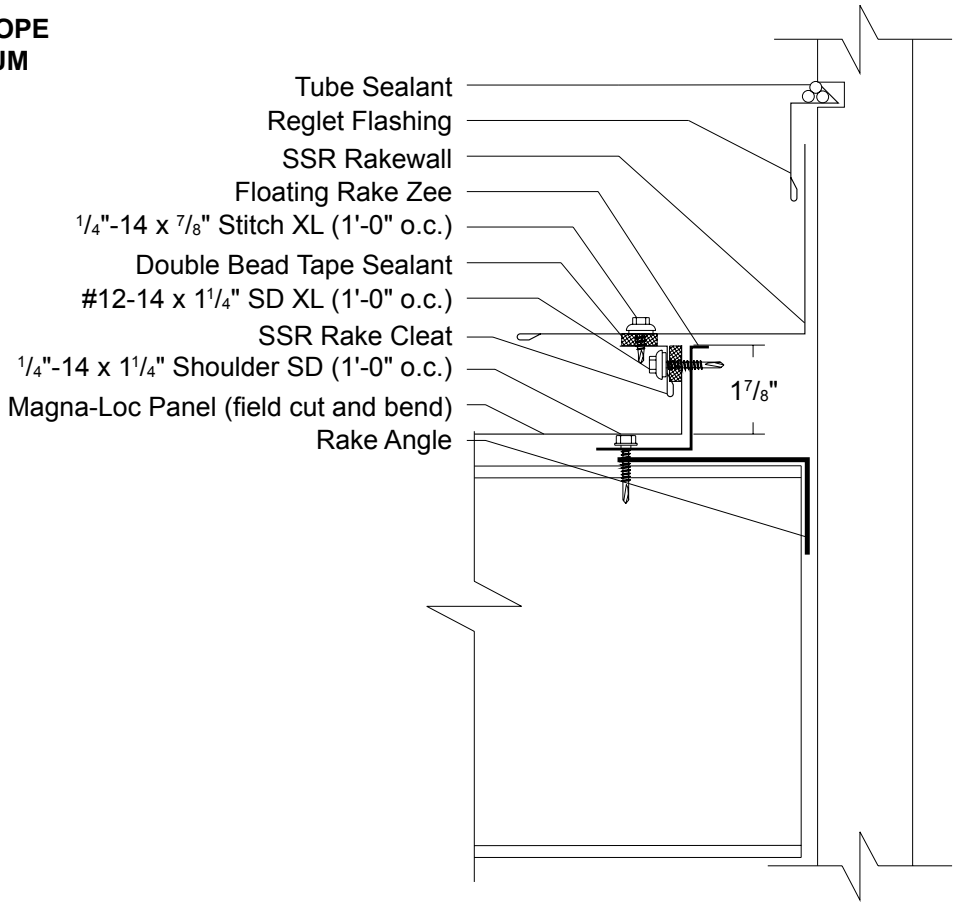
MAGNA-LOC Rakewall (On Module) Detail

1/2:12 SLOPE MINIMUM



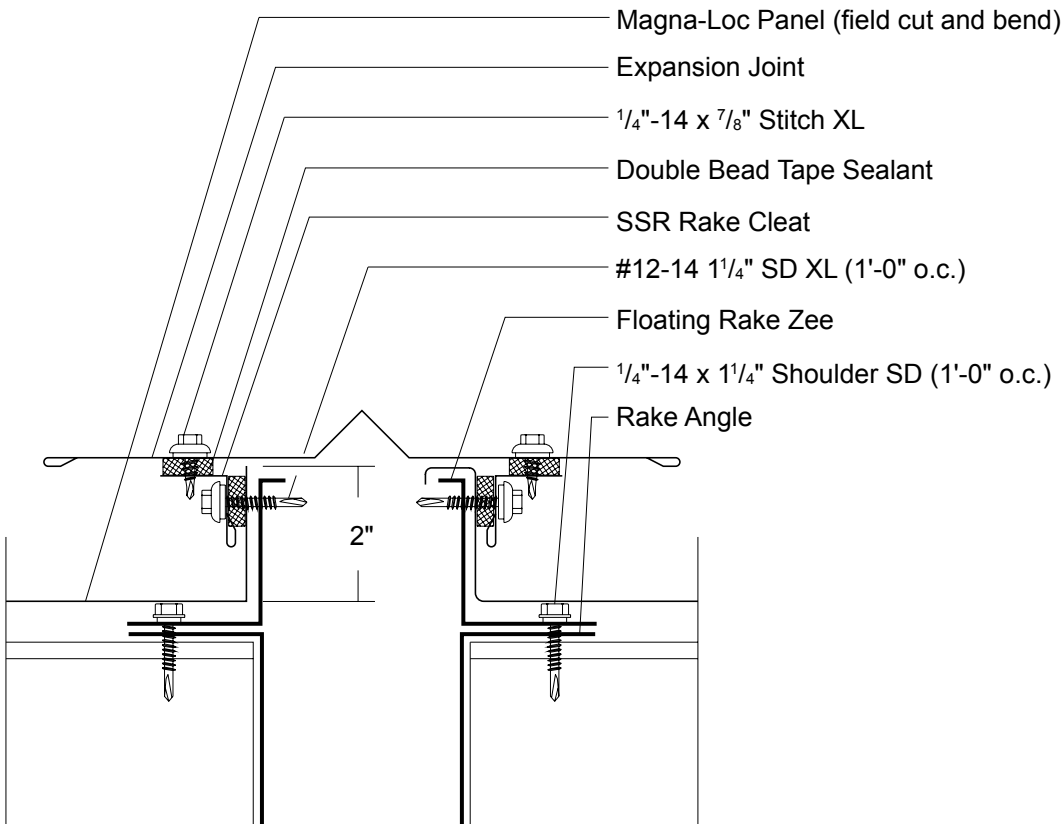
MAGNA-LOC Rakewall (Off Module) Detail

1/2:12 SLOPE MINIMUM



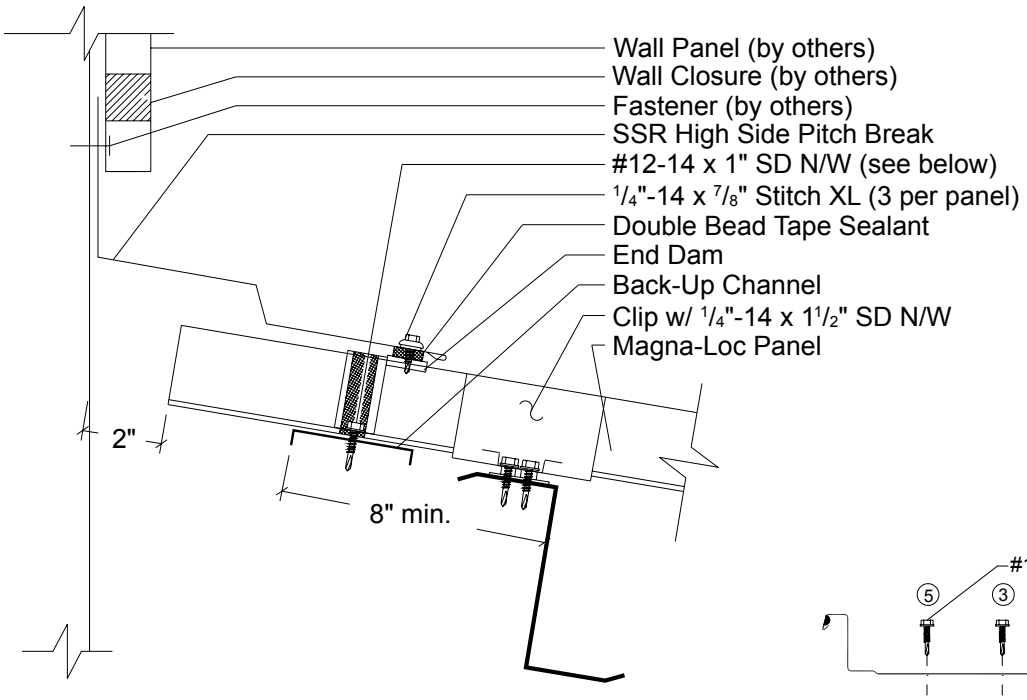
CAUTION
Note: If panel does terminate on module then Rake Cleat is not needed.

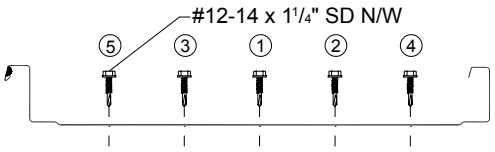
MAGNA-LOC Expansion Joint Detail



MAGNA-LOC Endwall with Wall Panel Detail

1/2:12 SLOPE MINIMUM

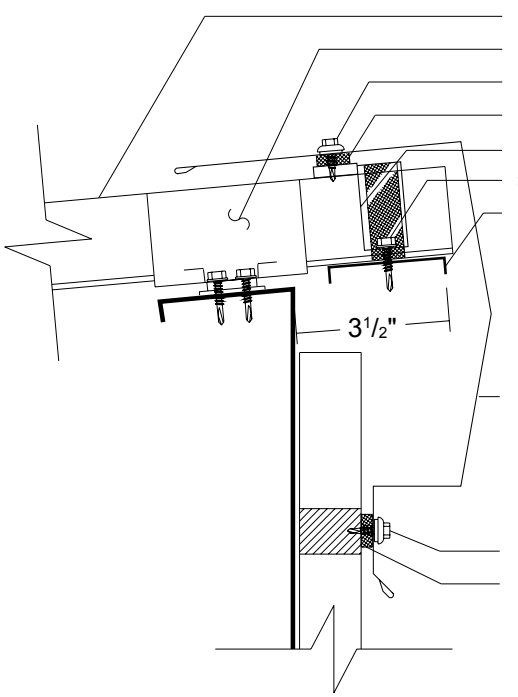




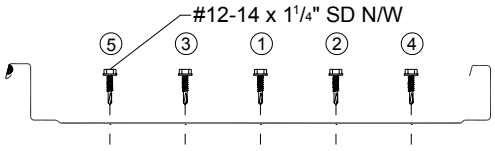
Magna-Loc Fastening Pattern

MAGNA-LOC Sculptured High Side Eave Detail

1/2:12 SLOPE MINIMUM



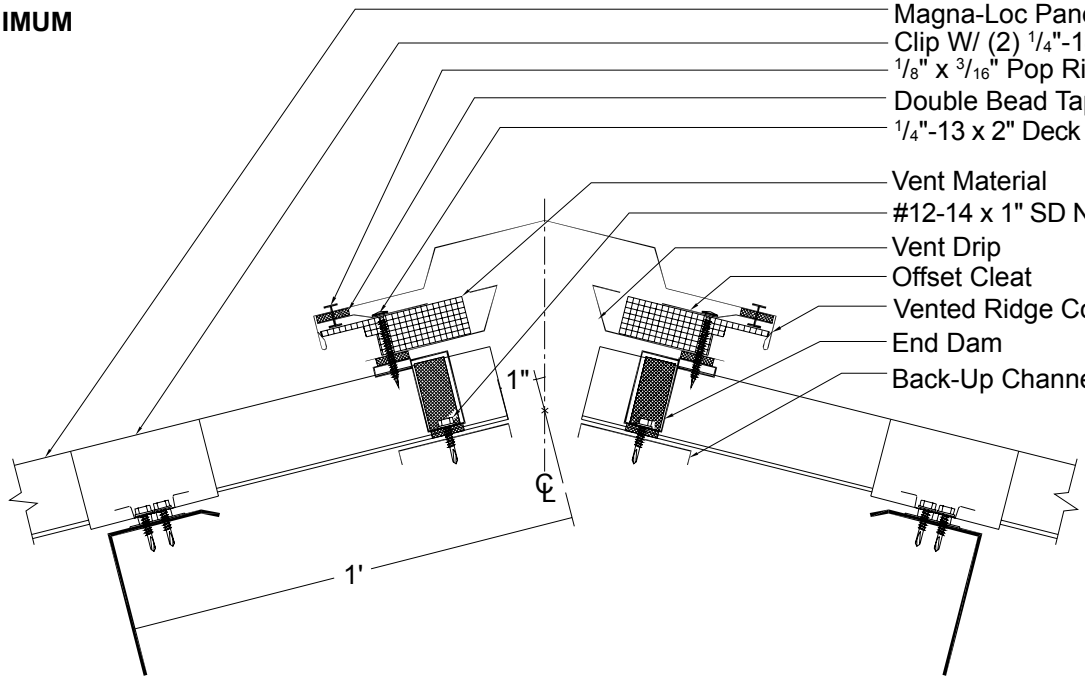
- Magna-Loc Panel (field cut)
- Clip W/ (2) 1/4"-14 x 1 1/2" SD N/W
- 1/4"-14 x 7/8" Stitch XL (3 per panel)
- Double Bead Tape Sealant
- End Dam
- #12-14 x 1" SD N/W (see below)
- Back-Up Channel
- SSR Sculptured High Side Eave
- 1/4"-14 x 7/8" Stitch XL (1'-0" o.c.)
- Double Bead Tape Sealant



Magna-Loc Fastening Pattern

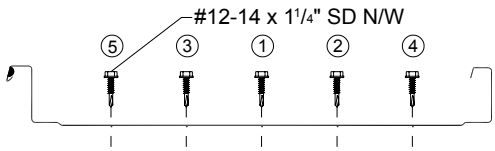
MAGNA-LOC Vented Ridge Detail

1/2:12 SLOPE MINIMUM



- Magna-Loc Panel
- Clip W/ (2) 1/4"-14 x 1 1/2"SD N/W
- 1/8" x 3/16" Pop Rivet (1'-0" o.c.)
- Double Bead Tape Sealant
- 1/4"-13 x 2" Deck Screw (1'-0" o.c.)
- Vent Material
- #12-14 x 1" SD N/W (see below)
- Vent Drip
- Offset Cleat
- Vented Ridge Cover
- End Dam
- Back-Up Channel

Note: Refer to PML-14 for proper ventilation considerations.



Magna-Loc Fastening Pattern

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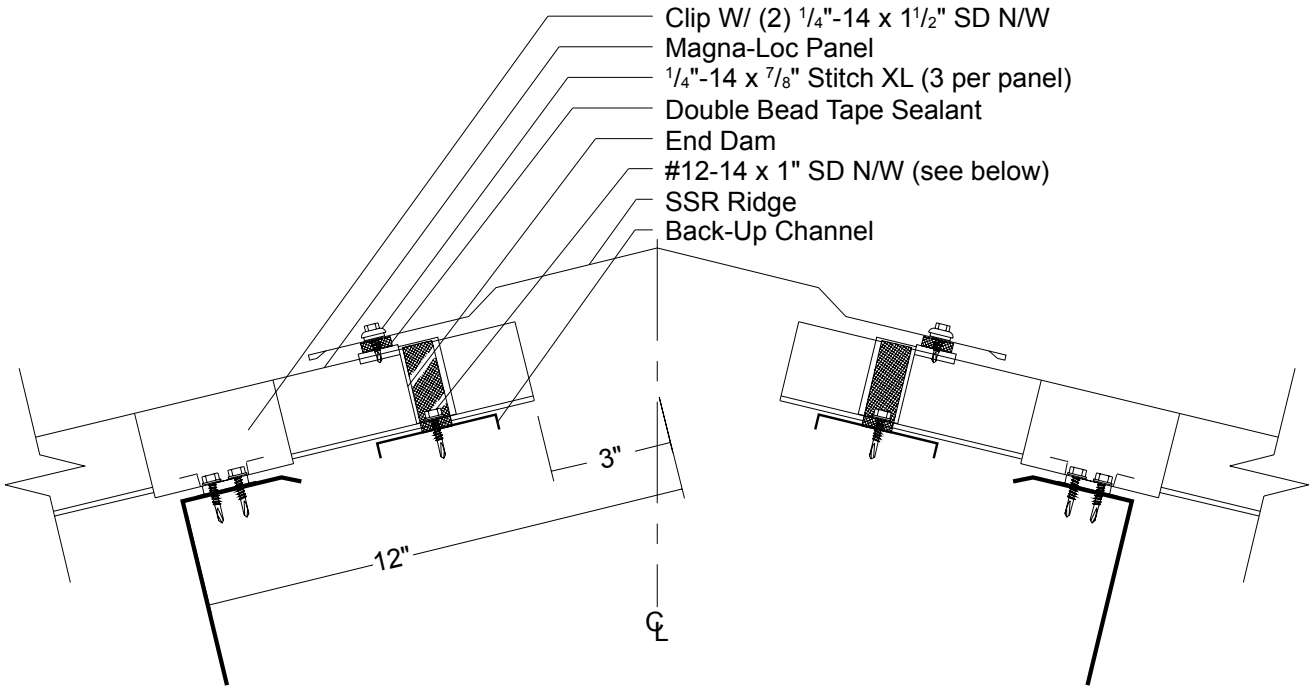
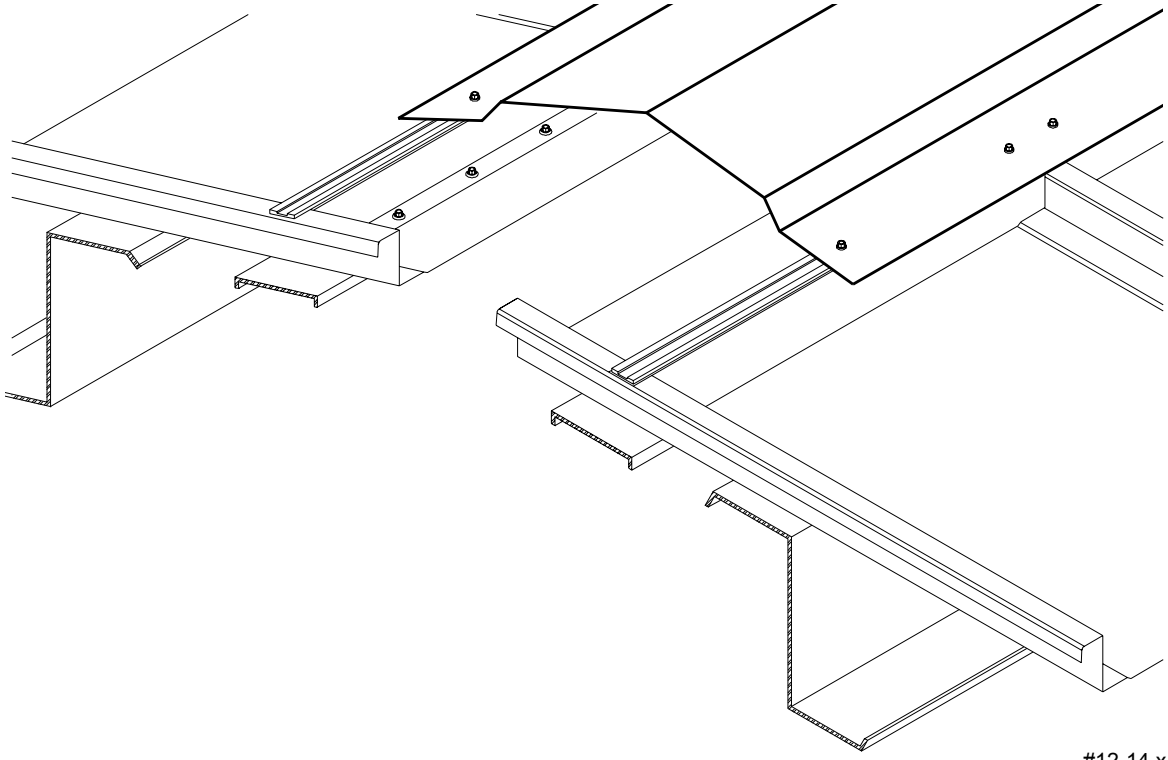
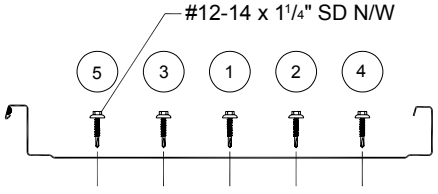
SSR Ridge Detail

1/2:12 SLOPE MINIMUM



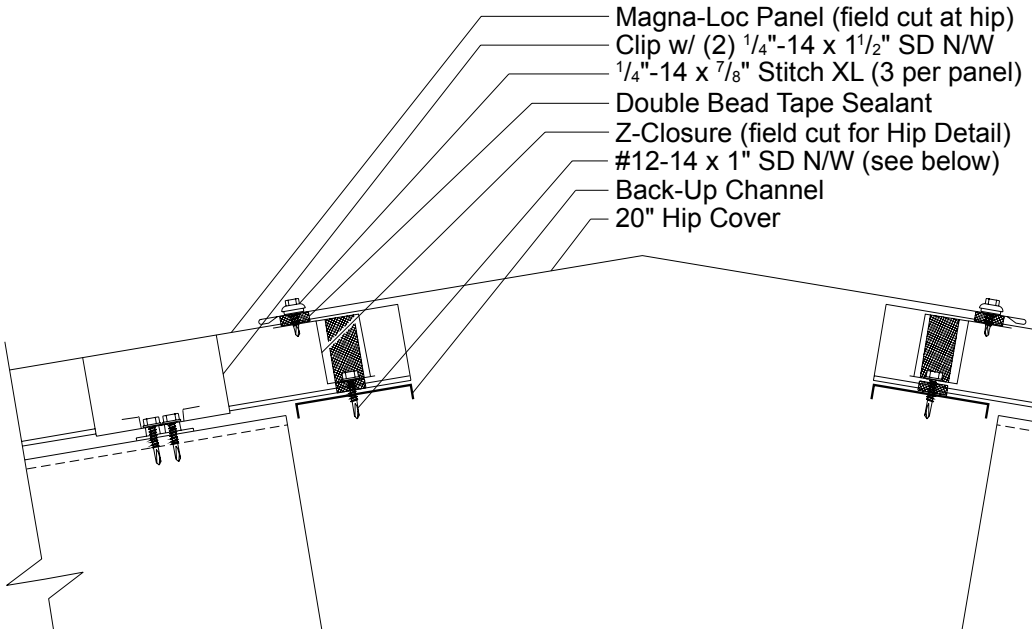


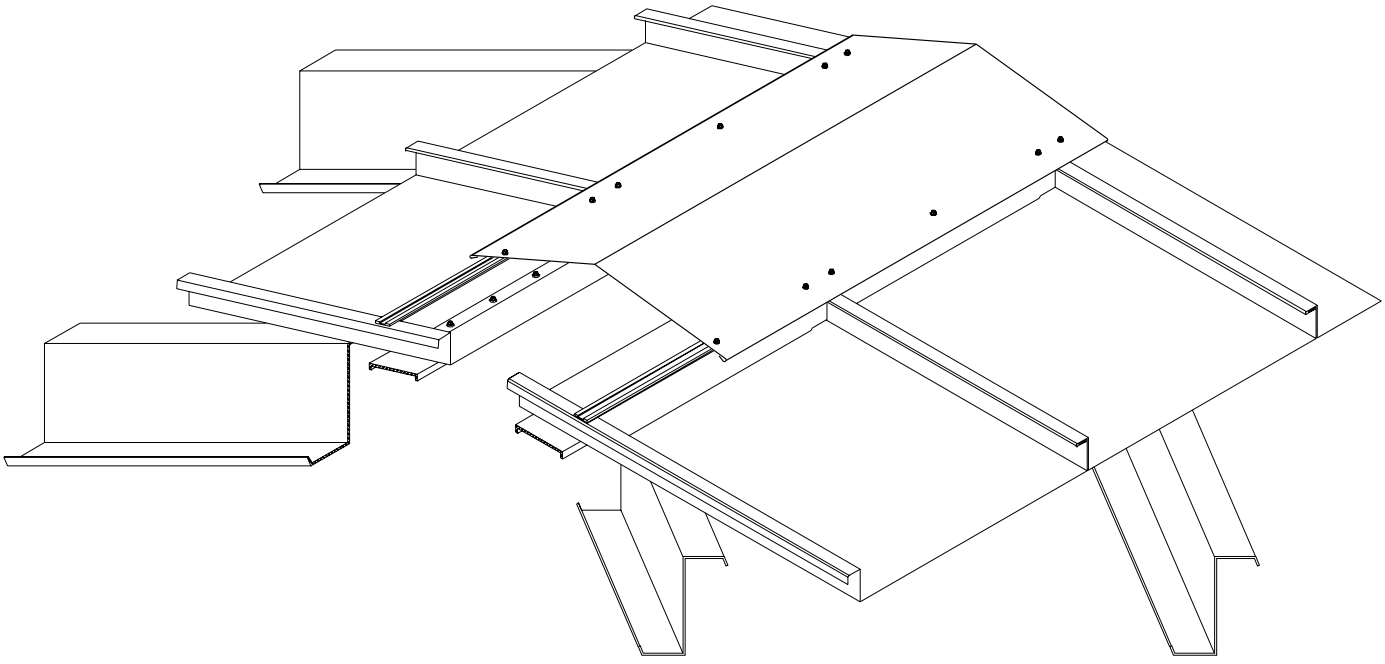


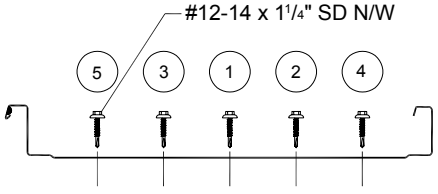
Magna-Loc Fastening Pattern

20" RIDGE/HIP DETAIL

1/2:12 SLOPE MINIMUM







Magna-Loc Fastening Pattern