



Magna-Loc

Installation Guide

Best Buy Metals

Toll Free 1-800-728-4010 / Phone 423-479-6382 / Fax 423-728-3066

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MAGNA*LOC IMPORTANT INFORMATION

The application and detail drawings in this manual are strictly for illustration purposes and may not be applicable to all building designs or product installations. All projects should conform to applicable building codes for that particular area. It is recommended to follow all building regulations and standard industry practices.

Best Buy Metals is not responsible for the performance of the roof system if it is not installed in accordance with the suggested instructions referenced in this manual. If there is a conflict between this manual and the approved erection drawings, the approved erection drawings are to take precedence.

Prior to ordering and installing materials, all dimensions should be verified by field measurements.

Oil canning is not a cause for rejection. Oil canning can be described as the amount of waviness found in the flat areas of metal panels. Oil canning is an inherent characteristic of light gauge cold formed metal products, particularly those with broad flat areas. There are many factors which may contribute to oil canning that we are not able to control. These factors include: misalignment of the support system, over driving of fasteners used on the panels, stress (whether inherent in the panel or induced), thermal expansion and contraction of the panel, proper material handling, width, gauge, length, color of panels, and proper installation. (Reference Metal Construction Association "Oil Canning Position Paper" * Appendix A).

We reserve the right to modify, without notice, any details, recommendations or suggestions. Any questions you may have regarding proper installation of the Magna*Loc roofing system should be directed to your representative.

Consult us for any additional information not outlined in this manual.

This manual is designed to be utilized as a guide when installing Magna*Loc roofing system. It is the responsibility of the erector to ensure the safe installation of this product system.

SAFETY

STUDY APPLICABLE OSHA AND OTHER SAFETY REQUIREMENTS BEFORE FOLLOWING THESE INSTRUCTIONS.

The installation of metal roof systems is a dangerous procedure and should be supervised by trained knowledgeable erectors. **USE EXTREME CARE WHILE INSTALLING ROOF PANELS.** It is not possible for us to be aware of all the possible job site situations that could cause an unsafe condition to exist. The erector of the roof system is responsible for reading these instructions and determining the safest way to install the roof system.

These instructions are provided only as a guide to show a knowledgeable, trained erector the correct parts placement one to another. If following any of the installation steps would endanger a worker, the erector should stop work and decide upon a corrective action.

Provide required safety railing, netting, or safety lines for crew members working on the roof.

Do not use the roof panel as a walking platform. The roof panels will not withstand the weight of a person standing at the edge of the panel.

Do not stand on the roof panel at the ends until the panels have been attached.



Magna-Loc

- Architectural/structural flat pan standing seam panel
- 16" and 18" panel coverage, 2" rib height
- Gauges: 24ga standard, 22ga optional
- Minimum roof slope: 1/2:12
- Factory applied side lap sealant
- Integral mechanically seamed side lap seam
- Concealed clip designed for thermal movement
- Accommodates 1/2" to 6" blanket insulation
- Applies over open framing or solid substrate
- Finishes: Kynar 500 (PVDF), MS Colorfast30®, and ACG®



Toll free (800) 728-4010

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Fax (423) 728-3066

Address:

1652 South Lee Hwy.

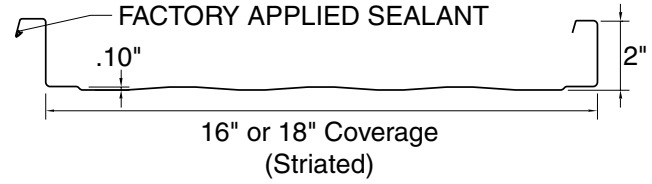
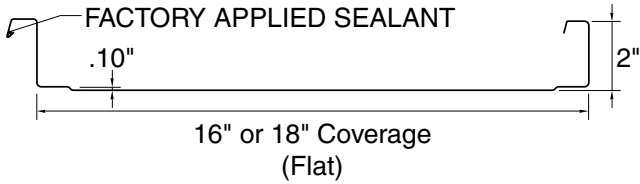
Cleveland, TN 37311

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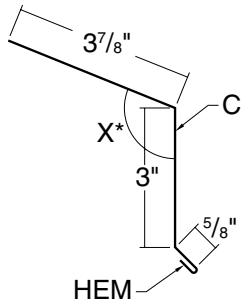
General Information	PAGE NO.
Important Information	1
Basic Product Information.....	2
Detailed Contact Information.....	3
Table of Contents	4 & 5
Panel Profile	6
Flashing Profiles	6*9
Accessory Profiles	9*10
Handling Material	
Receiving Material	11
General Handling	11
Mechanical Handling	11
Manual Handling	12
Storage	
General	13
Storage on Roof	14
Foot Traffic	15
Field Cutting and Touch*up	
Field Cutting	16
Touch*up Paint	16
Fastener Selection Guide	17
Design / Installation Considerations	
Fastener Installation Technique.....	18
Condition of Substructure	18
Ventilation	19
Insulation	19
System Expansion / Contraction	20
Selection of System Components	20
Installation Procedure Overview	21
Installation of Panel	
Installation of Floating Rake Zee	22
Installation of Eave Plate	23
Installing First Panel	24
Installing Panel Clips.....	25
Endlapping of Panel.....	26 27
Sidelapping of Panel	28 29
Termination of Panel	30
Seaming Panels	31 32
Installation of Panel Over Open Framing	
Sculptured Eave	33
Sculptured Gutter	34
4.5" Drop Valley	35
9" Drop Valley	36
Endlap	37
SSR Sculptured Rake (On Module)	38
SSR Sculptured Rake (Off Module)	39
Rakewall (On Module)	40
Rakewall (Off Module)	41
Expansion Joint	42
Endwall With Wall Panel	43
Sculptured High Side Eave	44
SSR Ridge	45
20" Ridge / Hip Cover	46
Vented Ridge	47

	PAGE NO.
Installation of Panel Over Decking	
Eave Offset	48
Box Gutter Offset	49
Valley Offset	50
Rake (On Module)	51
Rake (Off Module)	52
Rakewall	53
Peak With End Dam	54
20" Ridge / Hip Cover With End Dam Fixed	55
Vented Ridge With End Dam	56
Installation of End Dam	57
Installation of Z*Closures	58
Clip Detail	59
Transition Detail	60
Hemming Detail	61
Roof Penetrations	
General Notes	62
Installation Notes.....	62
Care and Maintenance	63
Notes	64

MAGNA*LOC STANDING SEAM METAL PANEL

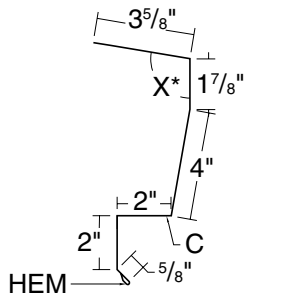


EAVE



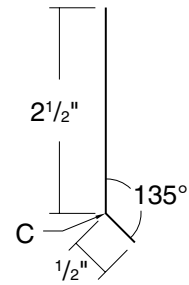
LENGTH 10*2"
*Specify Slope Angle

**MAGNA*LOC
SCULPTURED EAVE**



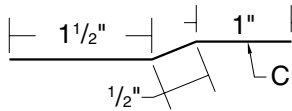
LENGTH 10*2", 20*3"
*Specify Slope Angle

CLEAT



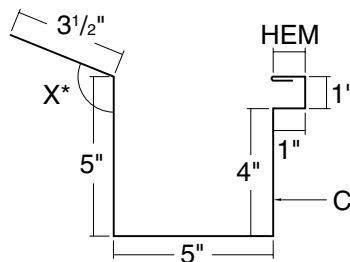
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OFFSET CLEAT



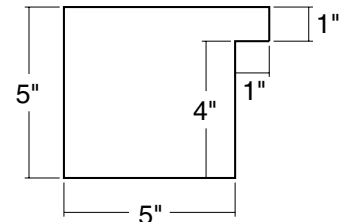
LENGTH 10*2"

BOX GUTTER

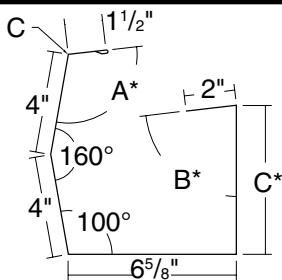


LENGTH 10*2", 20*3"
*Specify Slope Angle

BOX GUTTER END

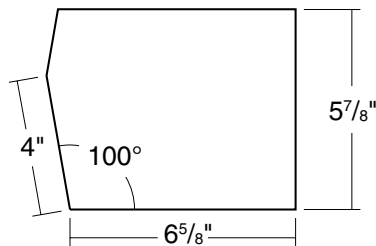


**MAGNA*LOC
SCULPTURED GUTTER**

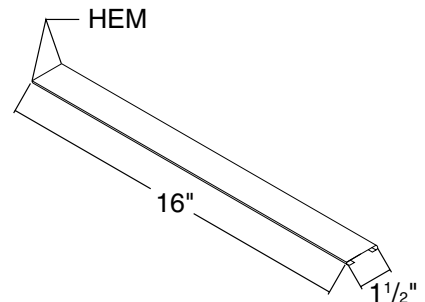


LENGTH 10*2", 20*3"
*Specify Slope Angle For A and B,
and Length for C.

**MAGNA*LOC
SCULPTURED GUTTER END**

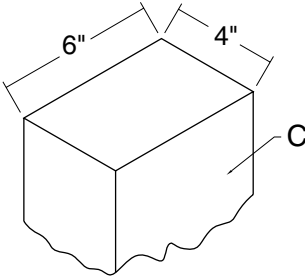


**UNIVERSAL GUTTER/
DOWNSPOUT STRAP**



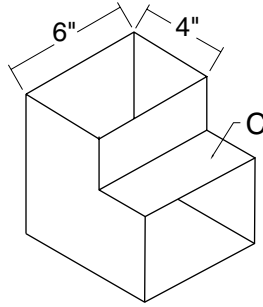
MAGNA*LOC FLASHING PROFILES (CONT.)

DOWNSPOUT 6" x 4"



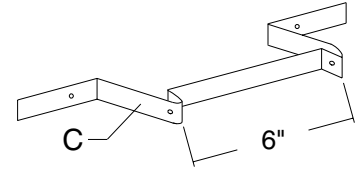
LENGTH 10'x2", 20'x3"
(Also available 4" x 3 1/2")

95° ELBOW 6" x 4"



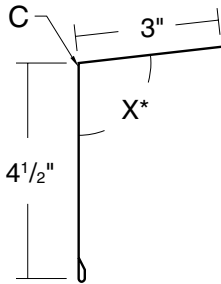
(Also available 4" x 3 1/2")

DOWNSPOUT BRACKET



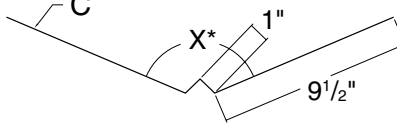
(Also available 4")

GUTTER DRIP



LENGTH 10'x2"
*Specify Slope Angle

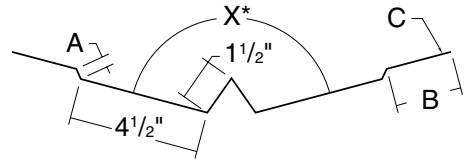
VALLEY



LENGTH 10'x2", 20'x3"
*Specify Slope Angle

SSR 4.5" DROP VALLEY

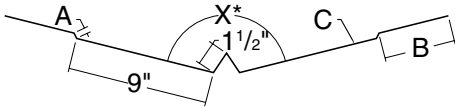
SYSTEM	A	B
LOW	3/8"	4 1/2"
HIGH	1 3/8"	3 1/2"



LENGTH 10'x2", 20'x3"
*Specify Slope Angle

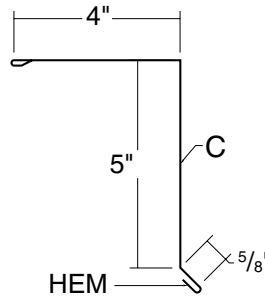
SSR 9" DROP VALLEY

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



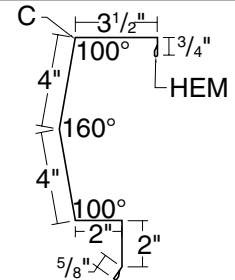
LENGTH 10'x2", 20'x3"
*Specify Slope Angle

RAKE



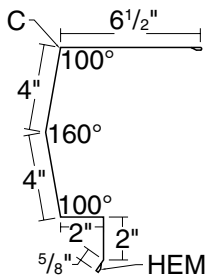
LENGTH 10'x2", 20'x3"

SSR SCULPTURED RAKE (ON MODULE)



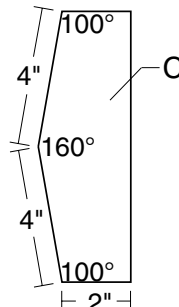
LENGTH 10'x2", 20'x3"

SSR SCULPTURED RAKE (OFF MODULE)

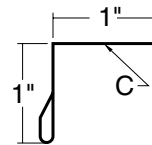


LENGTH 10'x2", 20'x3"

SSR SCULPTURED RAKE END



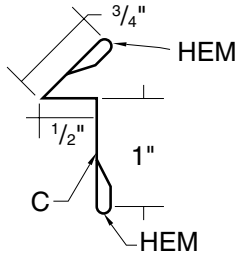
SSR RAKE CLEAT



LENGTH 10'x2"

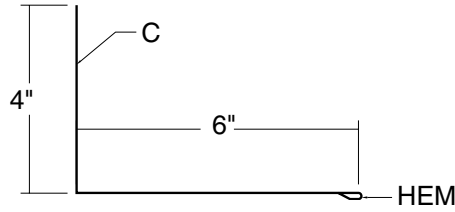
MAGNA*LOC FLASHING PROFILES (CONT.)

SSR RAKE SLIDE



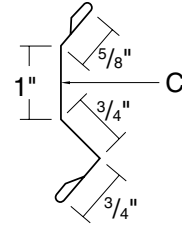
LENGTH 10'*2"

SSR RAKEWALL



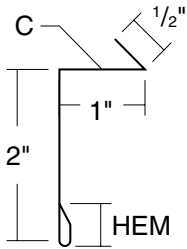
LENGTH 10'*2"

COUNTER FLASHING



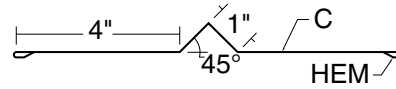
LENGTH 10'*2"

REGLET FLASHING



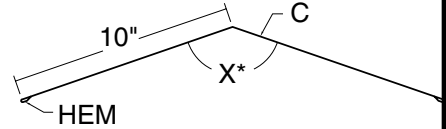
LENGTH 10'*2"

EXPANSION JOINT FLASHING



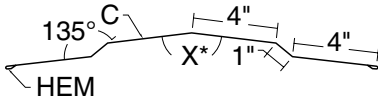
LENGTH 10'*2"

20" RIDGE /HIP COVER



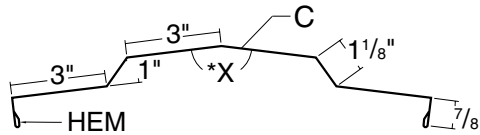
LENGTH 10'*2", 20'*3"
*Specify Slope Angle

SSR RIDGE



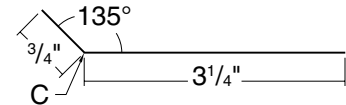
LENGTH 10'*2", 20'*3"
*Specify Slope Angle

VENTED RIDGE COVER



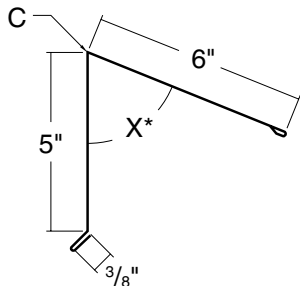
LENGTH 10'*2", 20'*3"
*Specify Slope Angle

VENT DRIP



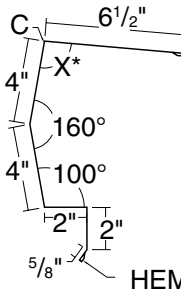
LENGTH 10'*2"

PEAK



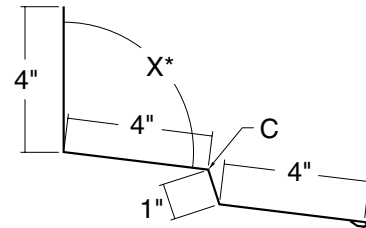
LENGTH 10'*2", 20'*3"
*Specify Slope Angle

SSR SCULPTURED HIGH SIDE EAVE



LENGTH 10'*2", 20'*3"
*Specify Slope Angle

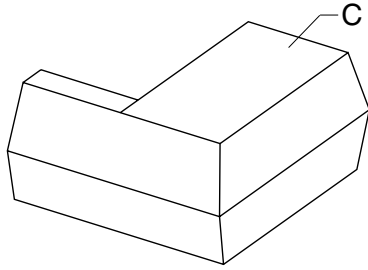
SSR HIGH SIDE PITCH BREAK



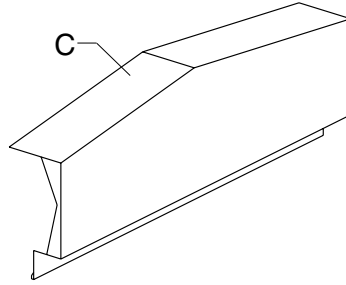
LENGTH 10'*2", 20'*3"
*Specify Slope Angle

MAGNA*LOC FLASHING AND ACCESSORY PROFILES (CONT.)

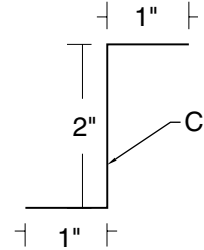
**SSR SCULPTURED
CORNER BOX**



**SSR SCULPTURED
PEAK BOX**

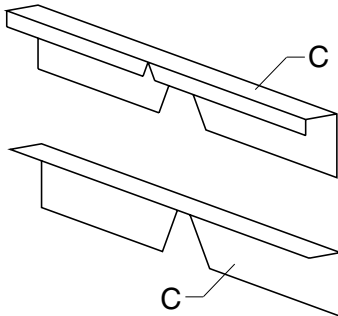


MAGNA*LOC Z*CLOSURE

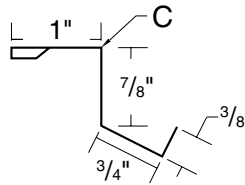


LENGTH 10'*2"

MAGNA*LOC RIB*COVER



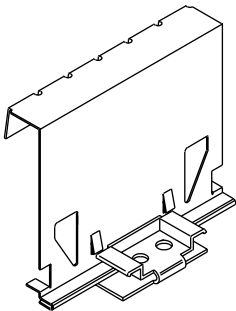
SSR GUTTER SUPPORT



LENGTH 10'*0"

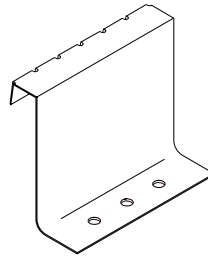
MAGNA*LOC ACCESSORY PROFILES

**MAGNA*LOC CLIP
(FLOATING)**



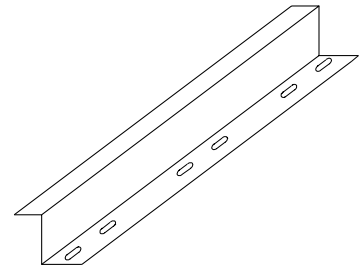
HEIGHT 2³/₈" , 3³/₈"

**MAGNA*LOC CLIP
(FIXED)**



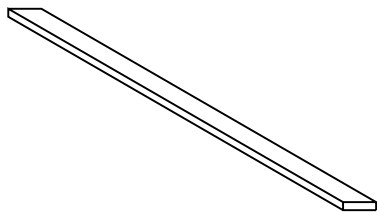
HEIGHT 2¹/₈" , 2³/₈"

FLOATING RAKE ZEE



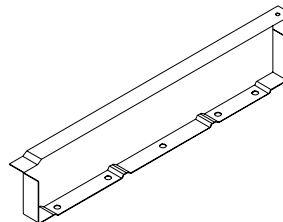
LENGTH 10'*0"
HEIGHT 2" , 2³/₈" , 3³/₈"
GALVANIZED

ENDLAP PAD



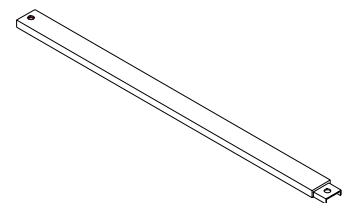
1¹/₂" x 3³/₃₂" x 20"
BUTYL * GRAY

END DAM



GALVANIZED AND PAINTED

BACK*UP CHANNEL



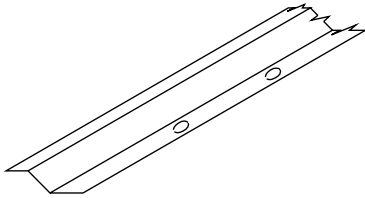
LENGTH 48" AND 72"
GALVANIZED

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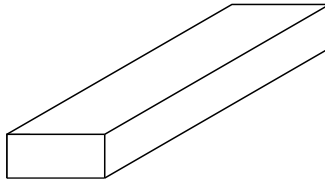
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EAVE PLATE



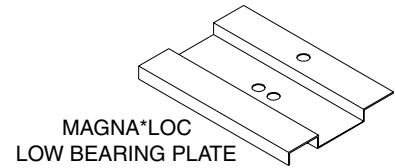
LENGTH 10'x0"
HEIGHT 3/8", 1", 1 3/8"
GALVANIZED

THERMAL BLOCK

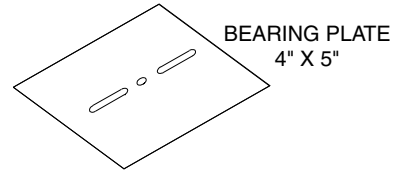


1" x 3" x 16"
POLYSTYRENE FOAM

BEARING PLATES

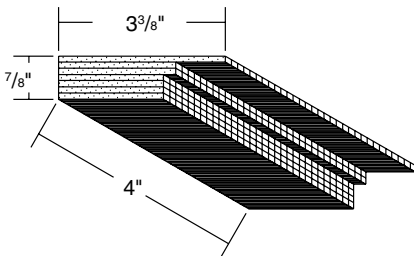


MAGNA*LOC
LOW BEARING PLATE

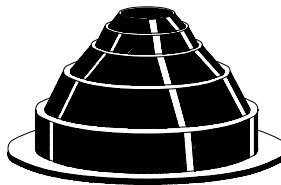


BEARING PLATE
4" X 5"

VENT MATERIAL

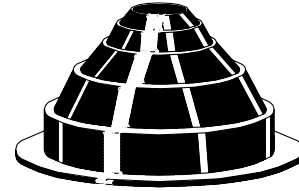


RUBBER FOOT JACK



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



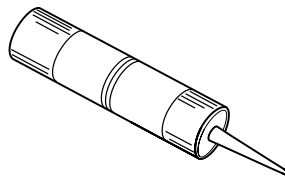
#801RETRO (3/4" to 2 3/4" O.D. PIPE)
#802RETRO (2" to 7 1/4" O.D. PIPE)
#803RETRO (3 1/4" to 10" O.D. PIPE)

RUBBER ROOF FLASH KIT



12" x 50" x 0" FLASH KIT
18" x 50" x 0" FLASH KIT

TUBE SEALANT



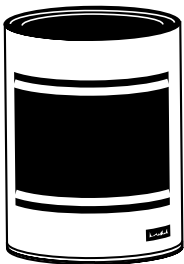
10.3 oz. CARTRIDGE
URETHANE

TAPE SEALANT



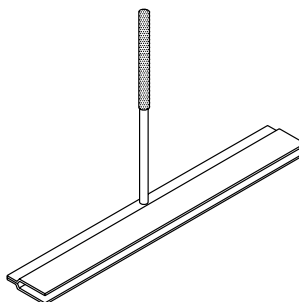
7/8" X 3/16" X 25'
DOUBLE BEAD
BUTYL * GRAY

TOUCH*UP PAINT

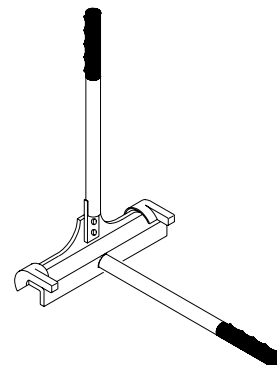


AVAILABLE IN PINTS
PVDF / MS CF25

METAL PANEL HEMMING TOOL



HAND CRIMPER



MAGNA*LOC HANDLING MATERIAL

RECEIVING MATERIAL

It is the responsibility of the installer to unload material from the delivery truck. The installer shall be responsible for providing suitable equipment for unloading of material from the delivery.

After receiving material, check the condition of the material, and review the shipment against the shipping list to ensure all materials are accounted for. If damages or shortages are discovered, it should be noted on the Bill of Lading at the time of delivery. A claim should be made against the carrier as soon as possible. We are not responsible for any damages or shortages unless they are documented in writing and presented within 48 hours.

GENERAL HANDLING

Each bundle should be handled carefully to avoid being damaged. Care should be taken to prevent bending of the panel or abrasion to finish. Whenever possible, the bundle should remain crated until it is located in its place of storage. If bundles must be opened, we recommend you recreate them before lifting. To avoid damage please lift the bundle at its center of gravity.

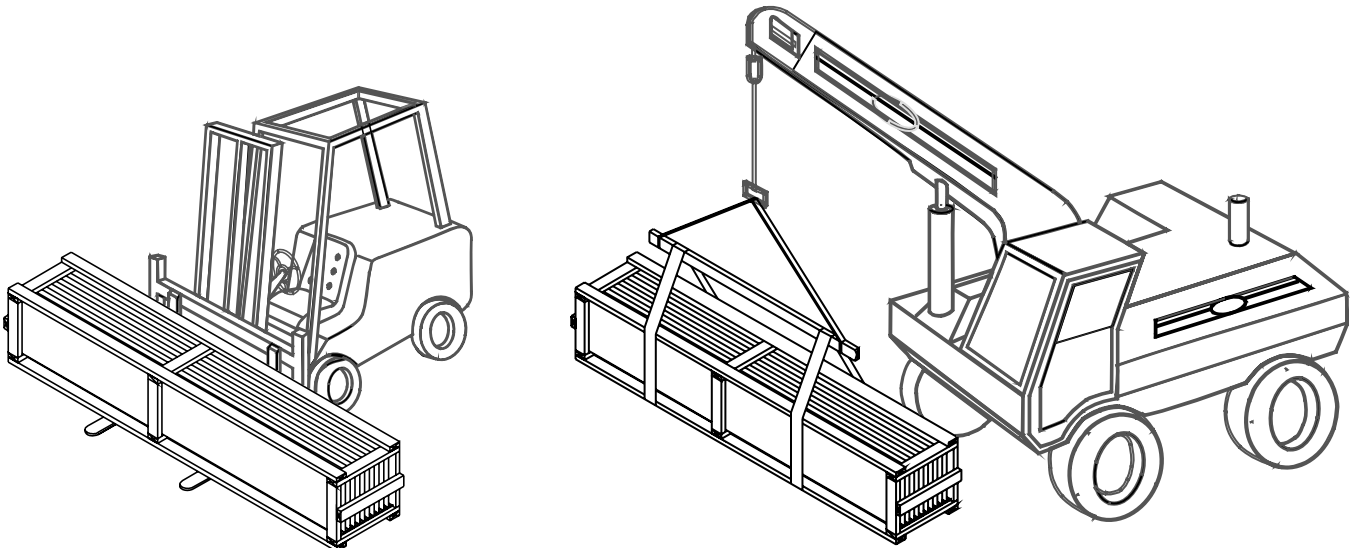
CAUTION

Improper loading and unloading of bundles and crates may result in bodily harm and/or material damage. We are not responsible for bodily injuries and/or material damages resulting from improper loading and unloading.

MECHANICAL HANDLING

Forklift *A forklift may be used for panels up to 20' 0" long. Please make sure the forks are at their maximum separation. Do not transport open bundles. When transporting bundles across rough terrain, or over a longer distance, some means of supporting the panel load must be used.

Crane *A crane should be used when lifting panels with lengths greater than 20' 0". Please be sure to utilize a spreader bar to ensure the even distribution of the weight to the pick up points. As a rule when lifting panels, no more than $\frac{1}{3}$ of the length of the panel should be left unsupported. Never use wire rope because this will damage the panels.



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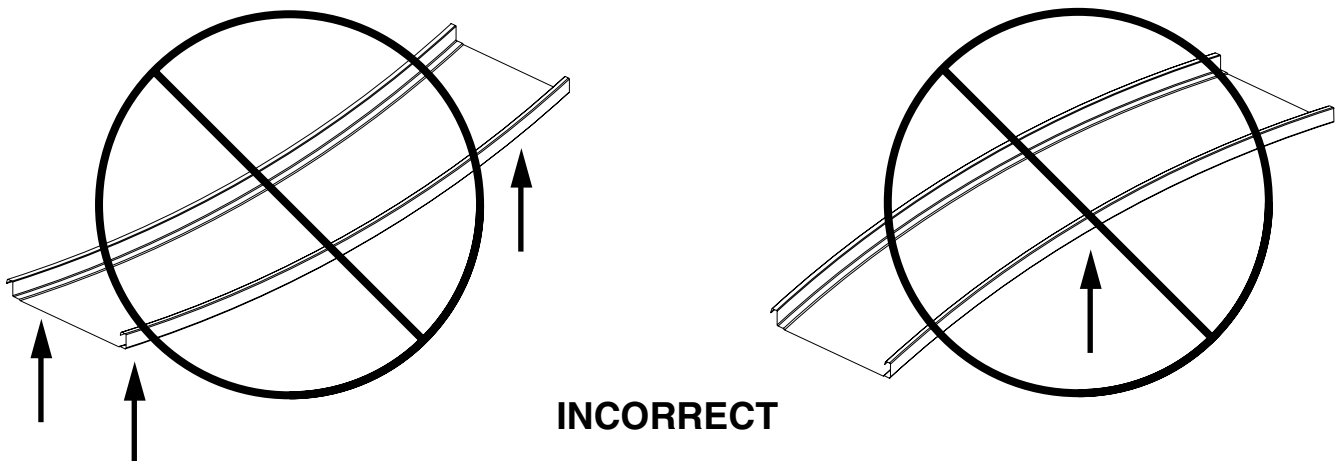
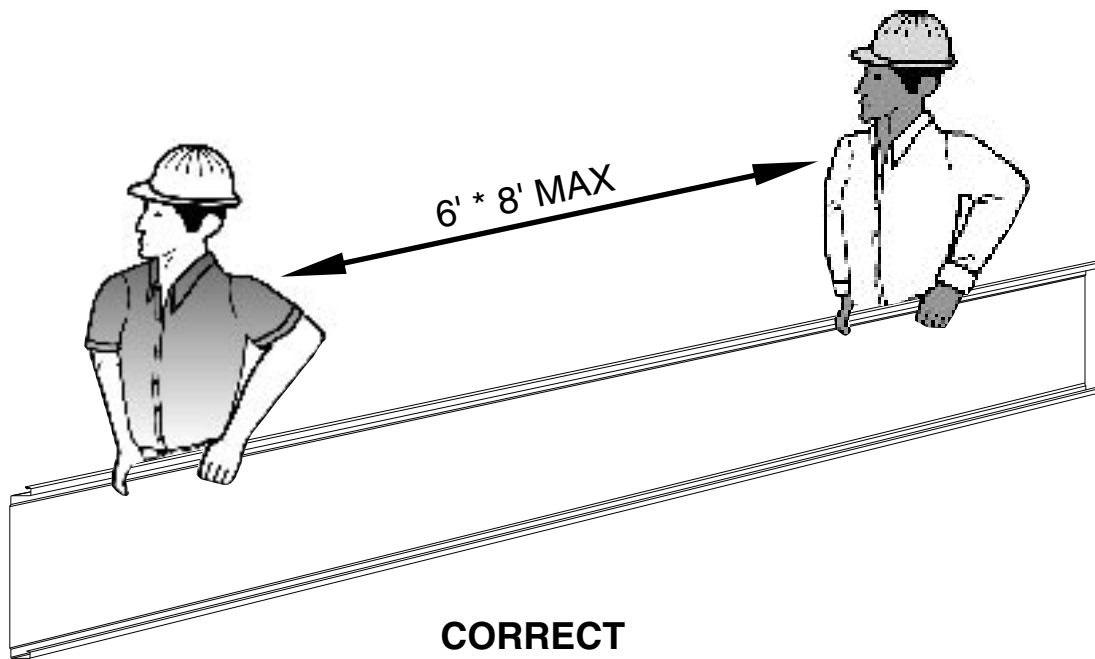
MAGNA*LOC HANDLING MATERIAL (CONT.)

MANUAL HANDLING

When handling painted steel care should be taken to prevent scratching of material. Clean gloves should be worn at all times to prevent a reaction with salts found on bare skin. Installers should wear rubber sole shoes to keep from scuffing material while walking on the roof.

Handling of individual panels should be done carefully and properly to avoid bending or damaging. Magna Loc panels should be carried by grasping the edge of the panel so that the Magna Loc panel is vertical to the ground. The Magna Loc panel should not be carried with the panel horizontal to the ground as this could cause the panel to buckle or bend in the center.

Normally individual panels can be handled by people placed every 6' 0" to 8' 0" along the length of the panel.

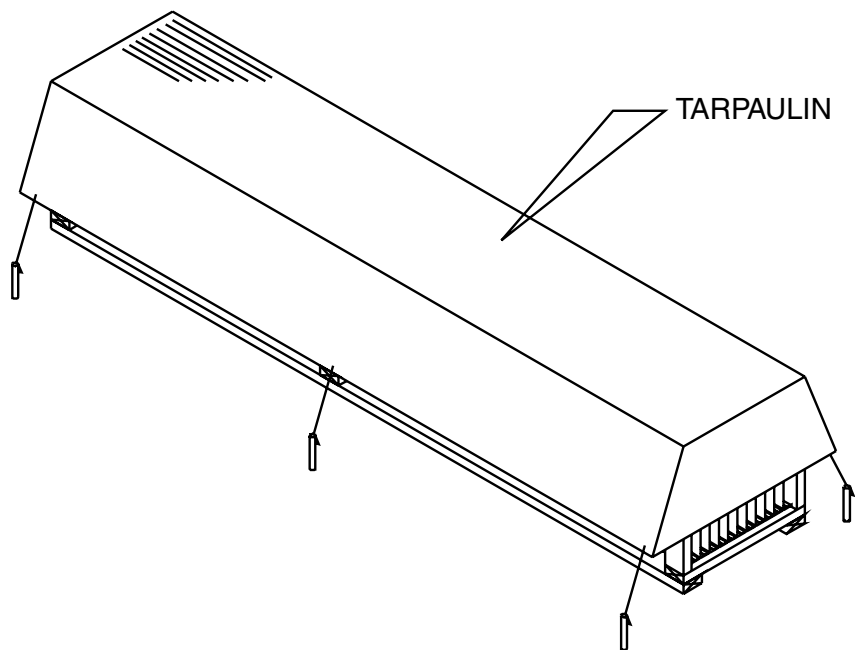
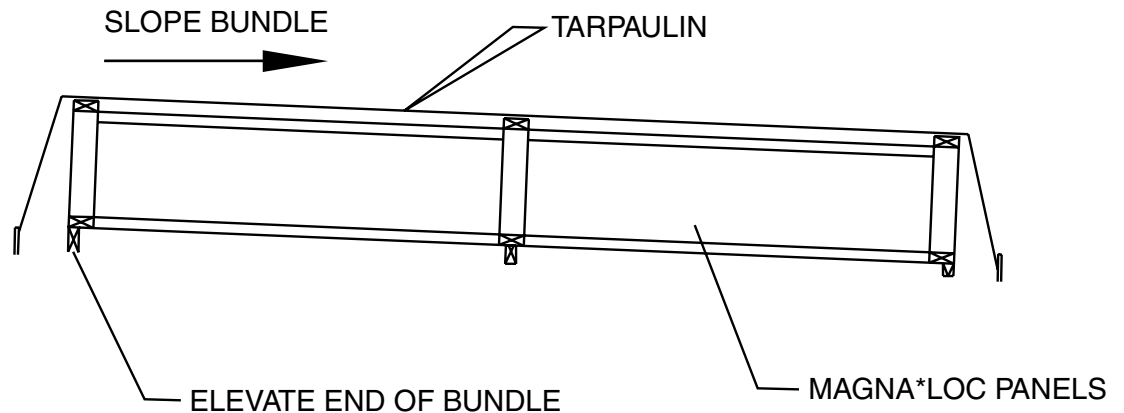


MAGNA*LOC STORAGE

GENERAL

Please inspect panels for moisture accumulation. If moisture has formed, the panels should be unbundled, wiped dry, and allowed to dry completely. Once dry, carefully restack the panels and loosely recover allowing for ample air circulation.

Bundled sheets should be stored high enough off of the ground to allow for air circulation and prevent contact with accumulating water. If possible, elevate one end of the bundle to allow any moisture to run off the panels. We recommend covering the bundle with a tarpaulin. Do not use tight fitting plastic type tarpaulins as panel bundle covers. While they may provide protection from heavy downpours, they can also retard necessary ventilation and trap heat and moisture that may accelerate metal corrosion. If panels are to be stored in possible bad weather, we suggest they be stored inside. Extended storage of panels in a bundle is not recommended. **Under no circumstances should the sheets be stored near or come in contact with salt water, corrosive chemicals, ash, or fumes generated or released inside the building or nearby plants, foundries, plating works, kilns, fertilizer, and wet or green lumber.**

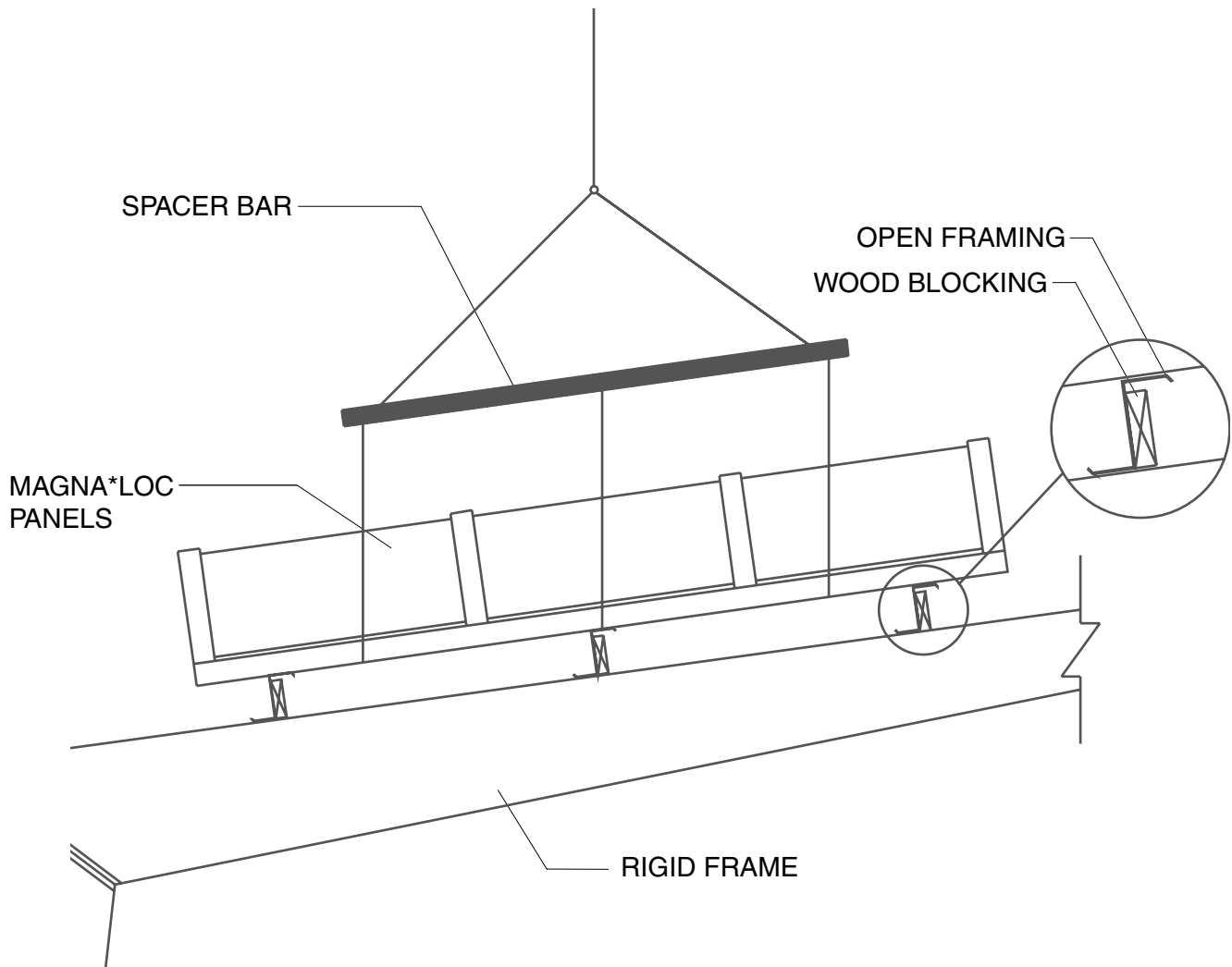


STORAGE ON ROOF

To facilitate the handling of Magna Loc panels, panel bundles can be lifted and placed on the roof. Bundles need to be placed on the roof in order for the roof structure to handle the weight. Loading capabilities of the structure must be checked.

When lifting packaged sheets, make certain they are adequately supported. Panels less than 20' 0" in length can normally be lifted with a forklift; however, when lifting panels in excess of 20' 0", it is recommended that a spreader bar and slings be used. As a rule, when lifting, no more than $\frac{1}{3}$ of the length of the panel should be left unsupported.

Make a plan for bundle placement by determining how much area a bundle of panels will cover. Bundles should be placed on the roof in accordance with the direction the panel will be installed. Consider where the string line, if any, is to run at the eave to set roof panels by. Roof bundles should not interfere with this string line.



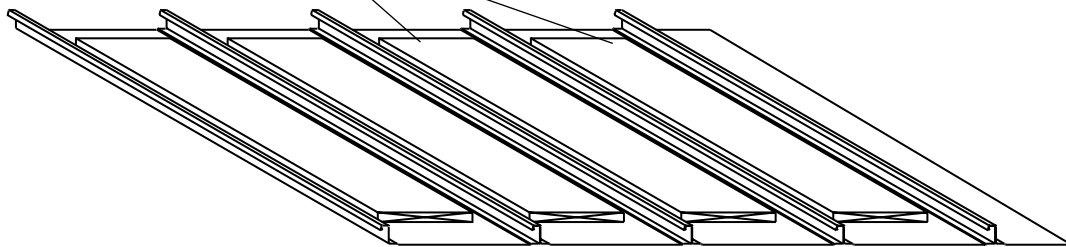
MAGNA*LOC FOOT TRAFFIC

Care of metal panels and flashings must be exercised throughout erection. Foot traffic can cause distortion of panel and damage to finish. Traffic over the installed system must be kept to an absolute minimum. If continuous foot traffic is necessary for maintenance over certain areas of the roof, then a permanent walkway should be installed.

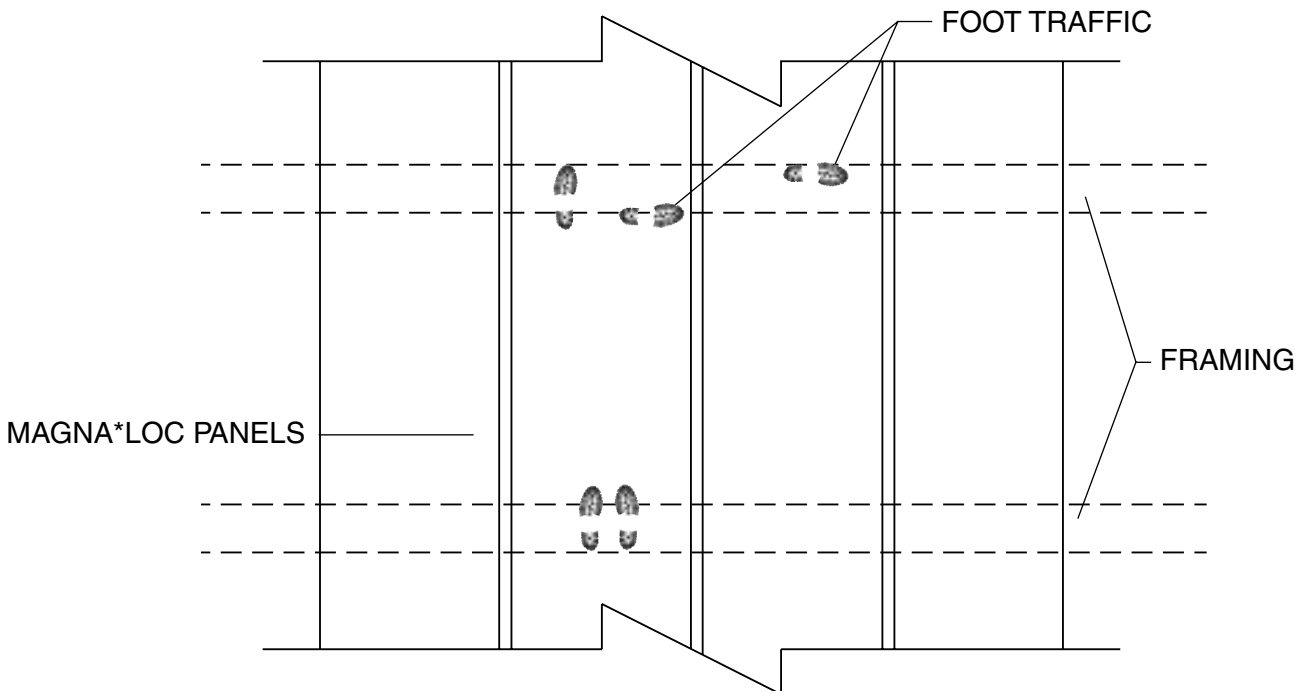
If metal panels are installed over open framing, do not use the roof panel as a walking platform. The roof panels will not withstand the weight of a person standing at the edge of the panel. Provide walking platforms to avoid any panel damage as shown below.

When walking on the roof panels is unavoidable, walk only in the flats of the panel. Walking on the ribs can cause damage to the panels. If Magna Loc is installed over open framing, step in the flat of the panel only and as close to the framing as possible.

WALKING PLATFORMS



OVER OPEN FRAMING



FIELD CUTTING

Tin snips or a "nibbler" type electric tool are recommended for field cutting Magna Loc panels. Cutting the steel generates slivers or metal chips. These slivers and metal chips must be immediately removed from the Magna Loc panels because they will damage the finish and shorten the life of the product.

One method of preventing this problem is to flip the Magna Loc panels over when cutting. This allows the slivers and metal chips to be brushed from the back side and avoids damaging the paint on the top side of the panels.

When cutting Magna Loc panels, goggles must be worn for eye protection.

CAUTION

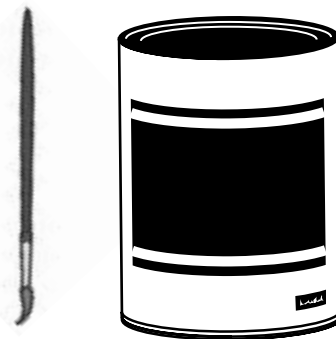
All product surfaces should be free of debris at all times. Installed surfaces should be wiped clean at the end of each work period. Never cut panels over metal surfaces. Metal shavings will rust on the surface, voiding the warranty.

TOUCH*UP PAINT

All painted panels and flashings have a factory applied baked on finish. Handling and installing panels may result in some small scratches or nicks to the paint finish. Touch up paint is available in matching colors. It is recommended that a small brush be used to apply touch up paint to those areas that are in need of repair. Touch up paint does not have the superior chalk and fade resistance of the factory applied paint finish and will normally discolor at an accelerated rate. Aerosol paint should not be used because of the overspray that may occur.

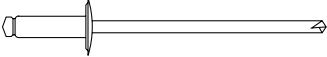
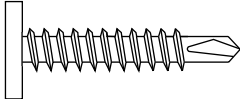

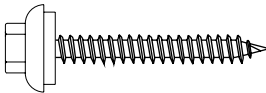
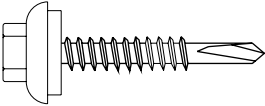
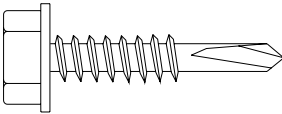
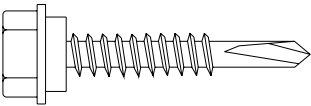
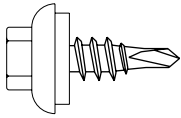
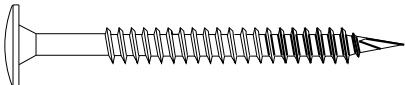


SPRAY PAINT



TOUCH*UP PAINT

MAGNA*LOC FASTENER SELECTION GUIDE

<p>POP RIVET</p> 	<p>SIZE</p> <p>1/8" x 3/16"</p> <p>1/8" x 3/16"</p>	<p>TYPE</p> <p>A</p> <p>A</p>	<p>FINISH</p> <p>Unpainted</p> <p>Painted</p>	<p>APPLICATION</p> <p>Flashing to Panel or Flashing</p>
<p>PANCAKE HEAD DRILLER</p> 	<p>SIZE</p> <p>#10*16 x 1" (# 2 Point)</p>	<p>TYPE</p> <p>Driller</p>	<p>FINISH</p> <p>Plated</p>	<p>APPLICATION</p> <p>Clip/flashing to metal framing or decking</p>
<p>PANCAKE HEAD WOODSCREW</p> 	<p>SIZE</p> <p>#10*12 x 1"</p>	<p>TYPE</p> <p>A</p>	<p>FINISH</p> <p>Plated</p>	<p>APPLICATION</p> <p>Clip/flashing to wood substructure</p>
<p>WOODSCREW XL</p> 	<p>SIZE</p> <p>#9*15 x 1"</p> <p>#9*15 x 1 1/2"</p> <p>#9*15 x 2"</p> <p>#9*15 x 1"</p> <p>#9*15 x 1 1/2"</p> <p>#9*15 x 2"</p>	<p>TYPE</p> <p>A</p> <p>A</p> <p>A</p> <p>A</p> <p>A</p> <p>A</p>	<p>FINISH</p> <p>Unpainted</p> <p>Unpainted</p> <p>Unpainted</p> <p>Painted</p> <p>Painted</p> <p>Painted</p>	<p>APPLICATION</p> <p>Panel or Flashing to wood substructure</p> <p>Panel or Flashing to wood substructure</p>
<p>SELF DRILLER XL</p> 	<p>SIZE</p> <p>#12*14 x 1 1/4"</p> <p>#12*14 x 1 1/2"</p> <p>#12*14 x 1 1/4"</p> <p>#12*14 x 1 1/4"</p> <p>#12*14 x 1 1/2"</p> <p>#12*14 x 1 1/4"</p>	<p>TYPE</p> <p>Driller</p> <p>Driller</p> <p>Driller</p> <p>Driller</p> <p>Driller</p> <p>Driller</p>	<p>FINISH</p> <p>Unpainted</p> <p>Unpainted</p> <p>Unpainted</p> <p>Painted</p> <p>Painted</p> <p>Painted</p>	<p>APPLICATION</p> <p>Panel or Flashing to metal substructure</p> <p>Panel or Flashing to metal substructure</p>
<p>SELF DRILLER NO WASHER</p> 	<p>SIZE</p> <p>#1/4*14 x 1 1/2"</p> <p>#12*24 x 1 1/4"</p> <p>#12*14 x 1"</p>	<p>TYPE</p> <p>Driller (# 2 Point)</p> <p>Driller (#4 point)</p> <p>Driller</p>	<p>FINISH</p> <p>Plated</p> <p>Plated</p> <p>Plated</p>	<p>APPLICATION</p> <p>Panel clips to metal substructure</p> <p>Panel clips to bar joists up to 3/8" thick</p> <p>Accessories to metal substructure and used with framing on Retrofit</p>
<p>SHOULDER SELF DRILLER</p> 	<p>SIZE</p> <p>#12*14 x 1 1/4"</p>	<p>TYPE</p> <p>Driller</p>	<p>FINISH</p> <p>Plated</p>	<p>APPLICATION</p> <p>For use with Floating Rake Zee to substructure</p>
<p>STITCH SCREW XL</p> 	<p>SIZE</p> <p>#1/4* 14 x 7/8"</p> <p>#1/4* 14 x 7/8"</p>	<p>TYPE</p> <p>Stitch</p> <p>Stitch</p>	<p>FINISH</p> <p>Un*Painted</p> <p>Painted</p>	<p>APPLICATION</p> <p>Flashing to Panel or Flashing</p> <p>Flashing to Panel or Flashing</p>
<p>DEKFAST</p> 	<p>SIZE</p> <p>#14*13 x 1 5/8"</p> <p>#14*13 x 4"</p> <p>#14*13 x 5"</p> <p>#14*13 x 6"</p> <p>#14*13 x 8"</p>	<p>TYPE</p> <p>Driller</p> <p>Driller</p> <p>Driller</p> <p>Driller</p> <p>Driller</p>	<p>FINISH</p> <p>Black</p> <p>Black</p> <p>Black</p> <p>Black</p> <p>Black</p>	<p>APPLICATION</p> <p>Panel Clip to metal deck and rigid board insulation assembly or wood substructure</p>

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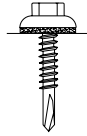
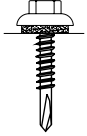

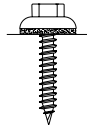
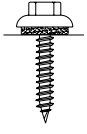
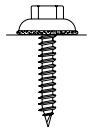
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FASTENER INSTALLATION TECHNIQUE

Recommended Tool Type *Use depth locating nose or adjustable clutch on screw gun to prevent overdrilling and strip out. **Do not use impact tools or runners.**

Seating the washer *Apply sufficient torque to seat the washer do not overdrive the fastener.

	CORRECT Sealing material slightly visible at edge of metal washer. Assembly is watertight.	TOO LOOSE Sealing material is not visible; not enough compression to seal properly.	TOO TIGHT Metal washer deformed; sealing material pressed beyond washer edge.
SELF DRILLER			
WOODSCREW			

To prevent wobbling *Make sure fastener head is completely engaged in the socket. If the head does not go all the way in the socket tap the magnet deeper into the socket to allow full head engagement. Metal chips will build up from drilling and should be removed from time to time.

Protect drill point *Push only hard enough on the screw gun to engage clutch. This prevents excess friction and burn out of the drill point. Correct pressure will allow screw to drill and tap without binding.

Drilling through sheet and insulation *Ease up on pressure when drilling through insulation to avoid striking the purlin or girt with the point apply more pressure after drill point contacts purlin or girt.

Drilling through purlin overlaps *Drilling through lapped purlins requires extra care. Excessive voids between purlins sometimes damages drill points and two self drillers might be necessary to complete the operation. It is sometimes advantageous to predrill.

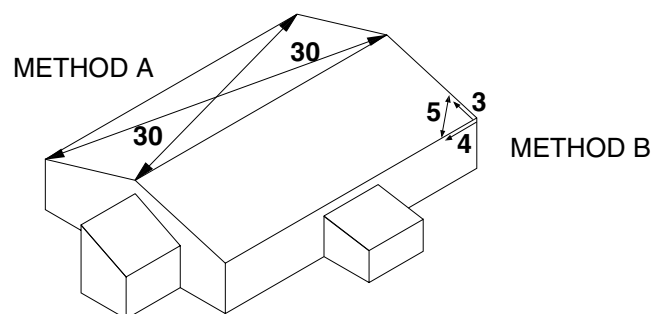
CONDITION OF SUBSTRUCTURE

Whether over solid substrate or open structural framing, panel distortion may occur if not applied over properly aligned and uniform substructure.

The installer should check the roof deck for squareness before installing Magna Loc panels. Several methods can be used to verify squareness of the structure for proper installation of the panels.

METHOD "A" *One method for checking the roof for squareness is to measure diagonally across one slope of the roof from similar points at the ridge and eave and obtain the same dimension.

METHOD "B" *The 3 4 5 triangle system may also be used. To use this system measure a point from the corner along the edge of the roof at a module of three (3). Measure a point from the same corner along another edge at a module of four (4). Then by measuring diagonally between the two points established, the dimension should be exactly a module of five (5) to have a square corner. Multiple uses of this system may be required to determine building squareness. If the endwall cannot be made square, the roof system cannot be installed as shown in these instructions.



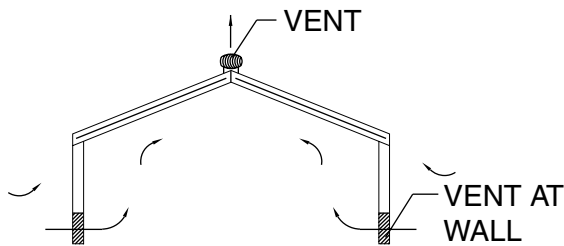
VENTILATION

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.

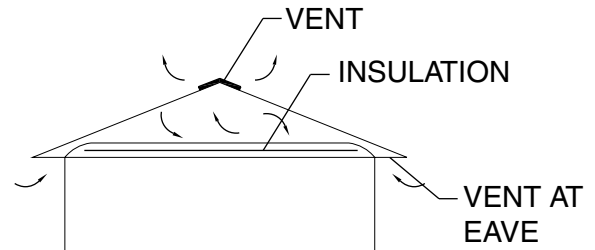
Condensation occurs when moisture laden air comes in contact with a surface temperature equal to or below the dew point of the air. This phenomenon creates problems that are not unique with metal buildings; these problems are common to all types of construction.

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)



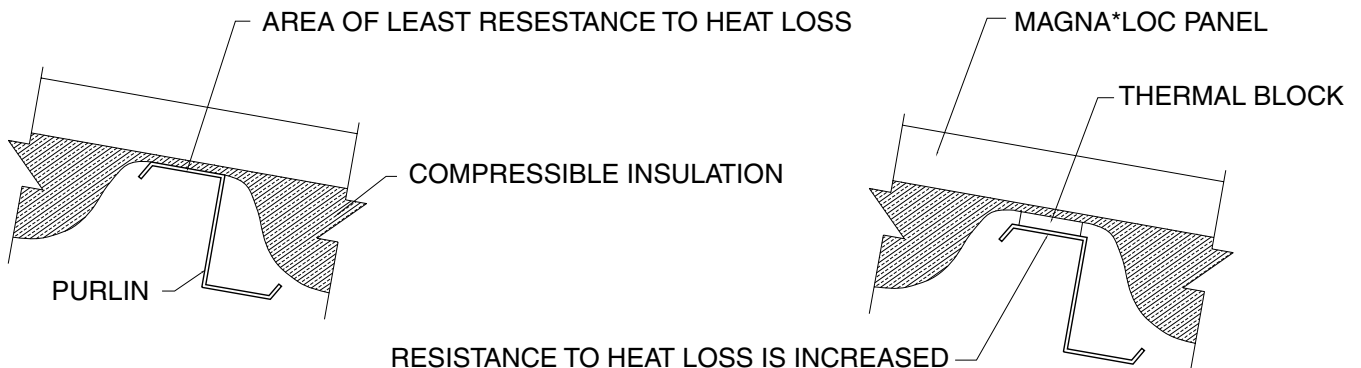
BUILDING WITH ATTIC OR RETROFITTED

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.

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.

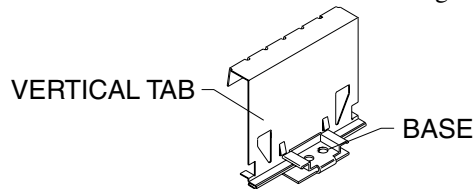
SELECTION OF SYSTEM COMPONENTS

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).

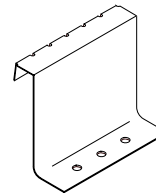
SYSTEM COMPONENTS					
SYSTEM	CLIP	EAVE PLATE	RAKE ZEE	THERMAL BLOCK	INSULATION
UTILITY	2 ¹ / ₈ " UTILITY (FIXED ONLY)	NONE REQUIRED	2 ¹ / ₈ " UTILITY	NONE REQUIRED	1/2" TO 4" BLANKET
LOW	2 ³ / ₈ " LOW (FLOATING OR FIXED)	3/8" LOW	2 ³ / ₈ " LOW	NONE REQUIRED	4" TO 6" BLANKET
HIGH	3 ³ / ₈ " HIGH (FLOATING)	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 fastener 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 Fastener Selection Guide page 17 for other fasteners available.)

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

* Length of Dekfast will vary depending on the total thickness of the rigid insulation and metal. (See page 17.)

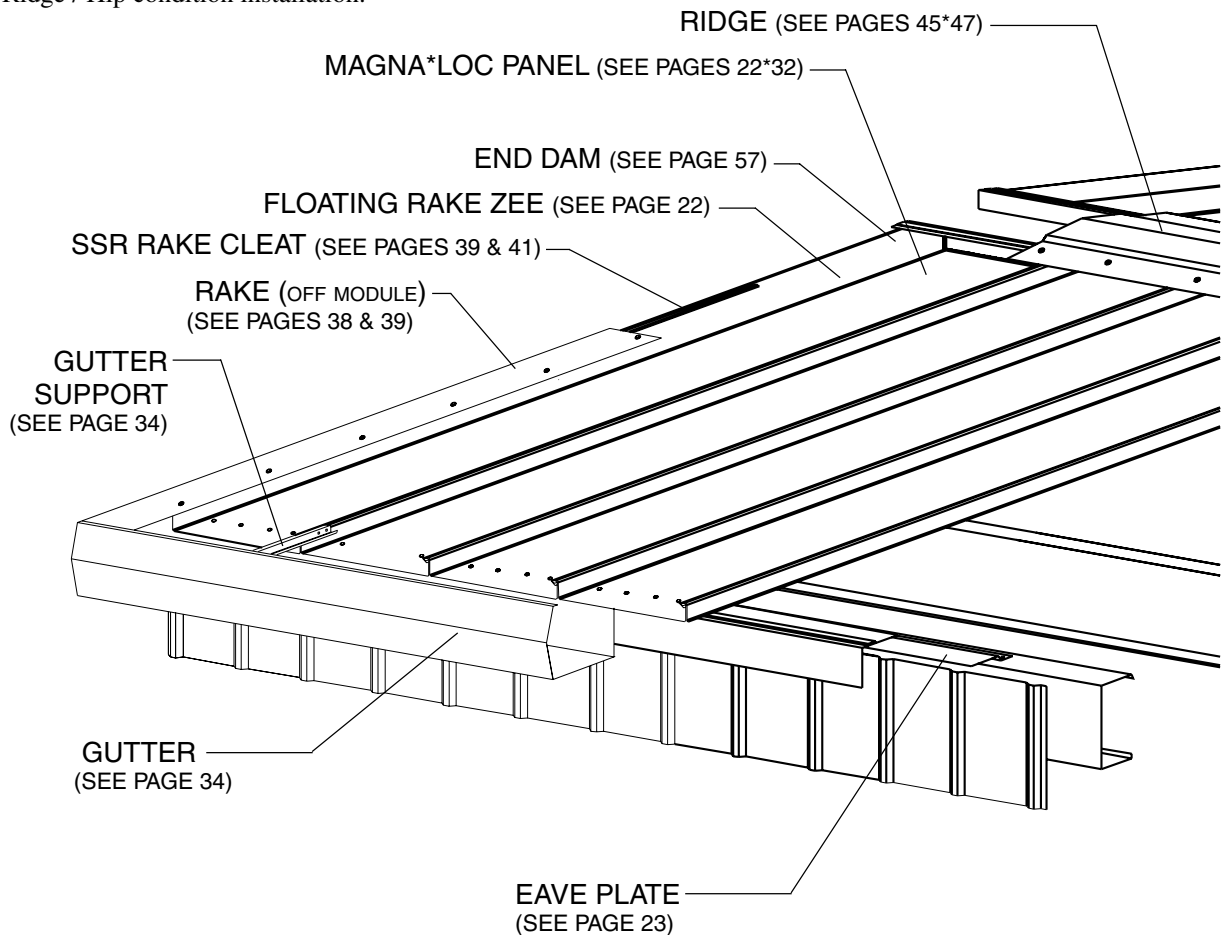
** Contact your representative for more information. (See pages 2 and 3.)

MAGNA*LOC INSTALLATION PROCEDURE OVERVIEW

The following procedures (pages 22-47) are presented as a general guide for installing Magna Loc panels, flashings, and accessories on a typical building or residence. Details are shown for installing Magna Loc and related flashings over solid decking and over open framing. For other applications please contact your representative.

The installation procedures will involve:

1. Installation of Floating Rake Zee.
2. Installation of Eave plate.
3. Installing panel from left to right (Looking from Eave to Peak.)
4. Panel Clip installation.
5. Endlapping of panel.
6. Sidelapping of panel.
7. Termination of panel.
8. Seaming panels.
9. Eave condition installation.
10. Gutter condition installation.
11. Valley condition installation.
12. Endlap condition installation.
13. Rake condition installation.
14. Rakewall condition installation.
15. Expansion Joint condition installation.
16. Endwall condition installation.
17. High Side Eave condition installation.
18. Ridge / Hip condition installation.



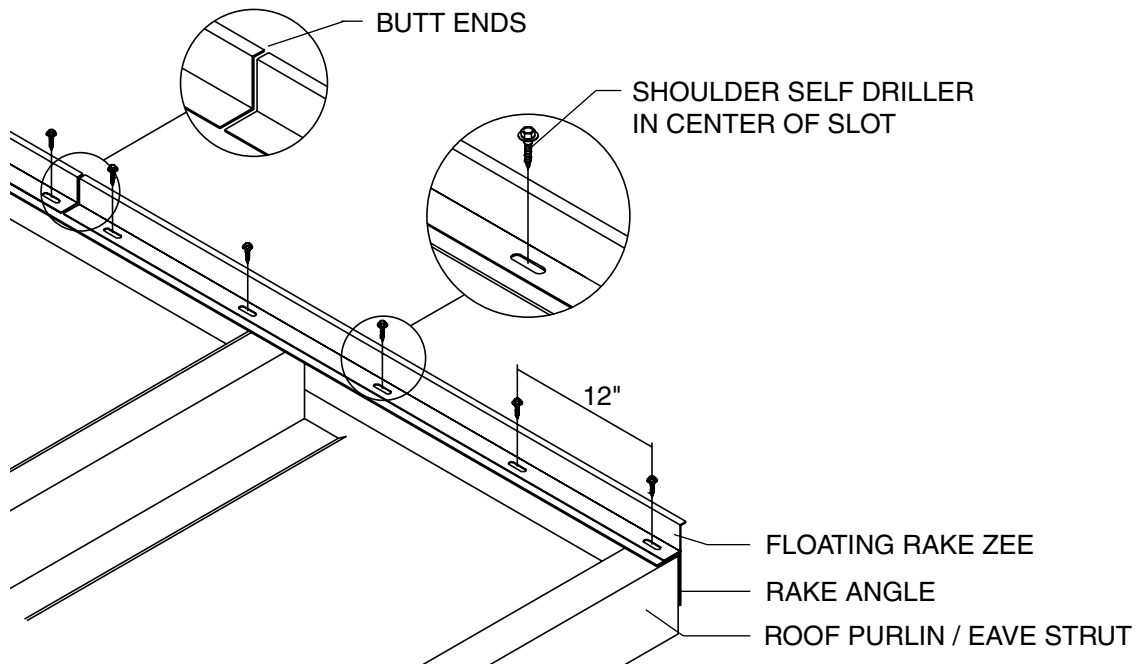
INSTALLING FLOATING RAKE ZEE

STEP 1

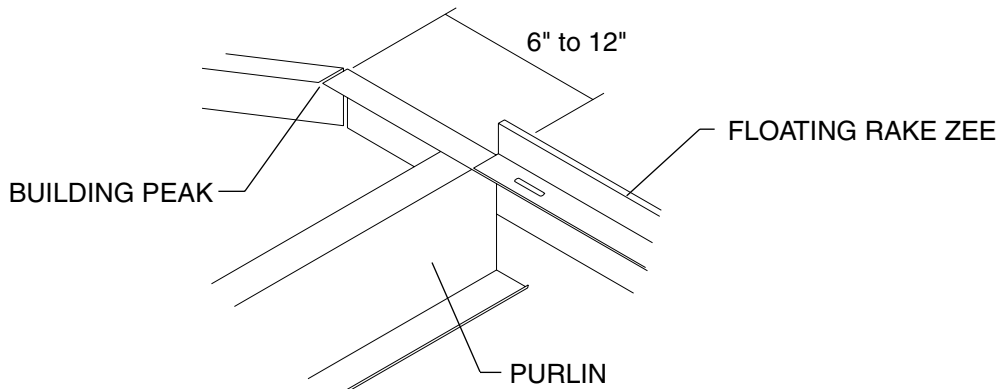
Note: The Floating Rake Zee must be attached to the framing member along the rake. Size of Floating Rake Zee can vary, (see System Components list on page 20). The following procedures are based on systems utilizing floating panel clips. For systems utilizing fixed panel clips, the Floating Rake Zee is not required to move along its slotted base, (see step 2).

Steps:

1. Starting on the left or right hand side, at the eave of the building (looking eave to peak), align the Floating Rake Zee flush with the existing rake angle/framing. **It is critical that the Floating Rake Zee be straight and square with the building as it controls the alignment of the roof panels.**
2. Fasten Floating Rake Zee with #12 14 x 1¼" Shoulder Self Driller screws into the center of each slot, (12" intervals). **Do not overtighten screws. Movement of the Floating Rake Zees are imperative for proper installation of the roof system.**



3. If two or more Floating Rake Zees are required, butt ends of Floating Rake Zees (**Do not overlap**) and continue fastening.
4. If necessary, field cut Floating Rake Zee to terminate 6" 12" from peak of building.
5. Install Floating Rake Zee on the opposite end where the panels terminate using the same procedures as above.



6. After applying Floating Rake Zees, insulation (if required) can be installed. Roll out insulation eave to peak, laying side of insulation on Floating Rake Zees.
7. Avoid side lap of insulation from occurring directly beneath side lap of panel.

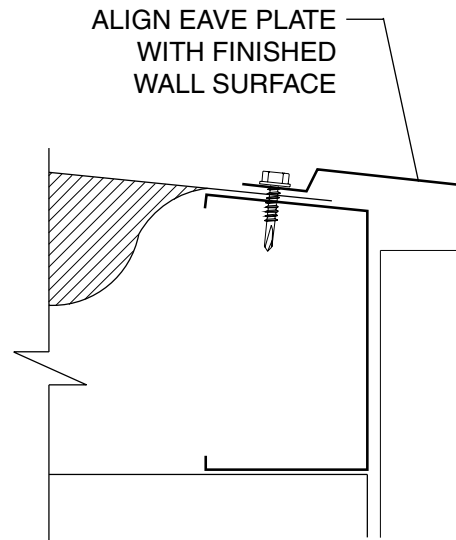
INSTALLING EAVE PLATE

STEP 2

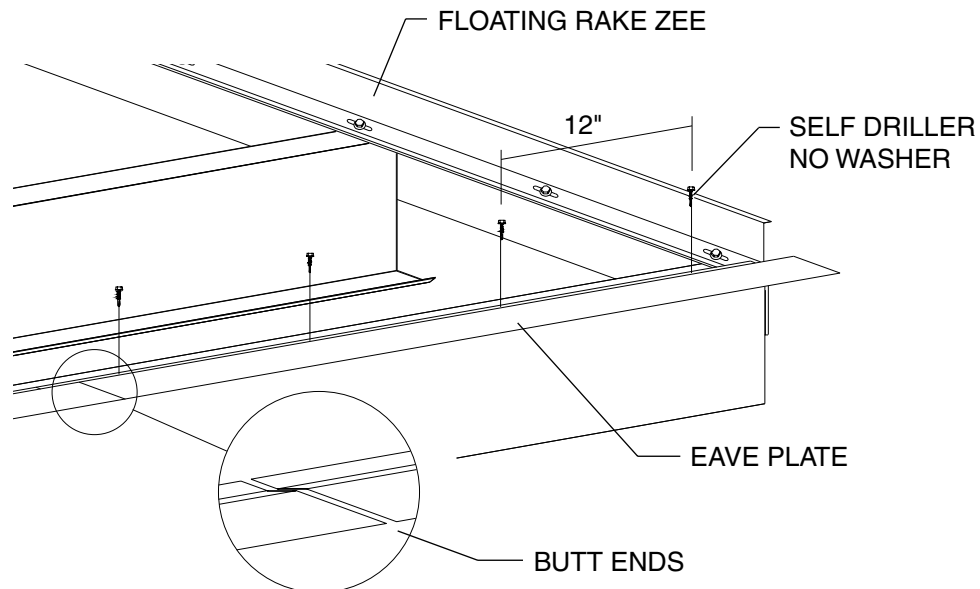
Note: The Eave Plate serves as an extension of the structure to support and fasten (if required) the panel at the eave on applications utilizing the Low or High Floating Clip Systems. Size of Eave Plate can vary, (see System Components list on page 20).

Steps:

1. If using blanket insulation, the Eave Plate may be used to secure the insulation at the eave. Be sure to remove the fiberglass and fasten only the vapor barrier to avoid wicking.
2. Place pre-punched leg of Eave Plate on top of eave framing member. Align the top leg of the Eave Plate flush with the finished wall surface at the eave of the building.



3. Fasten Eave Plate to eave framing member with #12 14 x 1" or #12 14 x 1/4" Self Driller No Washer screws 12" o.c. **Do not fasten through Eave Plate into Floating Rake Zee. Movement of the Floating Rake Zee is imperative for proper installation of roof system.**
4. If two or more Eave Plates are required, butt ends of the Eave Plates (**Do Not Overlap**) and continue fastening.



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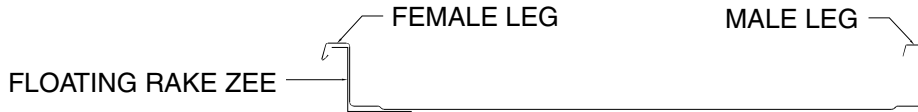
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MAGNA*LOC INSTALLATION OF PANEL (CONT.)

INSTALLING FIRST PANEL

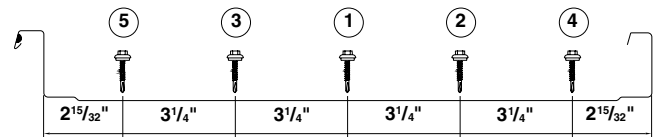
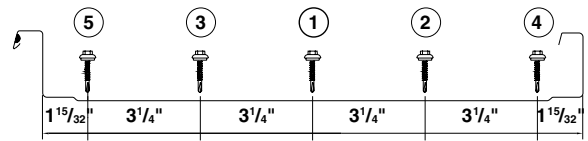
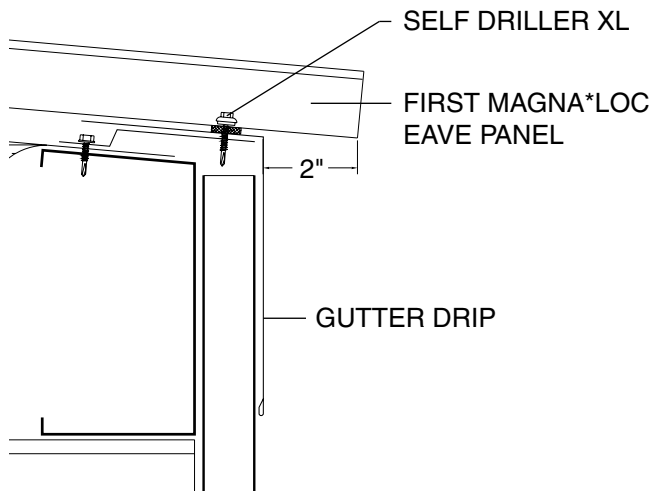
**STEP
3**

Note: Eave, Gutter Drip, Gutter, Valley, or any low side flashing must be installed prior to installation of roof panel. The following steps are for installing Magna*Loc from left to right. Magna*Loc may be installed from right to left if end lapping of panels is not required. (See page 30 for Off Module panel installation).

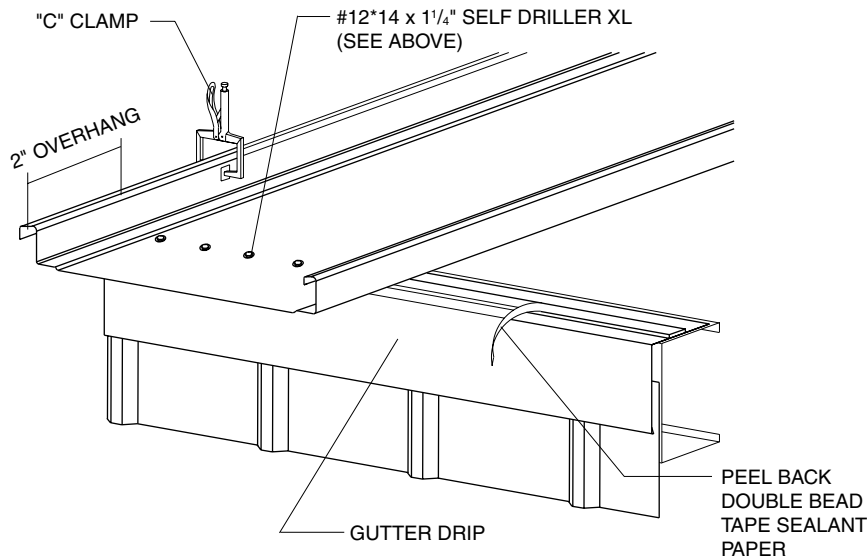


Steps:

1. Place a row of Double Bead Tape Sealant across top of Gutter Drip flashing. Be sure to place sealant where fastener will be placed.
2. Position the first panel so the female leg is on top of the Gutter Drip and the panel is against the vertical leg of the Floating Rake Zee.
3. Slide the panel over the eave flashing, 2" past finished wall surface.
4. Use a C clamp to hold the panel against the vertical leg of the Floating Rake Zee. Lift panel at the Eave Plate and strip off the paper backing on the Double Bead Tape Sealant.



5. Recheck the panel overhang dimension at Eave, Ridge, and Endlap If required, and adjust if necessary.
6. Fasten panel through the Double Bead Tape Sealant and Gutter Drip flashing into the Eave Plate using (5) #12 14 x 1 1/4" Self Driller XL screws.



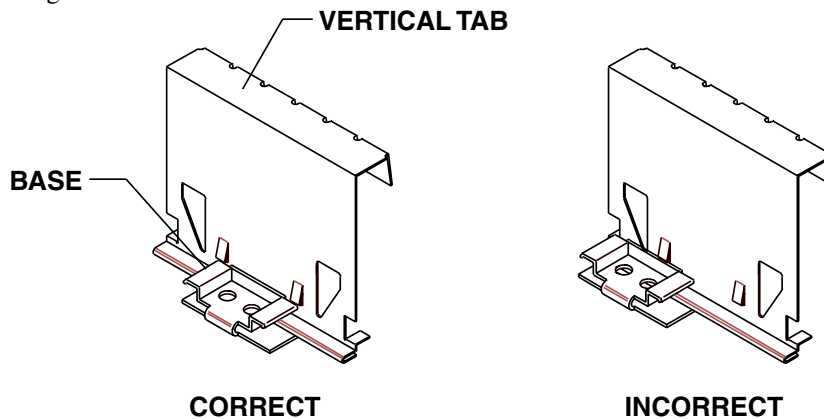
INSTALLING PANEL CLIPS

STEP 4

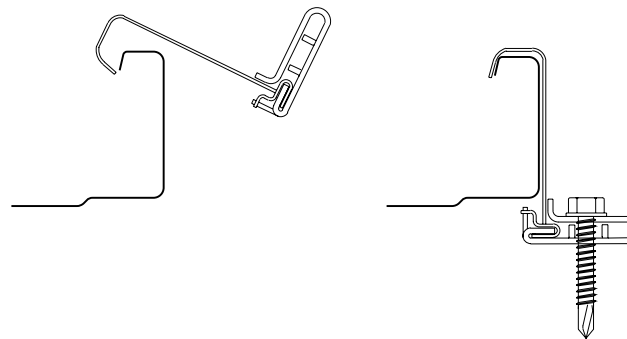
Note: The following procedures are based on installing panel clips over steel purlins. For fastening clips to a substructure other than steel, (see page 20). Design wind uplift requirements and insulation thickness must be considered for proper selection of clip type, size, and spacing. (See Systems Components chart on page 20.)

Steps:

1. When utilizing a floating clip system, the base of the clip must be aligned with the centering tab.
2. Place the panel clip over the male leg of panel and center the base of the clip with the center of the top flange of the purlin.
3. Rotate the clip to a vertical position so that the base of the clip rests on the top flange of the purlin.
4. Fasten clip to purlin with (2) #1/4 14 x 1 1/2" Self Driller No Washer screws. Screws must be torqued enough to pull floating base down out of centering tabs.



Refer to the chart for determination of the proper clip size. Correct clip size must be used for panel system to function properly.



ROTATE CLIP OVER MALE LEG OF PANEL

5. Clips should be installed at all purlin intersections. **Panel clips are not required at eave framing members.**
6. After installing clips along the male leg of the panel, measure across the pan of the panel to confirm panel modularity.
7. If installing over insulation, some method of finding the purlins for clip location must be used. Insulation should be installed as panels are installed allowing for ease of locating purlins.

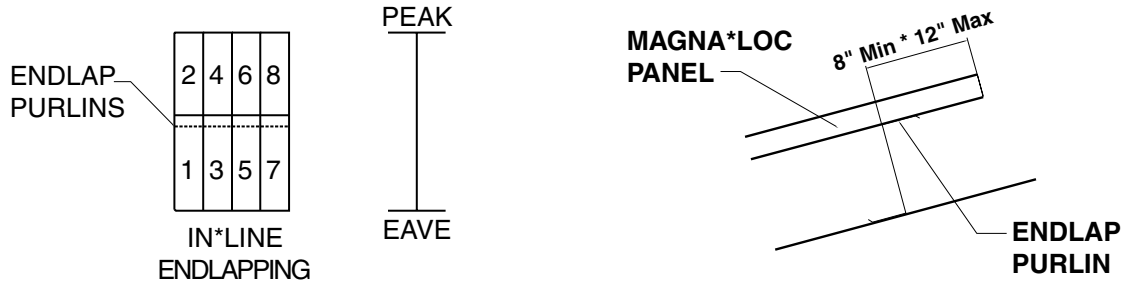
CAUTION

If a fastener strips out, you must remove the clip and reposition so the fastener can drill a new hole at least $\frac{3}{8}$ " from the stripped hole or install an oversized fastener in the stripped hole. Failure to do this will result in weakening the roof wind uplift resistance.

ENDLAPPING OF PANEL

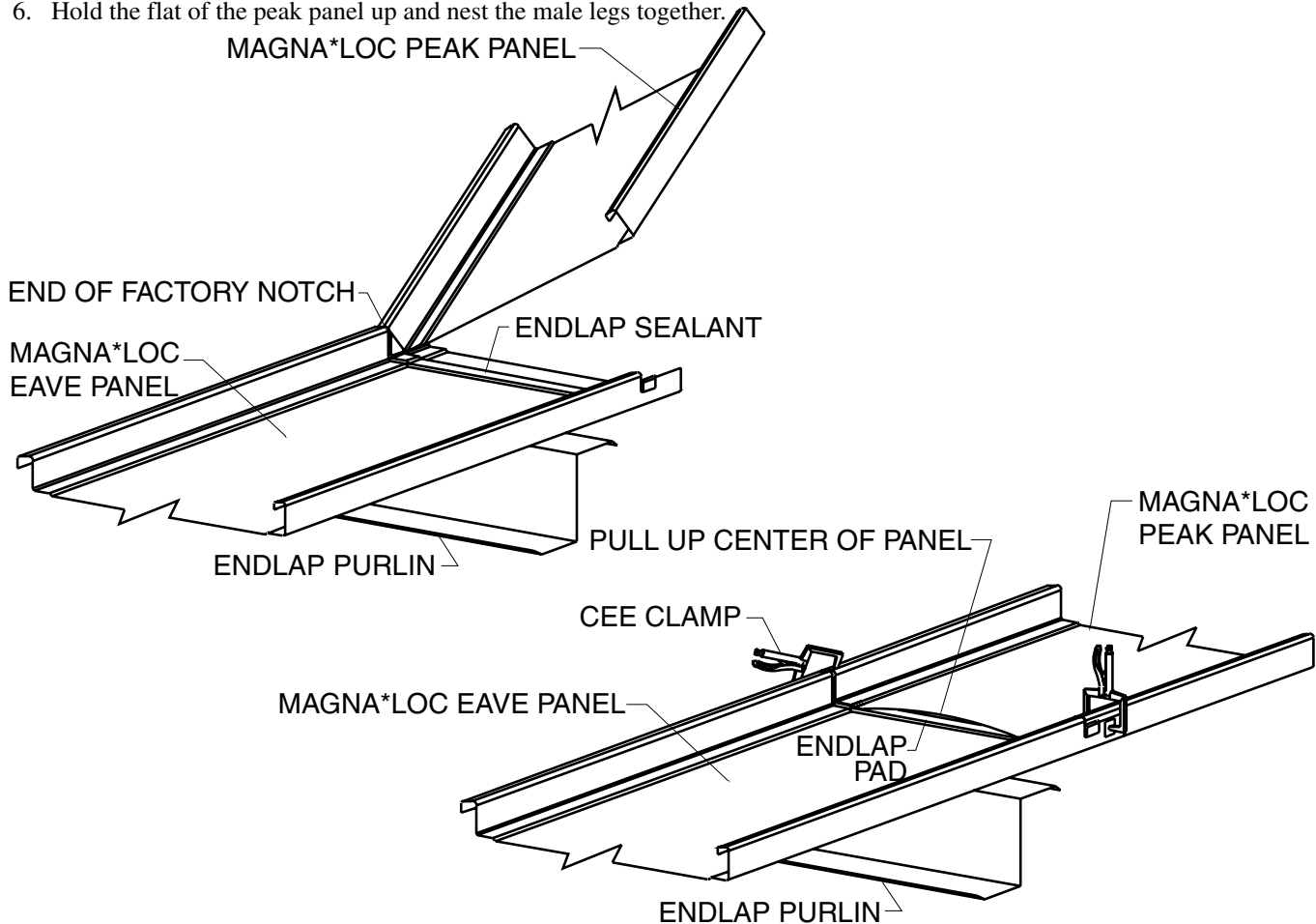
STEP 5

Note: It is critical that purlins at the ridge and endlap be exactly located as detailed on erection drawings in order for panels to have adequate movement due to thermal expansion and contraction. Panels with endlaps must be fixed at the eave and endlap splices are to be installed inline along the same purlin. The following procedures also apply to panel runs with multiple laps.



Steps:

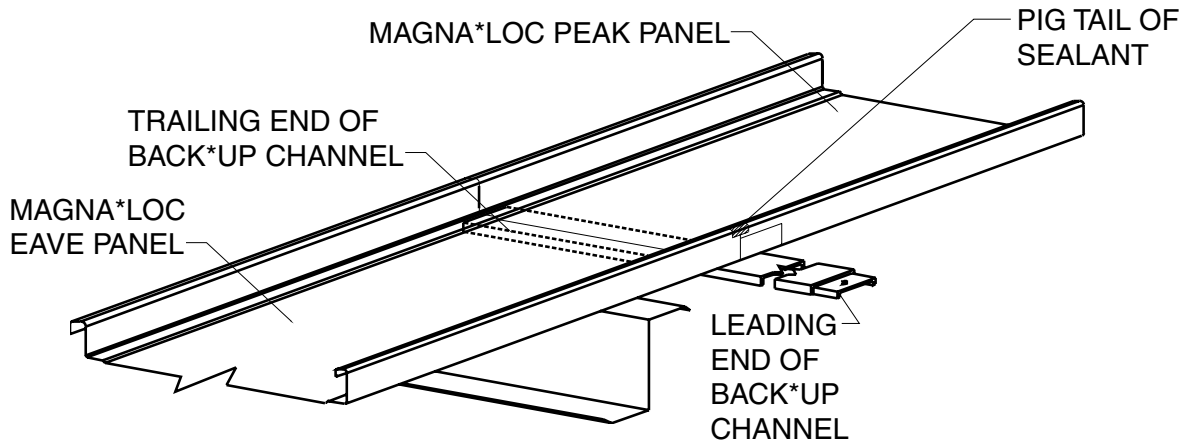
1. The eave panel when installed should measure 8" to 12" max from the web of the endlap purlin to the end of the eave panel. This dimension must be verified. If the panel extends past the web of the endlap purlin by more than 12" or less than 8", verify that the eave overhang dimension is correct.
2. The male and female legs of the high end of the eave panel are factory notched 2" to allow the peak panel to nest inside the eave panel.
3. Slide Back up Channel under panel in center of endlap and cee clamp to panel to hold in place for attachment.
4. Apply Endlap Pad on the notched end of the eave panel down male leg, across panel flat, and up the female leg 1/2" to 3/4" from the end of the panel.
5. Lap the female leg of the peak panel into the female leg of the eave panel lapping the proper 2".
6. Hold the flat of the peak panel up and nest the male legs together.



MAGNA*LOC INSTALLATION OF PANEL (CONT.)

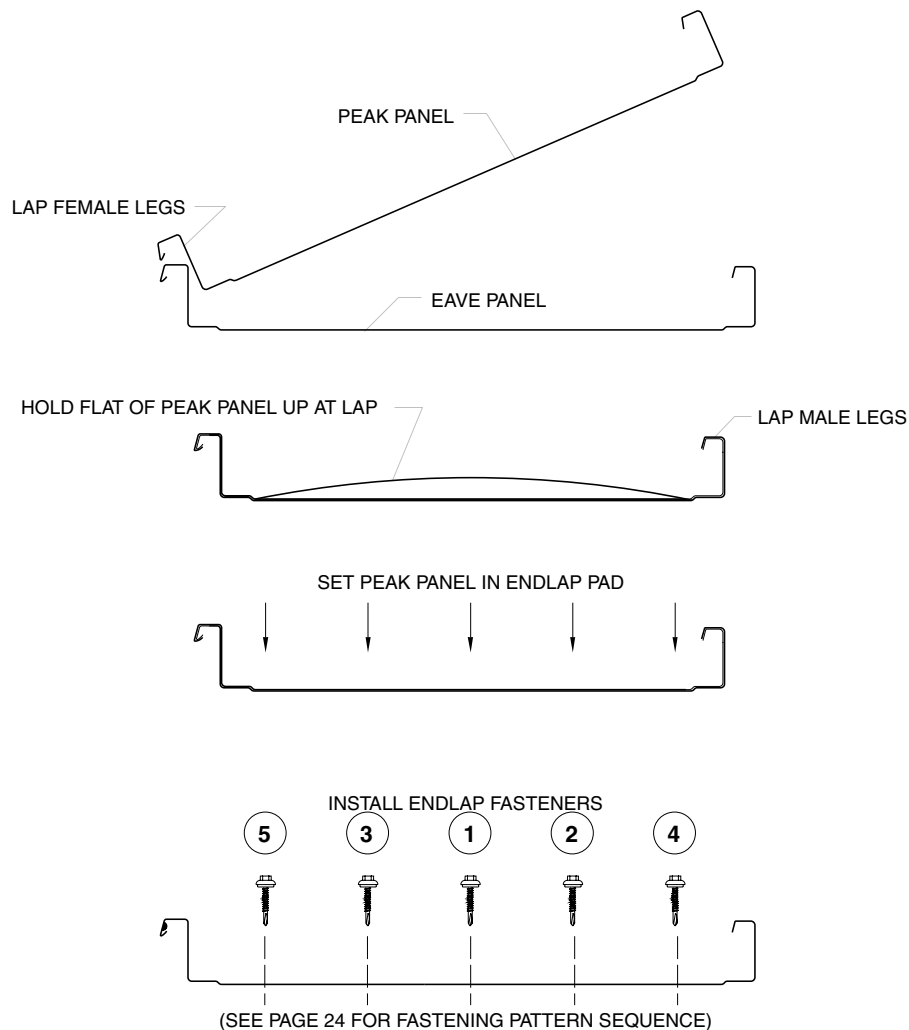
ENDLAPPING OF PANEL (CONT.)

7. Nest the flat of the peak panel into the eave panel.
8. Apply a pig tail of Endlap Pad on the top side of the male leg where panel notch occurs.



9. Install five (5) #12 14 x 1/4" Self Driller Screws XL where the peak panel laps over the eave panel and fasten in accordance with fastening pattern sequence shown below.
10. Repeat previous steps for subsequent endlaps.

ENDLAPPING SEQUENCE OVERVIEW



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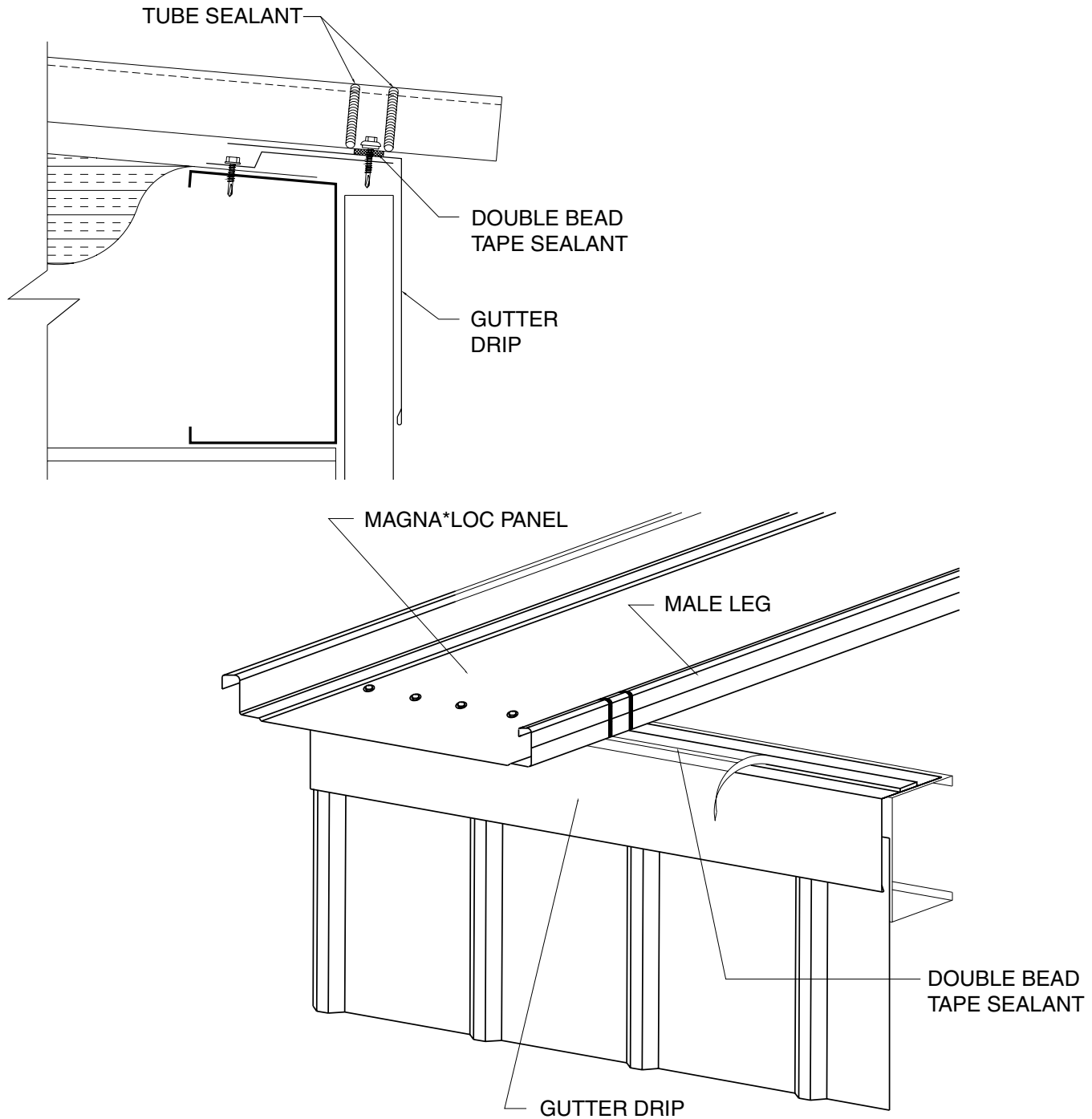
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SIDELAPPING OF PANEL**STEP
6**

Note: It is critical that sealants be properly placed to prevent moisture leakage.

Steps:

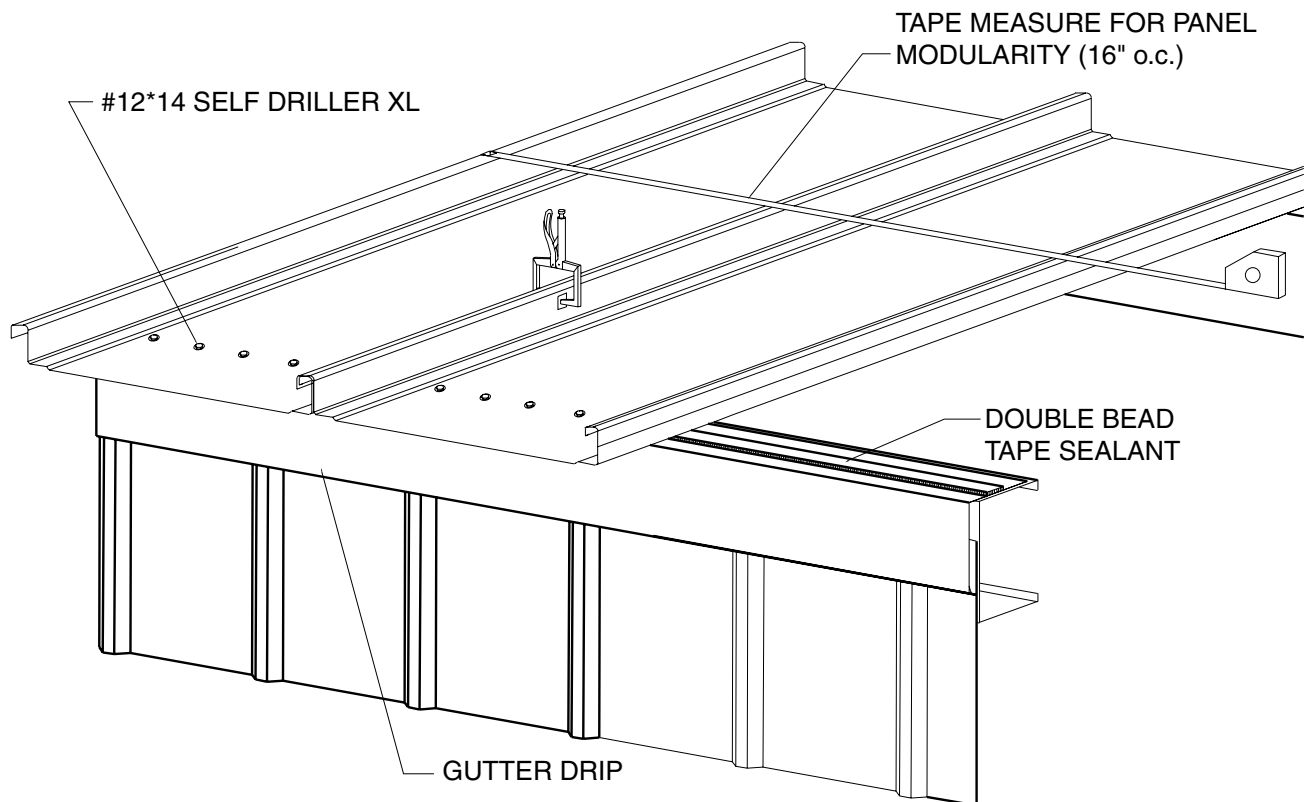
1. Apply two $\frac{3}{8}$ " beads of Tube Sealant along the vertical male leg of the panel and across the horizontal portion of the top side of the male leg directly over the Double Bead Tape Sealant on the eave flashing. Be sure the Tube Sealant joins with the Double Bead Tape Sealant.
2. Peel back the paper backing covering the Double Bead Tape Sealant at the eave flashing previously installed.



MAGNA*LOC INSTALLATION OF PANEL (CONT.)

SIDELAPPING OF PANEL (CONT.)

3. Roll the female leg of the second panel into place over the male leg of the first panel so their ends are flush. Do not let the flat of the second panel touch the Double Bead Tape Sealant at the eave until the ends are flush.
4. Use Cee Clamps to hold the two vertical legs of the panel seams together.
5. Install five (5) #12 14 x 1/4" Self Driller XL screws through the panel, tape sealant, eave flashing, and into Eave Plate using the fastening sequence previously shown.



6. Measure the distance from the female leg of the first panel installed. This dimension should be and even multiple of 16" 1/4" for every four panels. It is very important that the dimension from the start panel to the last male leg, at the eave and peak, be the same dimension within a 1/4" of each other.
7. Make certain that all clips are properly installed and that the panel sidelaps are properly positioned to be seamed. Use the hand crimper to crimp the panel seam at the eave and ridge ends only. This will adequately hold panels in place until fully seamed. Do not hand crimp the panel seam or panel clip at any other locations. Doing so will not allow proper function of electric seamer.

CAUTION

Hand crimping will not fasten the panels together tightly enough to withstand normal wind uplift forces. Be sure to seam all panels as soon as possible. (See seaming panels on pages 31 and 32 for proper seaming instructions.)

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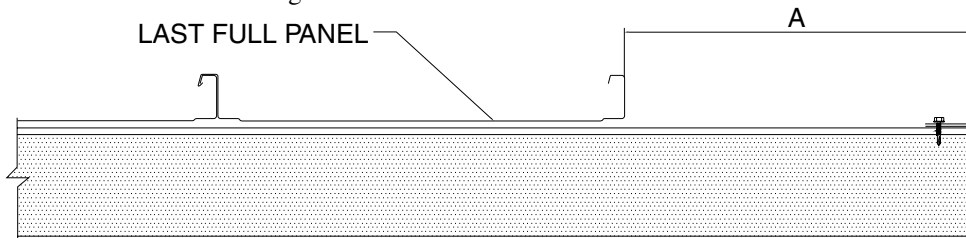
TERMINATION OF PANEL

STEP 7

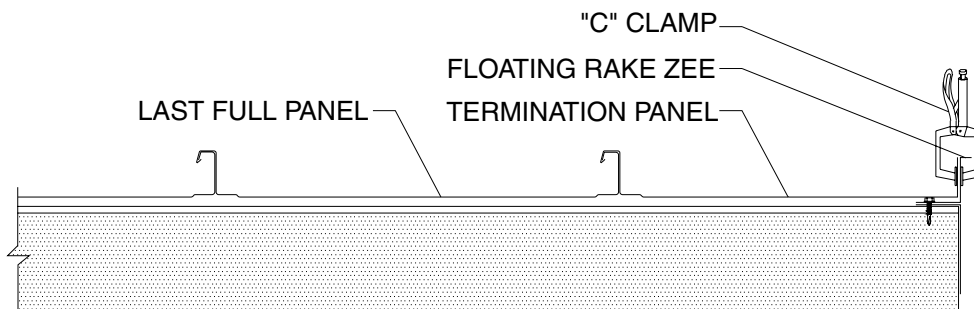
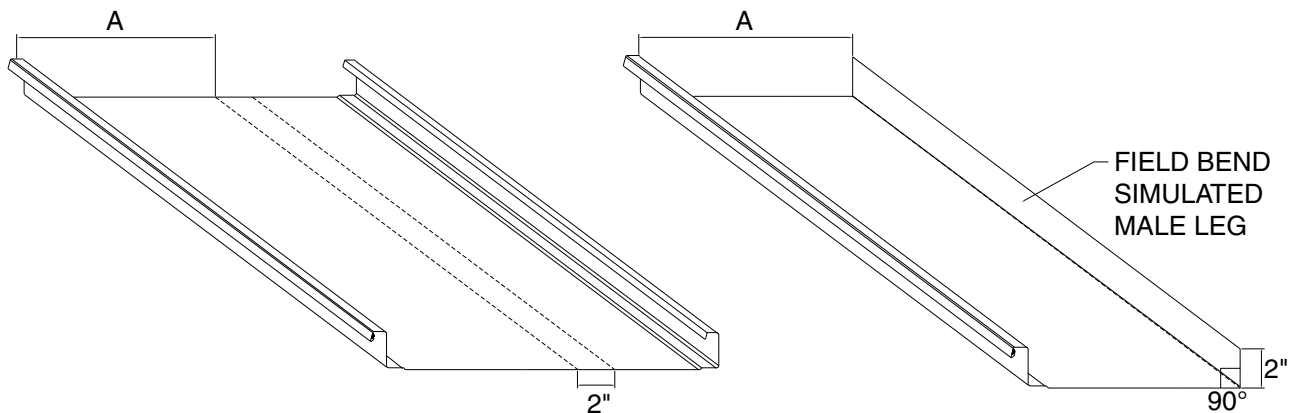
Note: The following steps are for terminating a panel run when the pan width exceeds the width of the building.

Steps:

1. When the roof panel installation has reached the opposite end of the roof, the last panel run may need to be field modified to attach to the Floating Rake Zee previously installed.
2. Measure the distance between the vertical leg of the last full panel run and the vertical leg of the Floating Rake Zee at the eave, endlap, and peak. See dimension "A".
3. Determine if a full panel will fit between the last full run and the Floating Rake Zee. In most cases it will not fit. If the full panel will fit, then continue with the installation of the roof. When the last panel is installed the vertical leg of the male side must fit flush with the Floating Rake Zee.



4. If a full panel is too wide to fit between the last full panel run and the Floating Rake Zee, a panel will have to be field cut and bent to simulate a male leg.
5. Use the dimension "A" and mark a line on the last panel to serve as the bend line. Mark a second line 2" past the bend line to be the line you will cut off the excess panel.
6. Field bend the roof panel up 90 degrees to form a vertical leg.
7. Place termination panel between last full panel and vertical leg of Floating Rake Zee making sure the panel fits properly.
8. Clamp termination panel to leg of Floating Rake Zee until Rake Detail is to be installed. (See page 39 for details.)

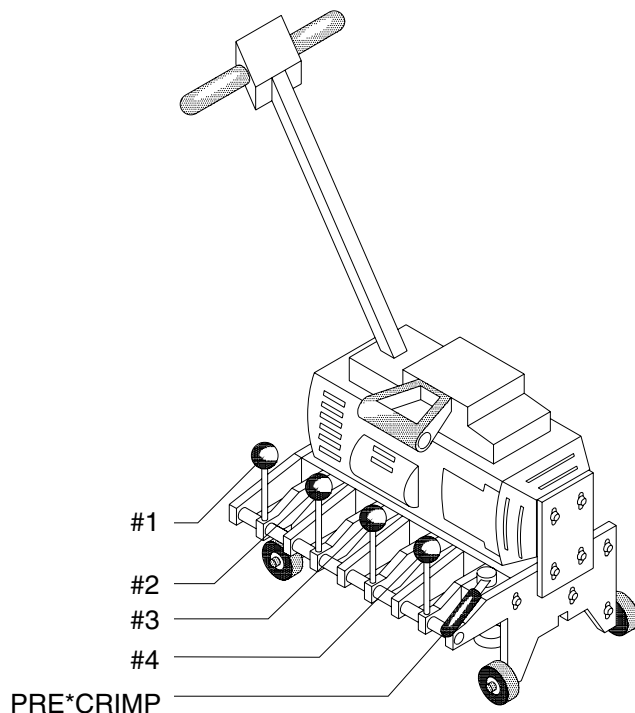


SEAMING PANELS

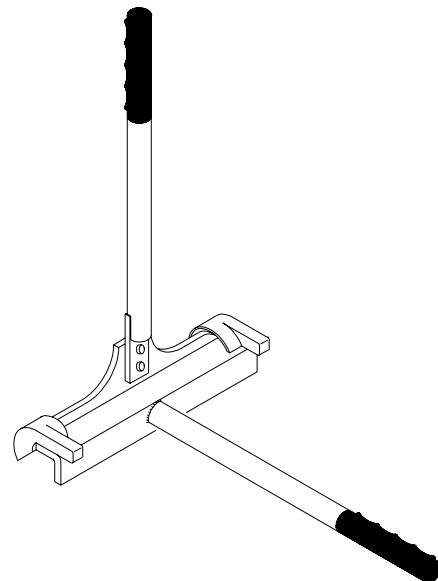
STEP 8

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. 8265 Highway 178 Olive Branch, MS 38654. Phone No. (662) 895 1222, Fax No. (662) 890 4775.
- 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. We 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 handcrimped 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 roof is 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

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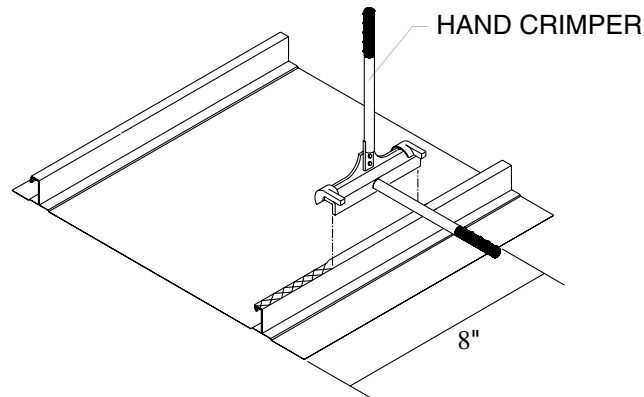
MAGNA*LOC INSTALLATION OF PANEL (CONT.)

SEAMING PANELS (CONT.)

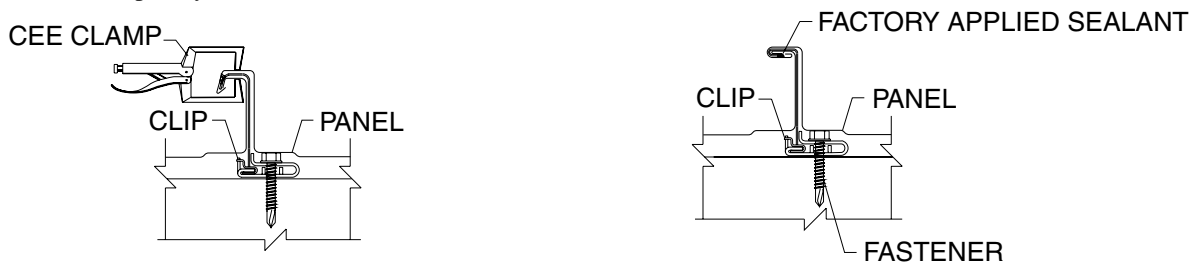
Note: When panels are installed from left to right, electric seamer operates from ridge to eave.

Steps:

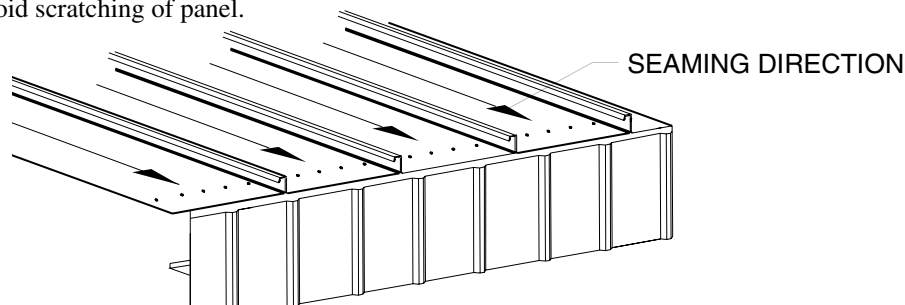
1. To start seaming, hand crimp first 8" of seam at eave, endlap, and ridge locations only. **Do not hand crimp at clip locations.**



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.

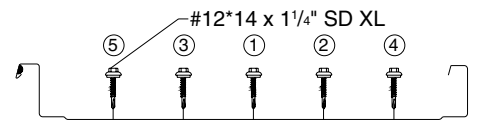
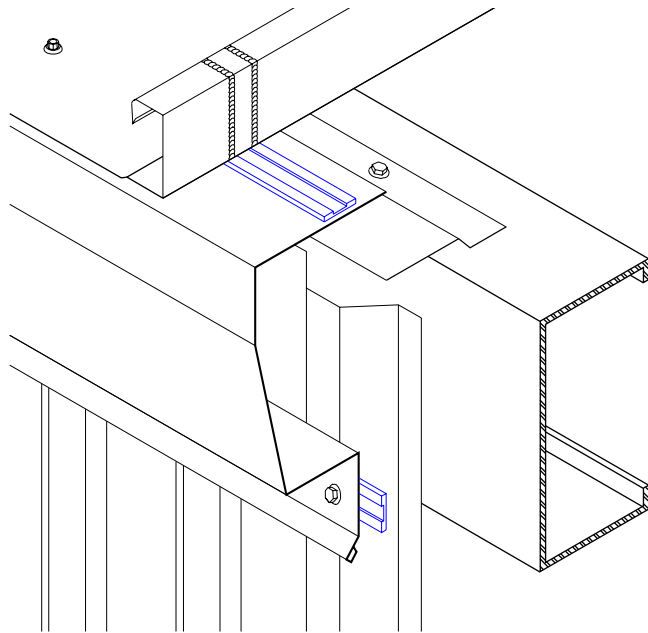
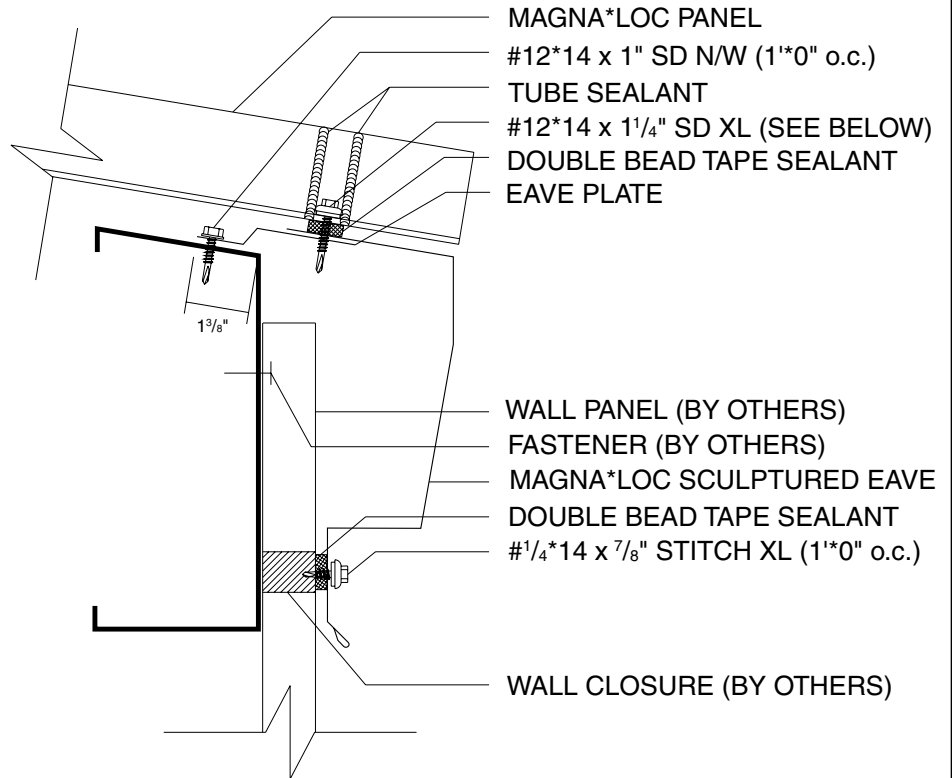


4. Prior to running seamer, check to make sure that Magna Loc panels are fully engaged along the entire run of the panel. Small c clamps may be required on the horizontal portion of the seam to hold panel seam engaged while seaming.
5. Turn on the power to seamer and walk with the seamer as it seams 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 endlapped, 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.)

**1/2:12 SLOPE
MINIMUM**



FASTENING PATTERN

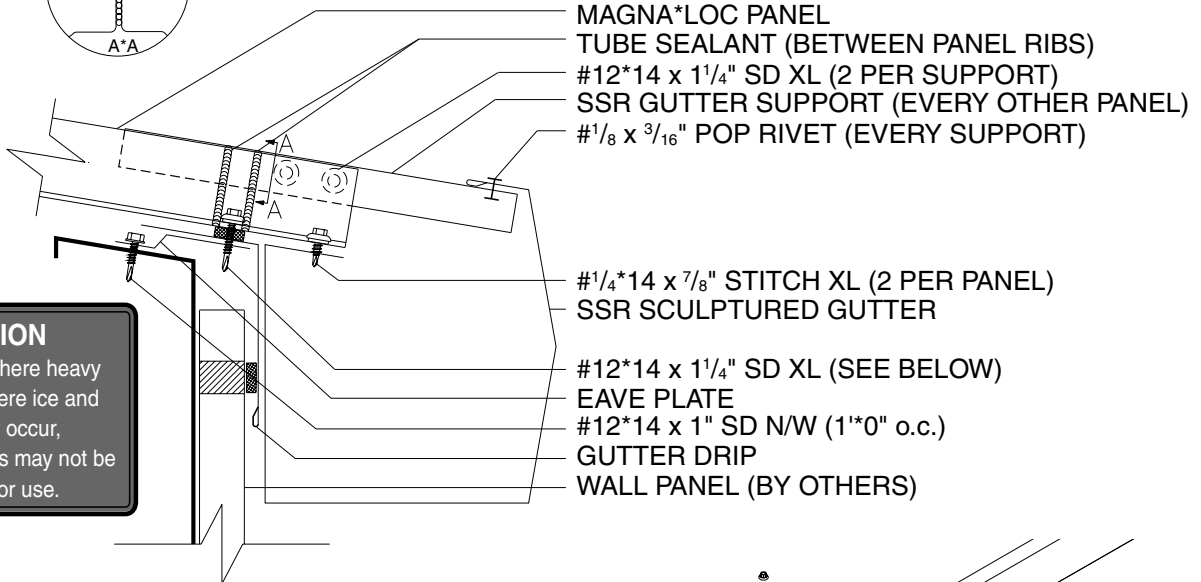
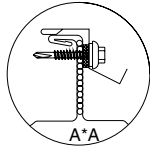
INSTALLATION NOTES

All Eave flashings must be installed prior to panel installation.

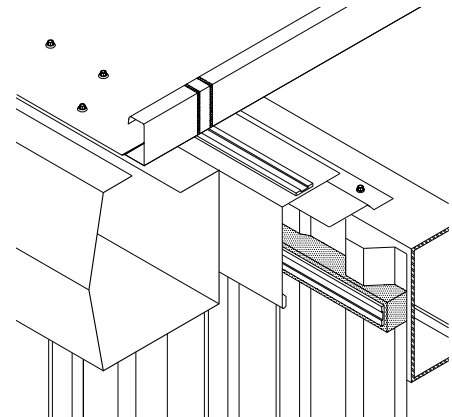
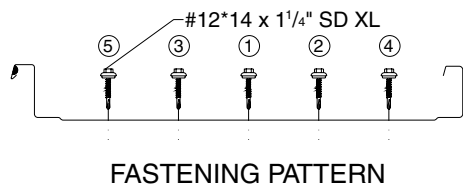
1. Install Sculptured Eave back against previously installed Eave Plate, (see page 23 for Eave Plate installation). To hold Sculptured Eave in place fasten to substrate with #10 16 x 1" Pancake Head fastener, 4' 0" o.c.
2. Fasten Sculptured Eave to wall with appropriate fastener, 12" o.c.
3. Apply a row of Double Bead Tape Sealant across Sculptured Eave so that sealant is centered over top leg of Eave Plate.
4. If two or more flashings are required, lap the flashing over the previously installed flashing by a minimum of 2" placing a bead of Tube Sealant between the flashings and securing with Pop Rivets, 2.5" o.c.
5. Once panels have been installed and properly sealed, (See page 24), fasten through panel, Double Bead Tape Sealant, and Sculptured Eave into Eave Plate with (5) #12 14 x 1 1/4" Self Driller XL screws per panel.

MAGNA*LOC SCULPTURED GUTTER OVER OPEN FRAMING

**1/2:12 SLOPE
MINIMUM**



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



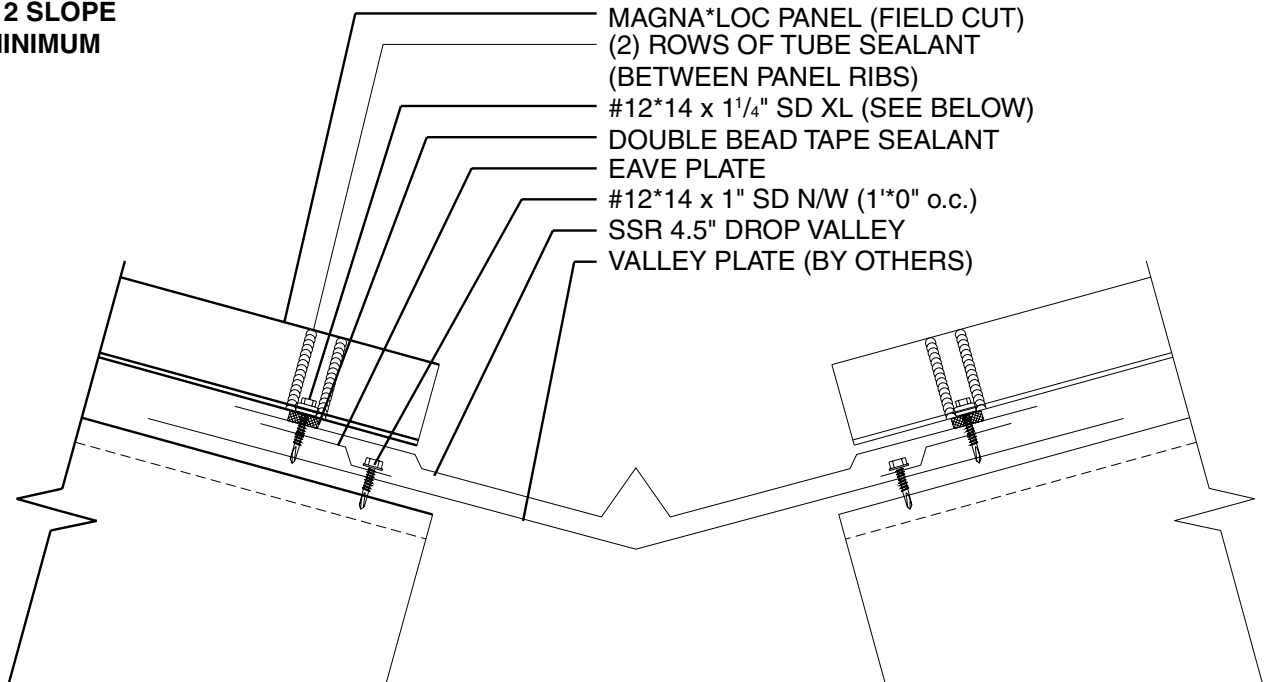
INSTALLATION NOTES

Gutter Drip Flashings must be installed prior to panel installation.

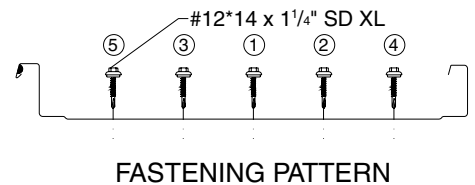
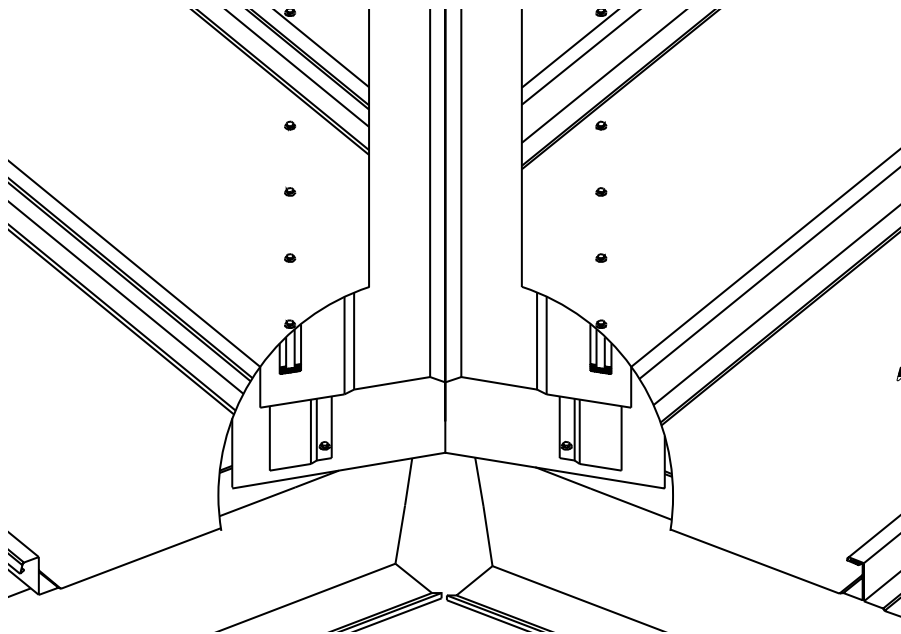
1. Install Gutter Drip back against previously installed Eave Plate, (see page 23 for Eave Plate installation). To hold Gutter Drip in place fasten to substrate with #10 16 x 1" Pancake Head fastener, 4' 0" o.c.
2. Apply a row of Double Bead Tape Sealant across Gutter Drip so that sealant is centered over top leg of Eave Plate.
3. If two or more flashings are required, lap the flashing over the previously installed flashing by a minimum of 2" placing a bead of Tube Sealant between the flashings and securing with Pop Rivets, 2.5" o.c.
4. Once panels have been installed and properly sealed, (see page 24), fasten through panel, Double Bead Tape Sealant, and Gutter Drip into Eave Plate with (5) #12 14 x 1 1/4" Self Driller XL screws per panel.
5. Attach the SSR Gutter Support to the panel rib every other panel (32" or 36" o.c.) with (2) #12 14 x 1 1/4" Self Driller XL screws. Fasteners must be applied down slope of the sealant line. Do not apply screws up slope of the sealant line. The SSR Gutter Supports can be adjusted in or out to allow the gutter to be installed in a straight line, even if the edge of the roof is not straight.
6. Prepare the first gutter section with a Sculptured Gutter End. Consider rake to gutter connection for proper placement of Sculptured Gutter End and the gutter flashing. Fasten with (8) #1/4 14 x 7/8" Stitch XL screws or Pop Rivets.
7. Position the gutter over the SSR Gutter Supports with one end against the Rake flashing and rotate gutter into position.
8. Clamp the top of the back lip of the gutter in position with a C clamp. Install a #1/4 14 x 7/8" Stitch XL screw or Pop Rivet where the front lip of the gutter rests on the SSR Gutter Support, and fasten the back lip of the gutter to the panel flat with (2) #1/4 14 x 7/8" Stitch XL screw per panel.
9. Field miter the rake trim to fit the gutter contour at the corner of the building or install a SSR Sculptured Corner Box.
10. If two or more flashings are required, lap the flashing over the previously installed flashing by a minimum of 2" placing a bead of Tube Sealant between the flashings and securing with #1/4 14 x 7/8" Stitch XL screws or Pop Rivets, 2.5" o.c.

MAGNA*LOC 4.5" DROP VALLEY OVER OPEN FRAMING

**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)



INSTALLATION NOTES

All Valley flashings must be installed prior to panel installation. If two or more Valley flashings are required, valley must be installed working from eave to peak. It is recommended that ice and water shield be installed under Valley flashing for added moisture protection.

1. Install Drop Valley flashing back against previously installed Eave Plates. To hold Sculptured Eave in place fasten to substrate with #10 16 x 1" Pancake Head fastener, 4' 0" o.c. into top leg of Eave Plate.
2. Apply a row of Double Bead Tape Sealant across both sides of Drop Valley flashing so that sealant is centered over top leg of Eave Plate.
3. If two or more flashings are required, lap the flashing over the previously installed flashing by a minimum of 6" placing two beads of Tube Sealant per side between the flashings.
4. Once panels have been installed and properly sealed, (see page 24), fasten through panel, Double Bead Tape Sealant, and Drop Valley into Eave Plate with (5) #12 14 x 1 1/4" Self Driller XL screws per panel.

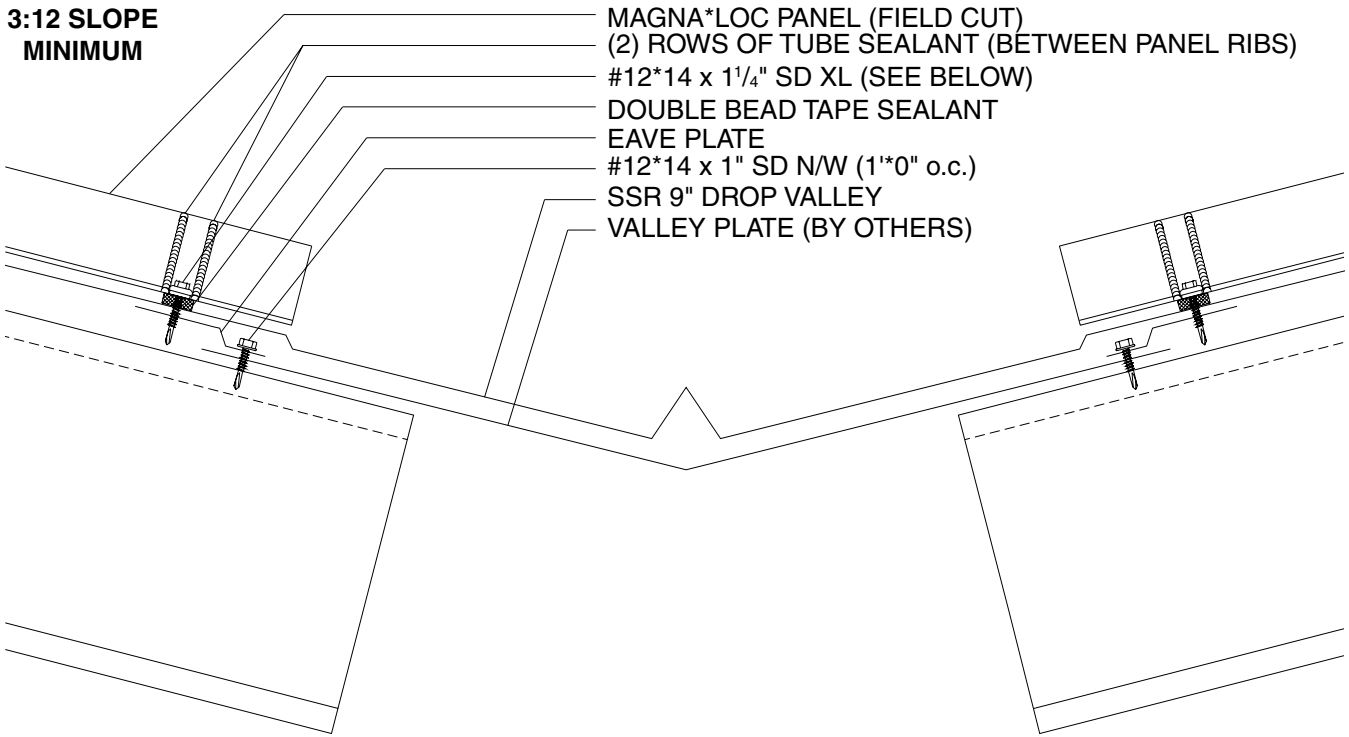
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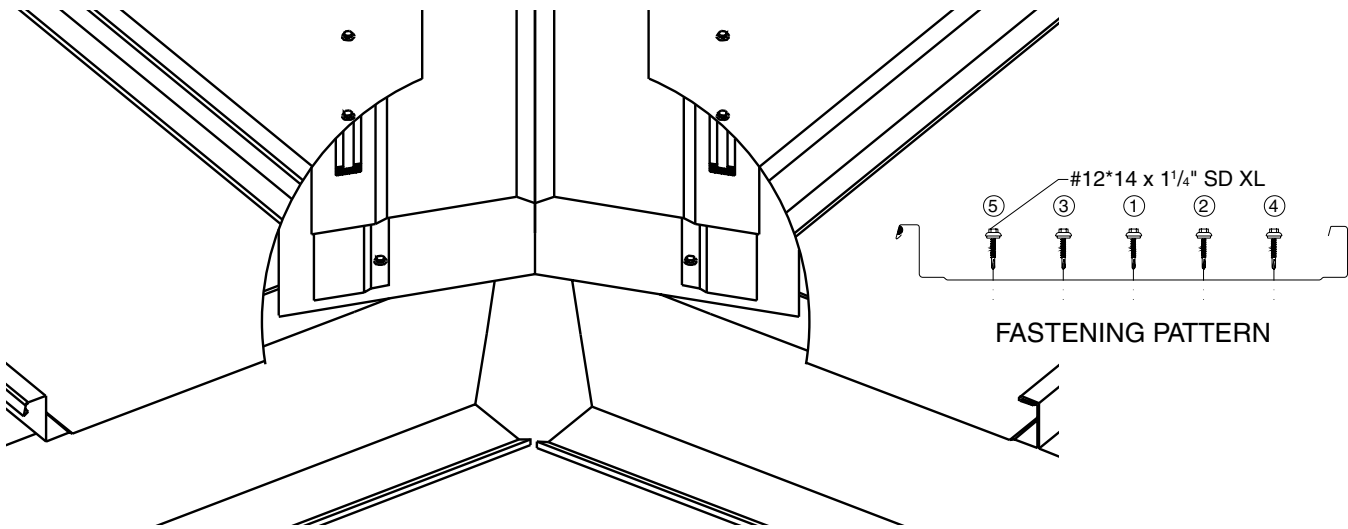
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MAGNA*LOC 9" DROP VALLEY OVER OPEN FRAMING

**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 9" DROP VALLEY
- VALLEY PLATE (BY OTHERS)



FASTENING PATTERN

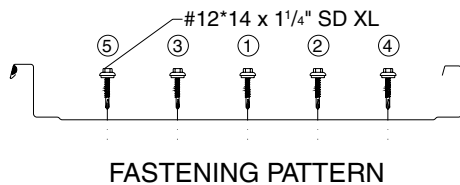
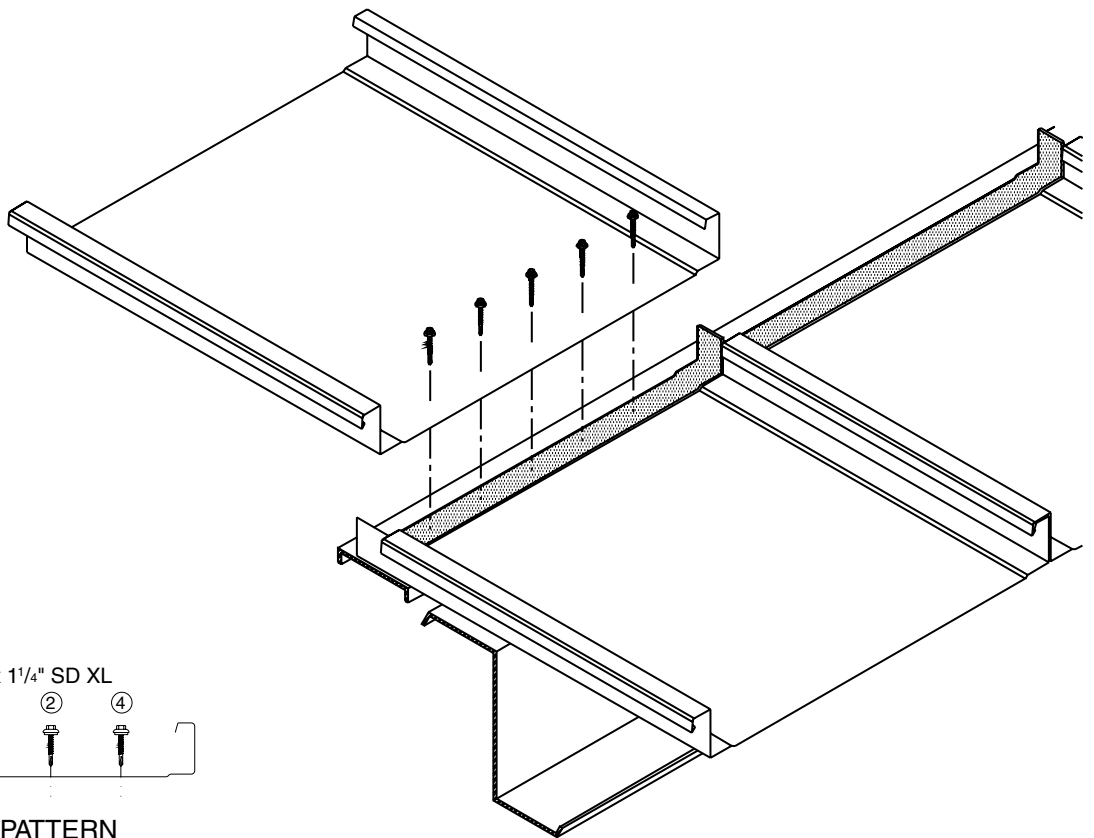
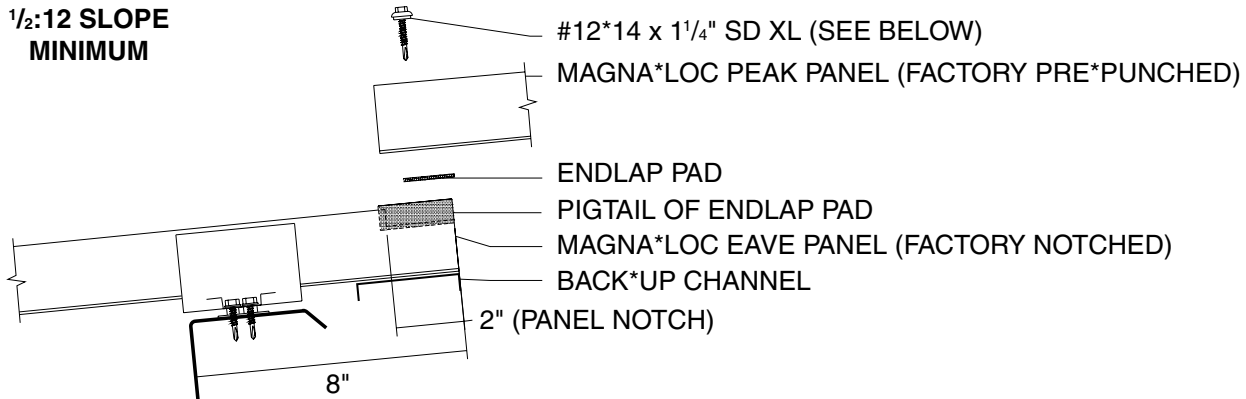
INSTALLATION NOTES

All Valley flashings must be installed prior to panel installation. If two or more Valley flashings are required, valley must be installed working from eave to peak. It is recommended that ice and water shield be installed under Valley flashing for added moisture protection.

1. Install Drop Valley flashing back against previously installed Eave Plates, (see page 23). To hold Sculptured Eave in place fasten to substrate with #10 16 x 1" Pancake Head fastener, 4' 0" o.c. into top leg of Eave Plate.
2. Apply a row of Double Bead Tape Sealant across both sides of the Drop Valley flashing so that the sealant is centered over the top leg of the Eave Plate.
3. If two or more flashings are required, lap the flashing over the previously installed flashing by a minimum of 6" placing two beads of Tube Sealant per side between the flashings.
4. Once panels have been installed and properly sealed, (see page 24), fasten through panel, Double Bead Tape Sealant, and Drop Valley into Eave Plate with (5) #12 14 x 1 1/4" Self Driller XL screws per panel.

MAGNA*LOC ENDLAP OVER OPEN FRAMING

1/2:12 SLOPE
MINIMUM



INSTALLATION NOTES

1. Once eave panel has been installed, (see page 26), slide a Back Up Channel under upper edge of panels. Back Up Channel should be flush with edge of Magna Loc eave panel. Use C clamps to hold Back Up Channel in place.
2. Apply a row of Endlap Pads across flat pans, up and over all ribs of eave panels. Endlap Pad should be flush with edge of eave panel.
3. Roll Magna Loc peak panel into place and nest with eave panel so that 2" factory notch is completely covered. (See page 26 for complete details on installing lapped panels.)
4. With peak panel in place, fasten panel endlap with (5) #12 14 x 1/4" SD XL fasteners per panel through factory punched holes and into the Back Up Channel.
5. Apply a pig tail of Endlap Pad, approximately 2 1/2", over factory notched section of male legs.

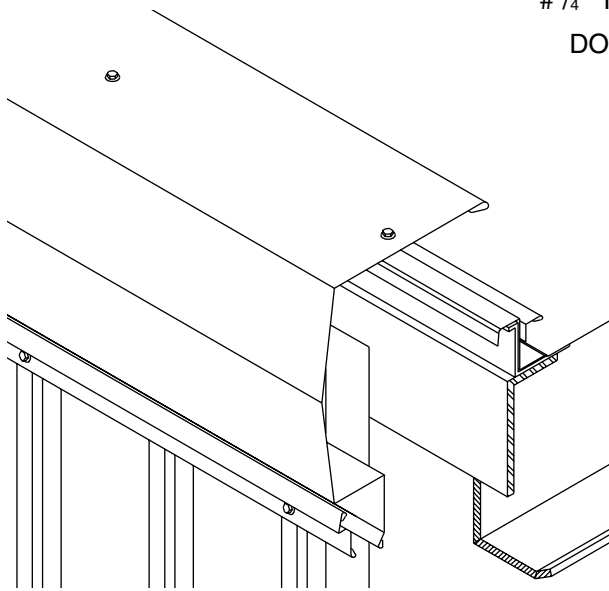
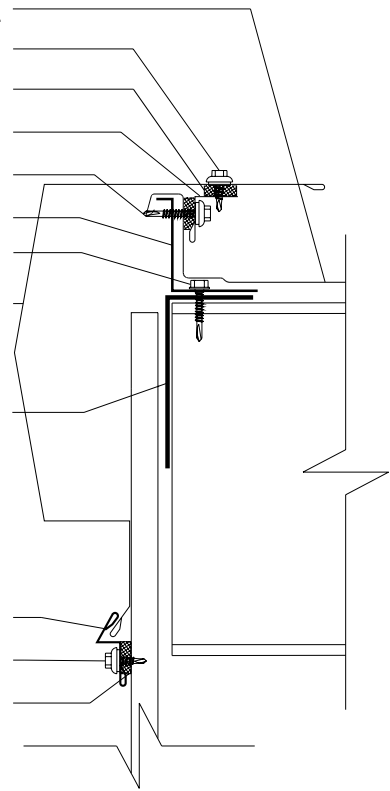
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**1/2:12 SLOPE
MINIMUM**

MAGNA*LOC PANEL
 #1/4"*14 x 7/8" STITCH XL (1'0" o.c.)
 DOUBLE BEAD TAPE SEALANT
 SSR RAKE CLEAT
 #12*14 x 1/4" SD XL (1'0" o.c.)
 FLOATING RAKE ZEE
 #12*14 x 1/4" SHOULDER SD (1'0" o.c.)
 SSR SCULPTURED RAKE (OFF MODULE)
 RAKE ANGLE (BY OTHERS)
 SSR RAKE SLIDE
 #1/4"*14 x 7/8" STITCH XL (1'0" o.c.)
 DOUBLE BEAD TAPE SEALANT

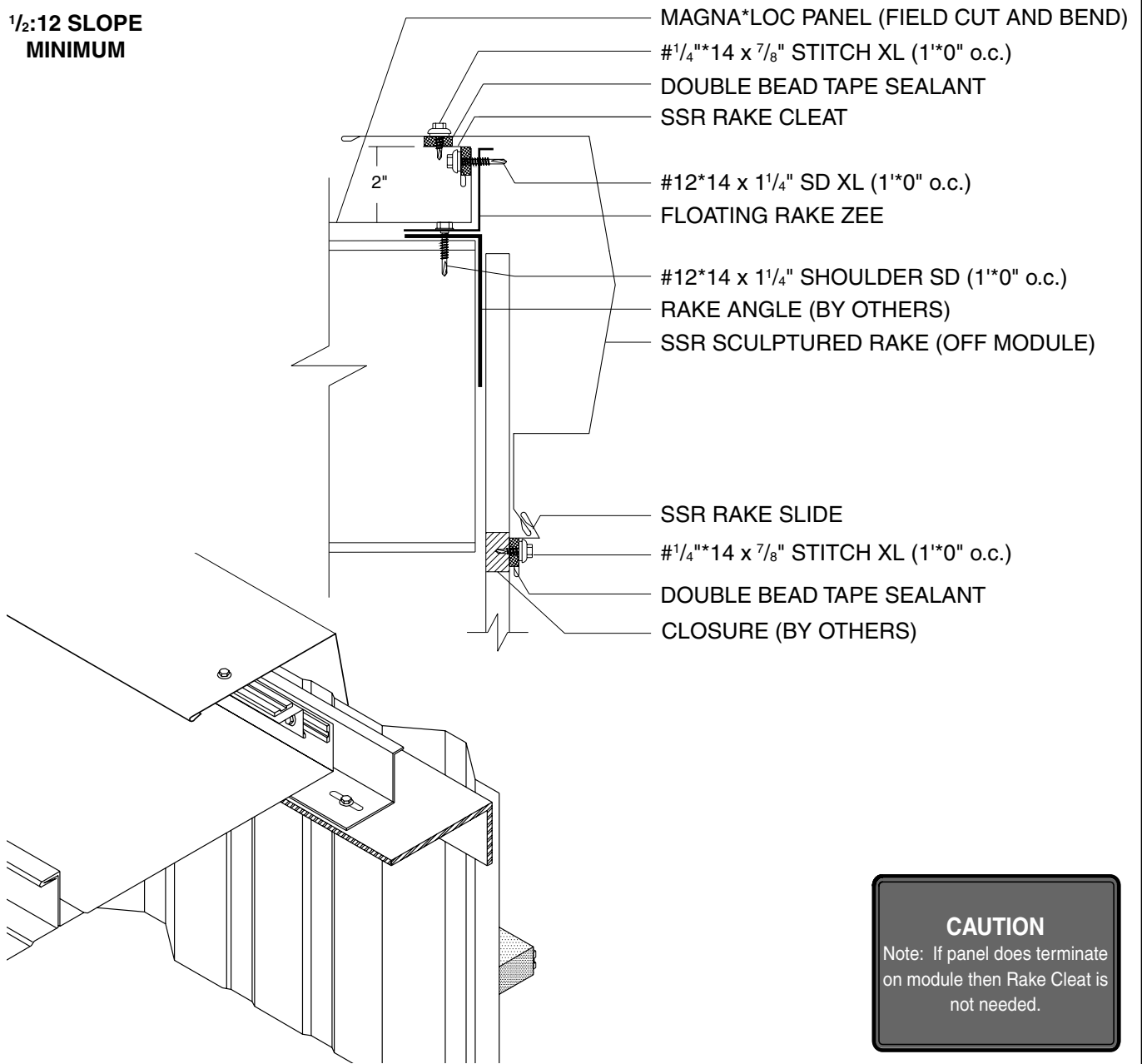


INSTALLATION NOTES

Magna*Loc floating rake zee and Magna*Loc panels must be installed prior to SSR Sculptured Rake installation (See pages 22*32).

1. With Magna Loc panel properly nested over top of Magna Loc Floating Rake Zee, apply a row of Double Bead Tape Sealant across upper side of panel rib.
2. Install SSR Rake Cleat over Double Bead Tape Sealant. Fasten through SSR Rake Cleat, Tape Sealant, panel, and into Floating Rake Zee with #12 14 x 1/4" Self Driller XL screws, 1' 0"o.c.
3. Apply a row of Double Bead Tape Sealant across top leg of SSR Rake Cleat.
4. Install SSR Sculptured Rake flashing so that top of flashing is flush with top of SSR Rake Cleat and panel rib. Fasten through SSR Sculptured Rake, Tape Sealant, and into SSR Rake Cleat with #1/4 14 x 7/8" Stitch XL, 1' 0"o.c.
5. Position and apply a row of Double Bead Tape Sealant across wall panel just below lower leg of SSR Rake Flashing.
6. Install SSR Rake Slide over lower leg of SSR Rake flashing and Double Bead Tape Sealant. Fasten with #1/4 14 x 7/8" Stitch XL, 1' 0"o.c.
7. If two or more flashings are required, lap the flashing over the previously installed flashing by a minimum of 2" placing a bead of Tube Sealant between the flashings and securing with Pop Rivets, 2.5"o.c.

**1/2:12 SLOPE
MINIMUM**



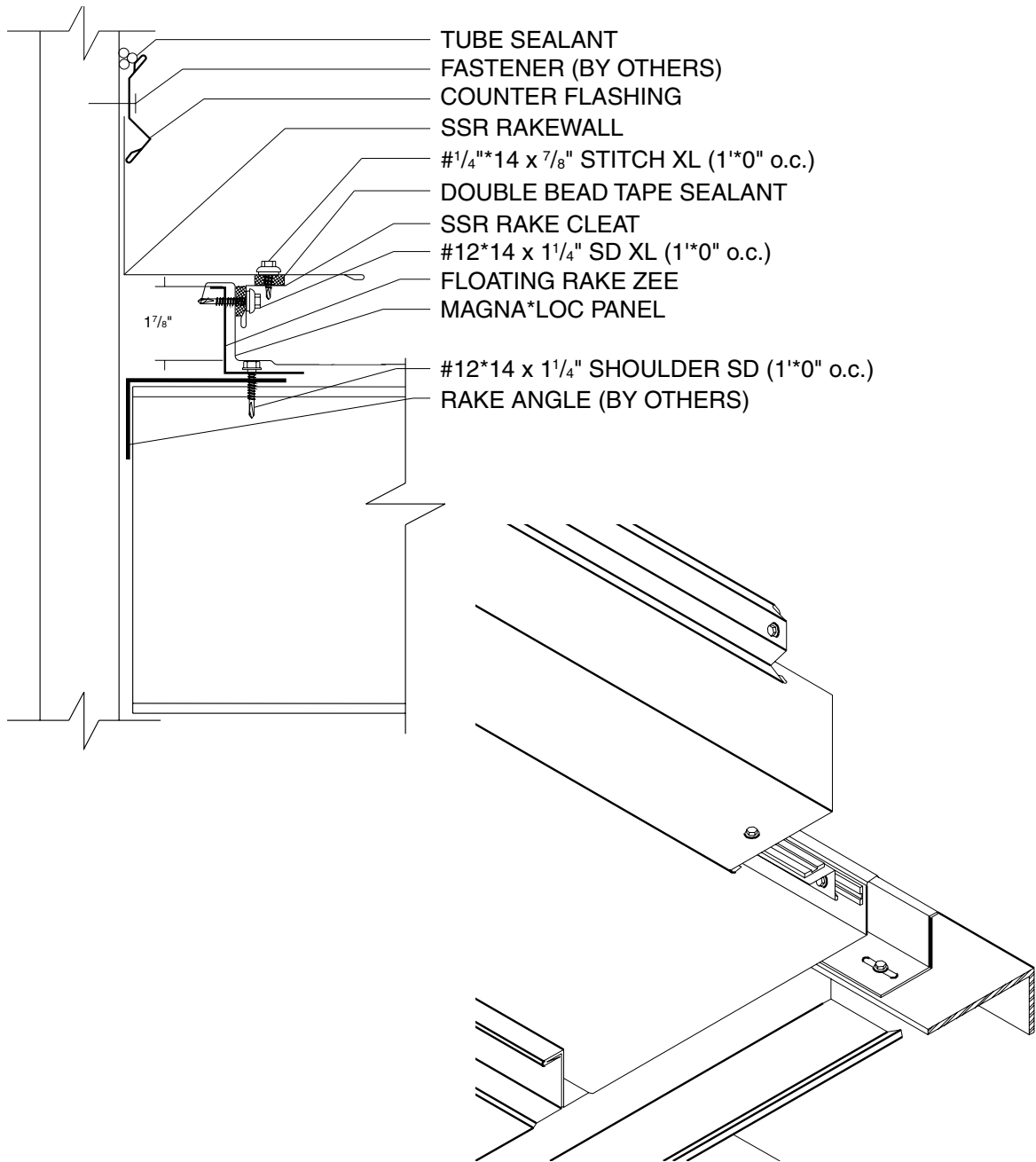
CAUTION
Note: If panel does terminate on module then Rake Cleat is not needed.

INSTALLATION NOTES

Magna*Loc Floating Rake Zee and Magna*Loc panels must be installed prior to SSR Sculptured Rake installation (See Pages 22*32).

1. With Magna Loc panel nested against Magna Loc Floating Rake Zee, apply a row of Double Bead Tape sealant across upper side of field bent panel rib. (See page 30 for proper bending of panel.)
2. Install SSR Rake Cleat over Double Bead Tape Sealant. Fasten through SSR Rake Cleat, Tape Sealant, panel, and into Floating Rake Zee with #12 14 x 1/4" Self Driller XL screws, 1' 0"o.c.
3. Apply a row of Double Bead Tape Sealant across top leg of SSR Rake Cleat.
4. Install SSR Sculptured Rake flashing so that top of flashing is flush with top of SSR Rake Cleat and panel rib. Fasten through SSR Sculptured Rake, Tape Sealant, and into SSR Rake Cleat with #1/4 14 x 7/8" Stitch XL, 1' 0"o.c.
5. Position and apply a row of Double Bead Tape Sealant across wall panel just below lower leg of SSR Rake flashing.
6. Install SSR Rake Slide over lower leg of SSR Rake flashing and Double Bead Tape Sealant. Fasten with #1/4 14 x 7/8" Stitch XL, 1' 0"o.c.
7. If two or more flashings are required, lap the flashing over the previously installed flashing by a minimum of 2" placing a bead of Tube Sealant between the flashings and securing with Pop Rivets, 2.5"o.c.

1/2:12 SLOPE
MINIMUM



INSTALLATION NOTES

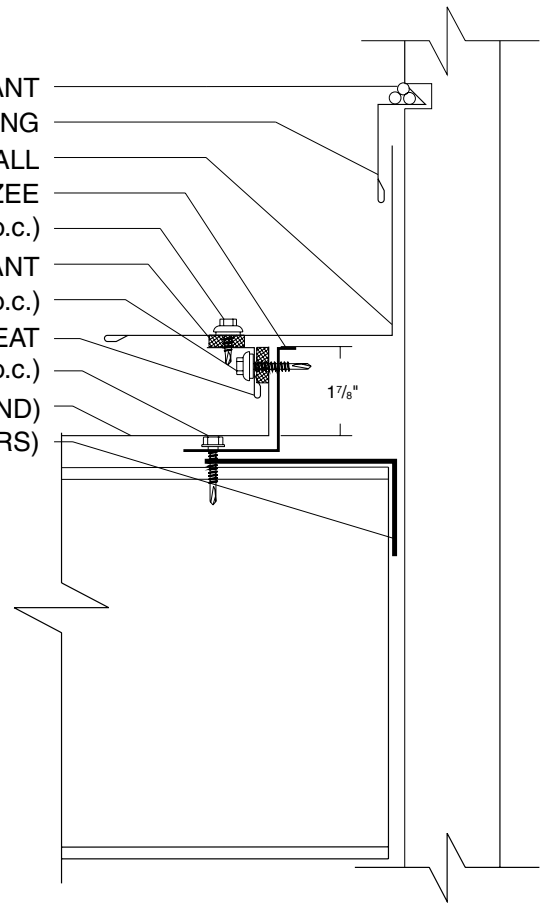
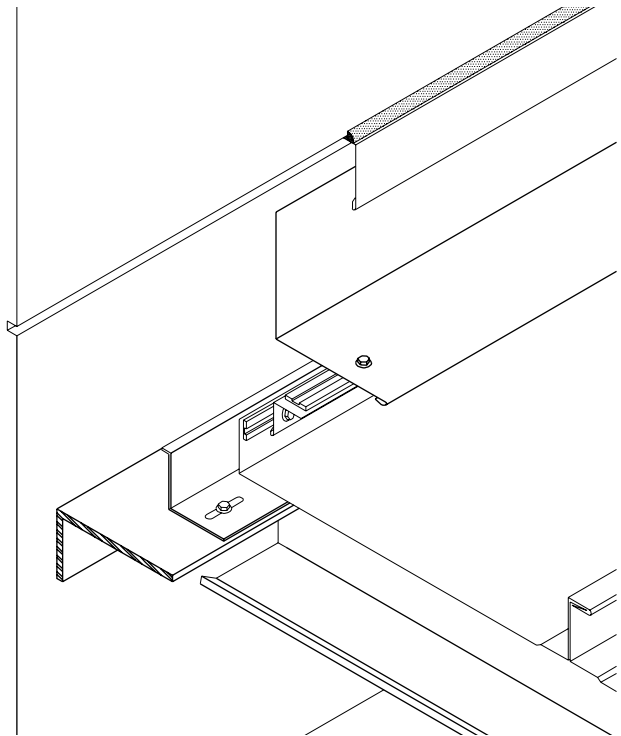
Magna*Loc Floating Rake Zee and Magna*Loc Panels must be installed prior to Raked wall installation (See pages 22*32).

1. With Magna Loc panel properly nested over top of Magna Loc Floating Rake Zee, apply a row of Double Bead Tape Sealant across upper side of panel rib.
2. Install SSR Rake Cleat over Double Bead Tape Sealant. Fasten through SSR Rake Cleat, Tape Sealant, panel, and into Floating Rake Zee with #12 14 x 1/4" Self Driller XL screws, 1' 0" o.c.
3. Apply a row of Double Bead Tape Sealant across top leg of SSR Rake Cleat.
4. Install SSR Raked wall so that top of flashing is flush with top of SSR Rake Cleat and panel rib. Fasten through SSR Raked wall, Tape Sealant, and into SSR Rake Cleat with #1/4 14 x 7/8" Stitch XL, 1' 0" o.c.
5. Install Counter Flashing, Reglet, or wall panel and fasten to parapet wall with appropriate fastener, 12" o.c. If Counter Flashing or Reglet is used, seal to parapet wall with Tube Sealant. Do NOT fasten SSR Raked wall to parapet wall.
6. If two or more flashings are required, lap the flashing over the previously installed flashing by a minimum of 2" placing a bead of Tube Sealant between the flashings and securing with Pop Rivets, 2.5" o.c.

MAGNA*LOC RAKEWALL (OFF MODULE) OVER OPEN FRAMING

**1/2:12 SLOPE
MINIMUM**

TUBE SEALANT
 REGLET FLASHING
 SSR RAKEWALL
 FLOATING RAKE ZEE
 #1/4"*14 x 7/8" STITCH XL (1'0" o.c.)
 DOUBLE BEAD TAPE SEALANT
 #12*14 x 1 1/4" SD XL (1'0" o.c.)
 SSR RAKE CLEAT
 #12*14 x 1 1/4" SHOULDER SD (1'0" o.c.)
 MAGNA*LOC PANEL (FIELD CUT AND BEND)
 RAKE ANGLE (BY OTHERS)



INSTALLATION NOTES

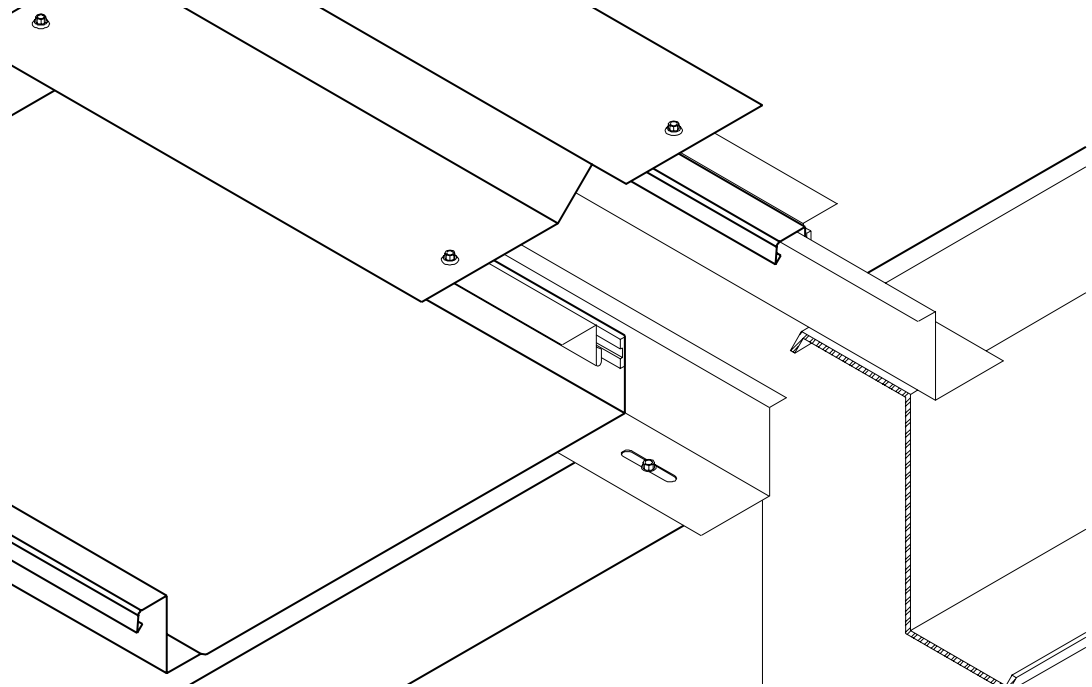
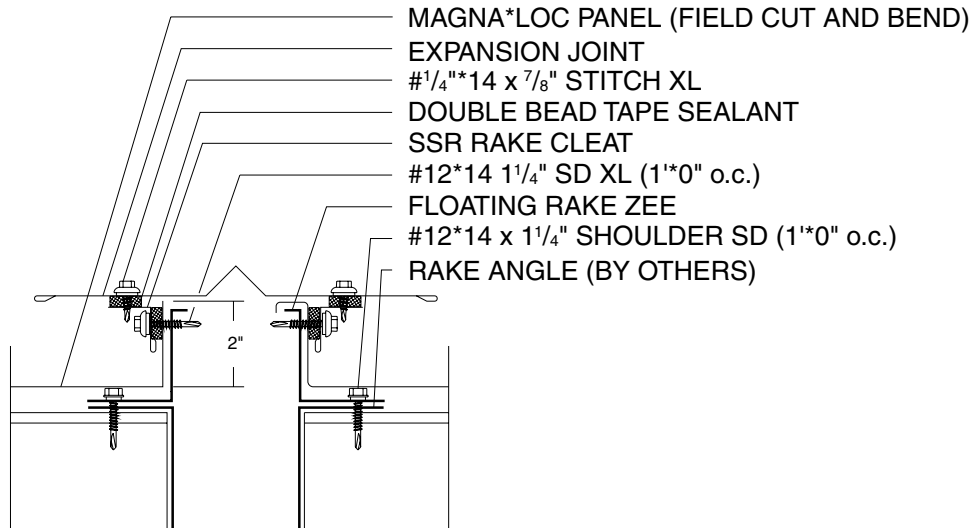
Magna*Loc Floating Rake Zee and Magna*Loc Panels must be installed prior to Rakewall installation (See pages 22*32).

1. With Magna*Loc panel nested against Magna*Loc Floating Rake Zee, apply a row of Double Bead Tape Sealant across upper side of field bent panel rib. (See page 30 for proper bending of panel.)
2. Install SSR Rake Cleat over Double Bead Tape Sealant. Fasten through SSR Rake Cleat, tape sealant, panel, and into floating rake zee with #12 14 x 1 1/4" Self Driller XL screws, 1' 0" o.c.
3. Apply a row of Double Bead Tape Sealant across top leg of SSR Rake Cleat.
4. Install SSR Rakewall so that top of flashing is flush with top of SSR Rake Cleat and panel rib. Fasten through SSR Rakewall, tape sealant, and into SSR Rake Cleat with #1/4 14 x 7/8" Stitch XL, 1' 0" o.c.
5. Install Counter Flashing, Reglet, or wall panel and fasten to parapet wall with appropriate fastener, 12" o.c. If Counter Flashing or Reglet is used, seal to parapet wall with tube sealant. Do NOT fasten SSR Rakewall to parapet wall.
6. If two or more flashings are required, lap the flashing over the previously installed flashing by a min. of 2" placing a bead of Tube Sealant between the flashings and securing with Pop Rivets, 2.5" o.c.

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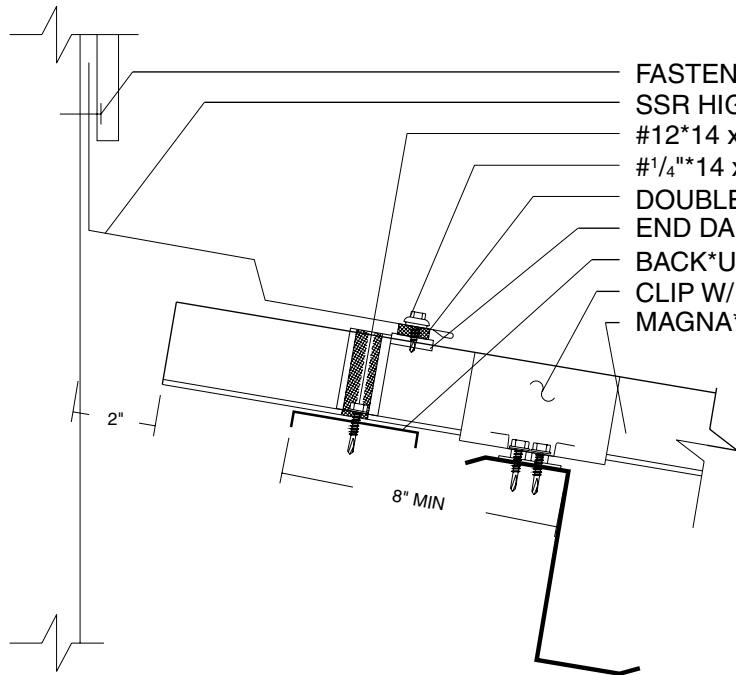
INSTALLATION NOTES

Magna*Loc Floating Rake Zees and Magna*Loc Panels must be installed prior to Expansion Joint installation (See pages 22*32).

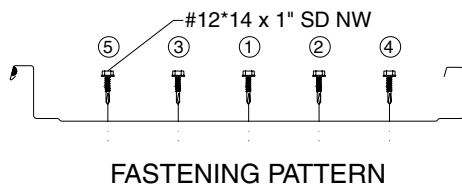
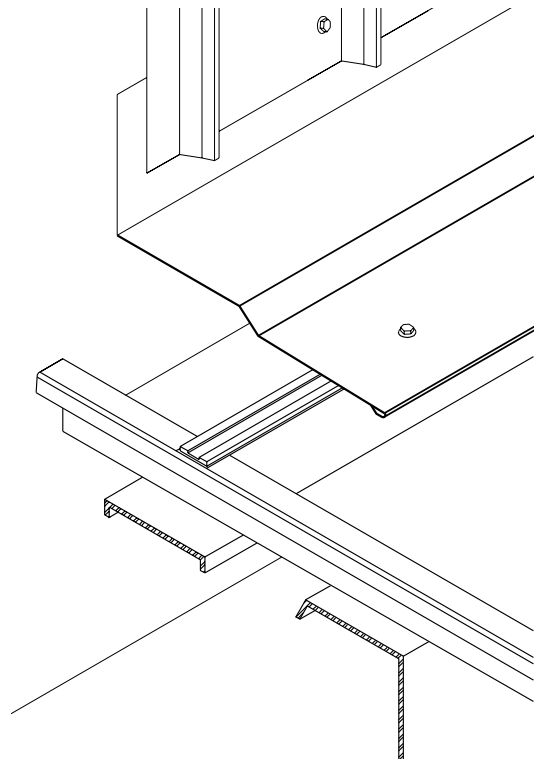
1. With Magna Loc panels nested against Magna Loc Floating Rake Zees, apply a row of Double Bead Tape Sealant across upper side of panel ribs on both sides of Expansion Joint. (See page 30 for proper bending of panel if off module.)
2. Install SSR Rake Cleats over Double Bead Tape Sealant on both sides. Fasten through SSR Rake Cleat, Tape Sealant, panel, and into Floating Rake Zee with #12 14 x 1/4" Self Driller XL screws, 1' 0"o.c. on both sides of Expansion Joint.
3. Apply a row of Double Bead Tape Sealant across top leg of SSR Rake Cleats.
4. Install Expansion Joint flashing on top legs of SSR Rake Cleats. Fasten through Expansion Joint flashing, Tape Sealant, and into SSR Rake Cleat with #1/4 14 x 7/8" Stitch XL, 1' 0"o.c. on both sides of Expansion Joint.
5. If two or more flashings are required, lap the flashing over the previously installed flashing by a minimum of 2" placing a bead of Tube Sealant between the flashings and securing with Pop Rivets, 2.5"o.c.

MAGNA*LOC ENDWALL WITH WALL PANEL OVER OPEN FRAMING

1/2:12 SLOPE
MINIMUM



FASTENER (BY OTHERS)
SSR HIGH SIDE PITCH BREAK
#12*14 x 1" SD N/W (SEE BELOW)
#1/4*14 x 7/8" STITCH XL (3 PER PANEL)
DOUBLE BEAD TAPE SEALANT
END DAM
BACK*UP CHANNEL
CLIP W/ #1/4*14 x 1 1/2" SD N/W
MAGNA*LOC PANEL



INSTALLATION NOTES

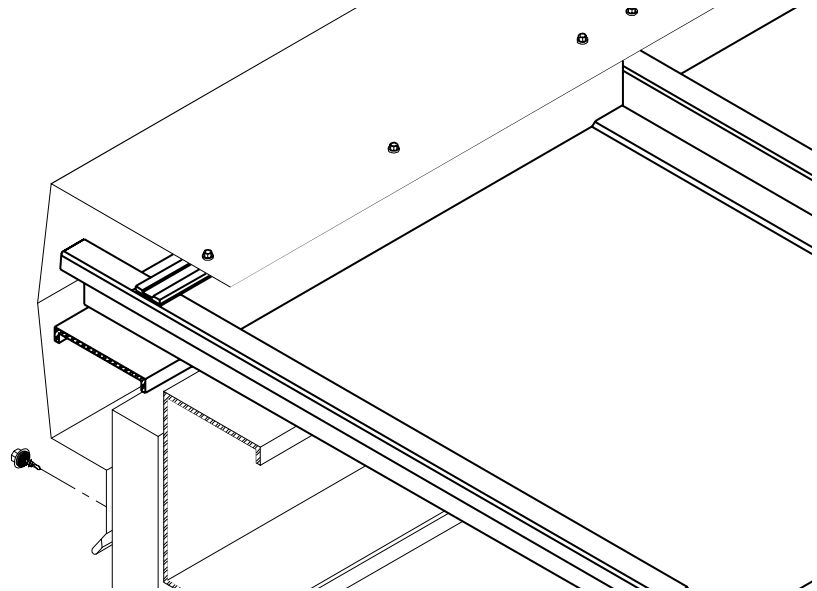
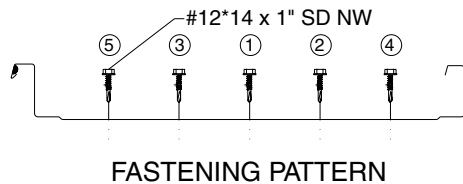
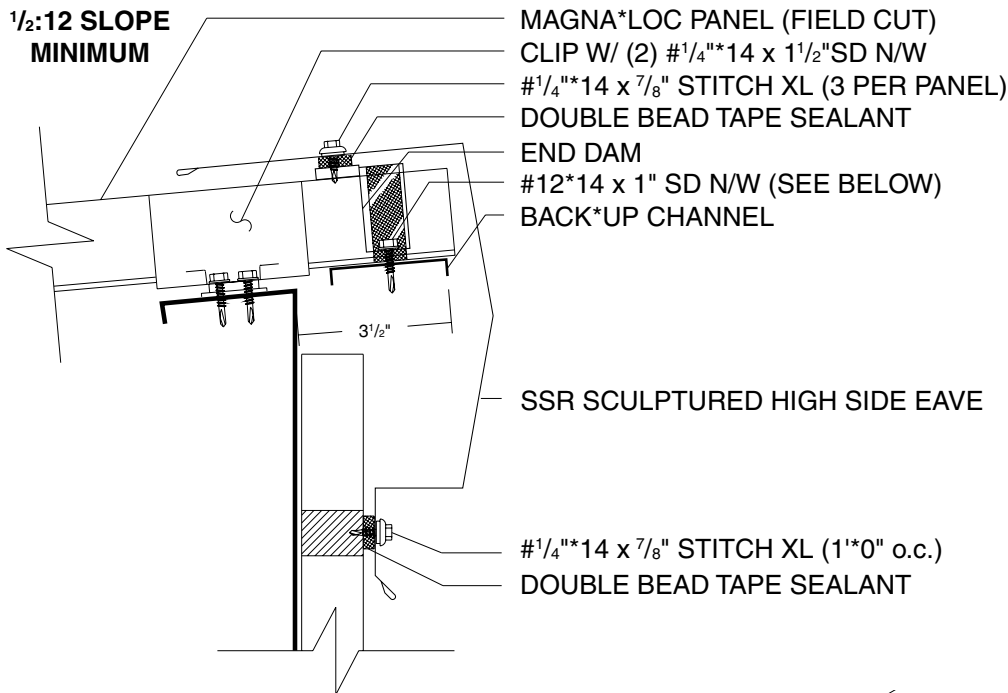
1. Once panels have been installed, slide Back Up Channel under upper edge of panels. Position Back Up Channel to allow for proper installation of endwall assembly. Use C clamps to hold Back Up Channel in place.
2. Apply a row of Double Bead Tape Sealant across panel, up and over all ribs approximately 6" - 8" from panel end.
3. Install Magna Loc End Dams over Tape Sealant. Before continuing make sure End Dam placement will accommodate SSR High Side Pitch Break.
4. Once closure is set in Tape Sealant, fasten through End Dam, Tape Sealant, Magna Loc panel, and into Back Up Channel with (5) 12 14 x 1" SD N/W per panel. C clamps may be removed once closures have been fastened.
5. Once all End Dams have been installed, place a row of Double Bead Tape Sealant across top of End Dams. Tube Sealant must be used to fill any and all gaps left around End Dams.
6. Install SSR High Side Pitch Break and secure to top leg of End Dams with #1/4 14 x 7/8" Stitch XL at the spacing shown above and to parapet wall with appropriate fastener, 12" o.c.
7. Install Counter Flashing, Reglet, or wall panel and fasten to parapet wall with appropriate fastener, 12" o.c. If Counter Flashing or Reglet is used, seal to parapet wall with Tube Sealant.
8. If two or more flashings are required, lap the flashing over the previously installed flashing by a minimum of 2" placing a bead of Tube Sealant between the flashings and securing with Pop Rivets, 2.5" o.c.

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1/2:12 SLOPE
MINIMUM

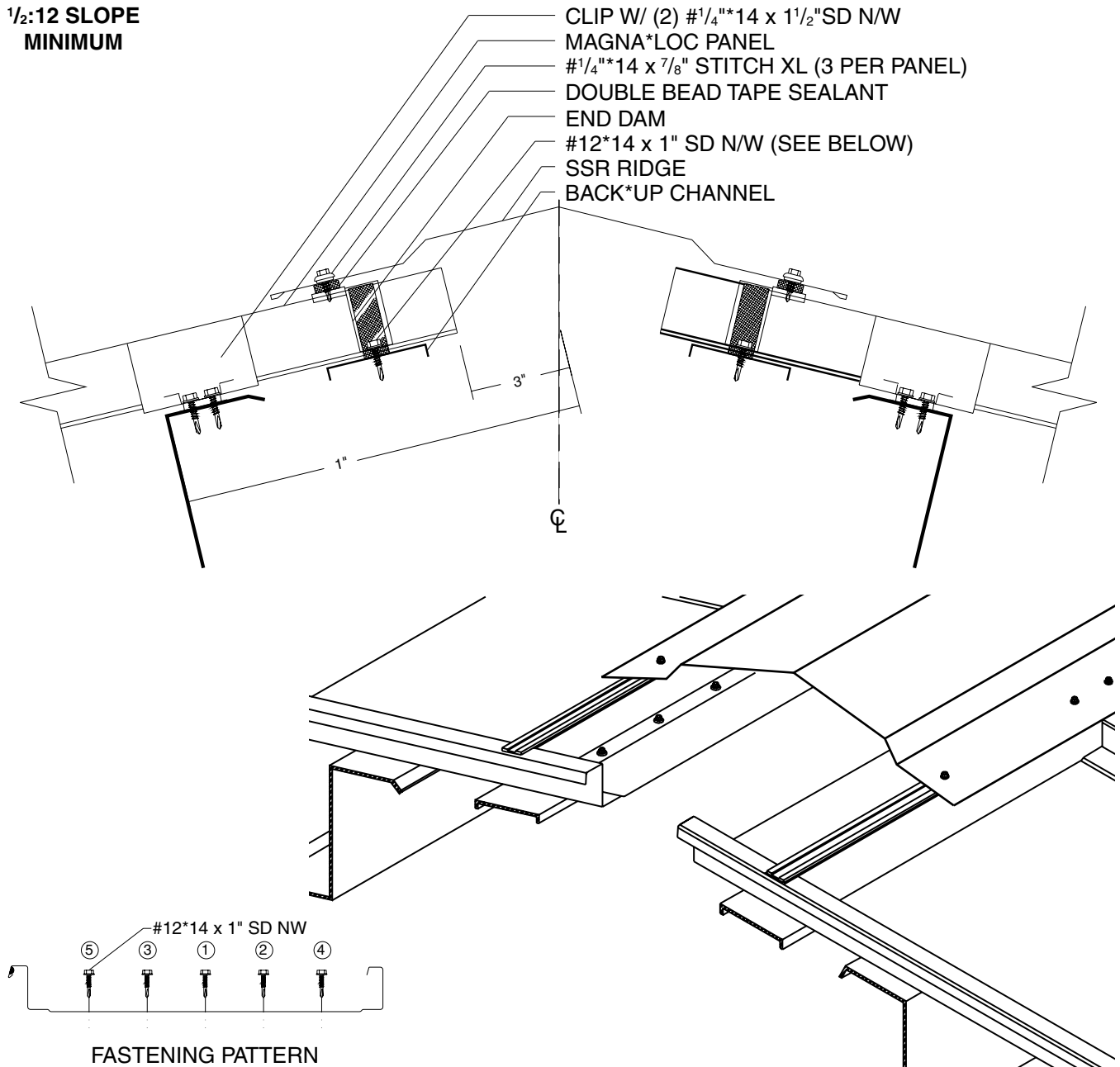


INSTALLATION NOTES

1. Once panels have been installed, slide Back Up Channel under upper edge of panels. Position Back Up Channel to allow for proper installation of High Side Eave assembly. Use C clamps to hold Back Up Channel in place.
2. Apply a row of Double Bead Tape Sealant across panel, up and over all ribs approximately 2" - 4" from panel end.
3. Install Magna Loc End Dams over tape sealant. Before continuing make sure End Dam placement will accommodate SSR Sculptured High Side Eave flashing.
4. Once Closure is set in Tape Sealant, fasten through End Dam, Tape Sealant, Magna Loc panel, and into Back Up Channel with (5) 12 14 x 1" SD N/W per panel. C clamps may be removed once closures have been fastened.
5. Once all End Dams have been installed, place a row of Double Bead Tape Sealant across top of End Dams. Tube Sealant must be used to fill any and all gaps left around End Dams.
6. Install SSR Sculptured High Side Eave flashing and secure to top leg of End Dams with #1/4 14 x 7/8" Stitch XL at the spacing shown above.
7. Fasten SSR Sculptured High Side Eave flashing to finished wall with appropriate fastener, 1' 0" o.c.
8. If two or more flashings are required, lap the flashing over the previously installed flashing by a minimum of 2" placing a bead of Tube Sealant between the flashings and securing with Pop Rivets, 2.5" o.c.

MAGNA*LOC SSR RIDGE OVER OPEN FRAMING

1/2:12 SLOPE
MINIMUM



INSTALLATION NOTES

1. Once panels have been installed, slide Back Up Channel under upper edge of panels. Position Back Up Channel to allow for proper installation of ridge assembly. Use C clamps to hold Back Up Channel in place.
2. Apply a row of Double Bead Tape Sealant across panel, up and over all ribs approximately 2" - 4" from panel end on both sides of ridge.
3. Install Magna Loc End Dams over Tape Sealant. Before continuing make sure End Dam placement will accommodate SSR Ridge.
4. Once Closure is set in Tape Sealant, fasten through End Dam, Tape Sealant, Magna Loc panel, and into Back Up Channel with (5) #12 14 x 1" SD N/W per panel. C clamps may be removed once Closures have been fastened.
5. Once all End Dams have been installed, place a row of Double Bead Tape Sealant across top of End Dams on both sides of ridge. Tube Sealant must be used to fill any and all gaps left around End Dams.
6. Install SSR Ridge flashing and secure to top leg of End Dams with #1/4 14 x 7/8" Stitch XL at the spacing shown above.
7. If two or more flashings are required, lap the flashing over the previously installed flashing by a minimum of 2" placing a bead of Tube Sealant between the flashings and securing with Pop Rivets, 2.5" o.c.

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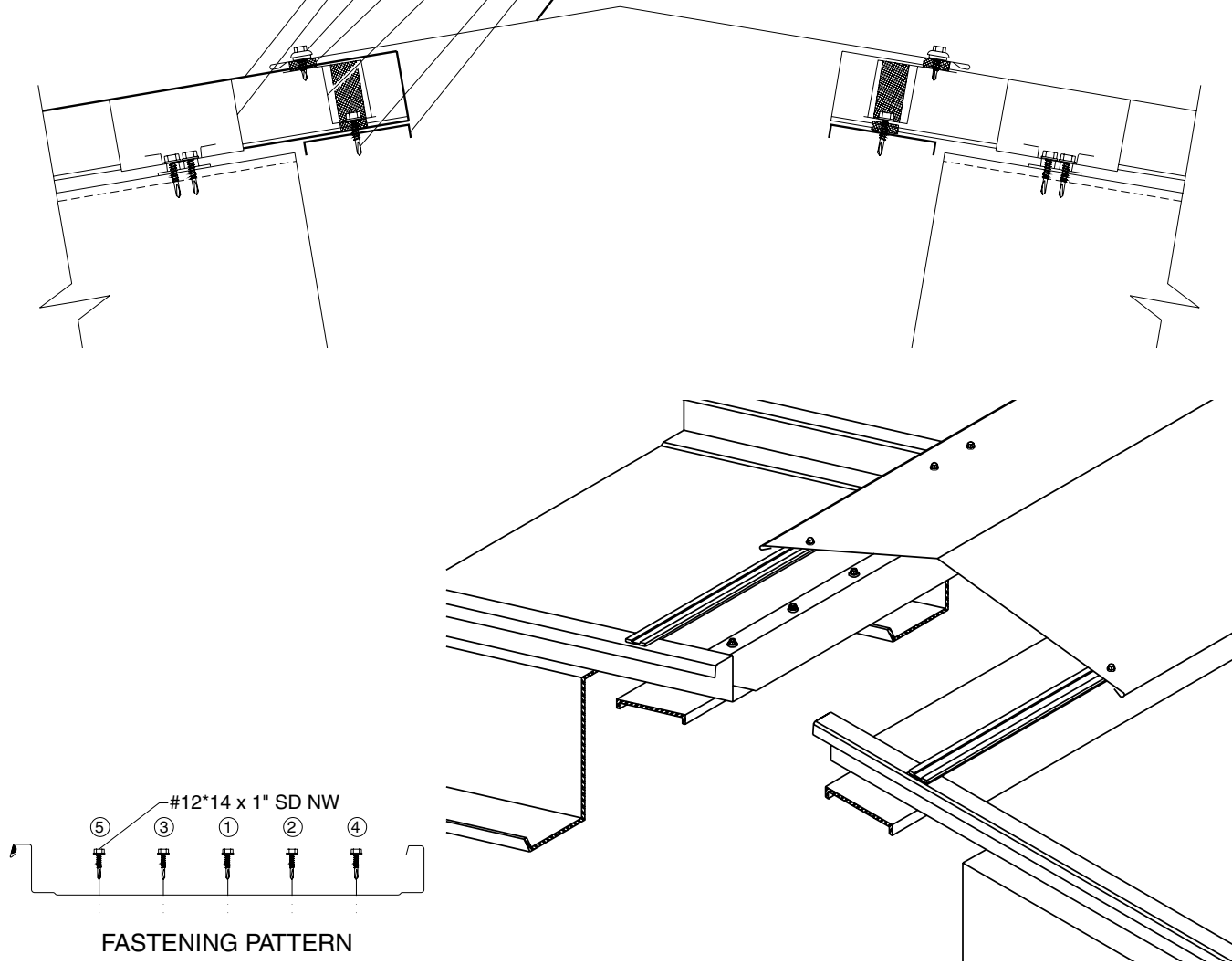
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MAGNA*LOC 20" RIDGE/HIP COVER OVER OPEN FRAMING

**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
- Z*CLOSURE (FIELD CUT)
- #12*14 x 1" SD N/W (SEE BELOW)
- BACK*UP CHANNEL
- 20" HIP COVER

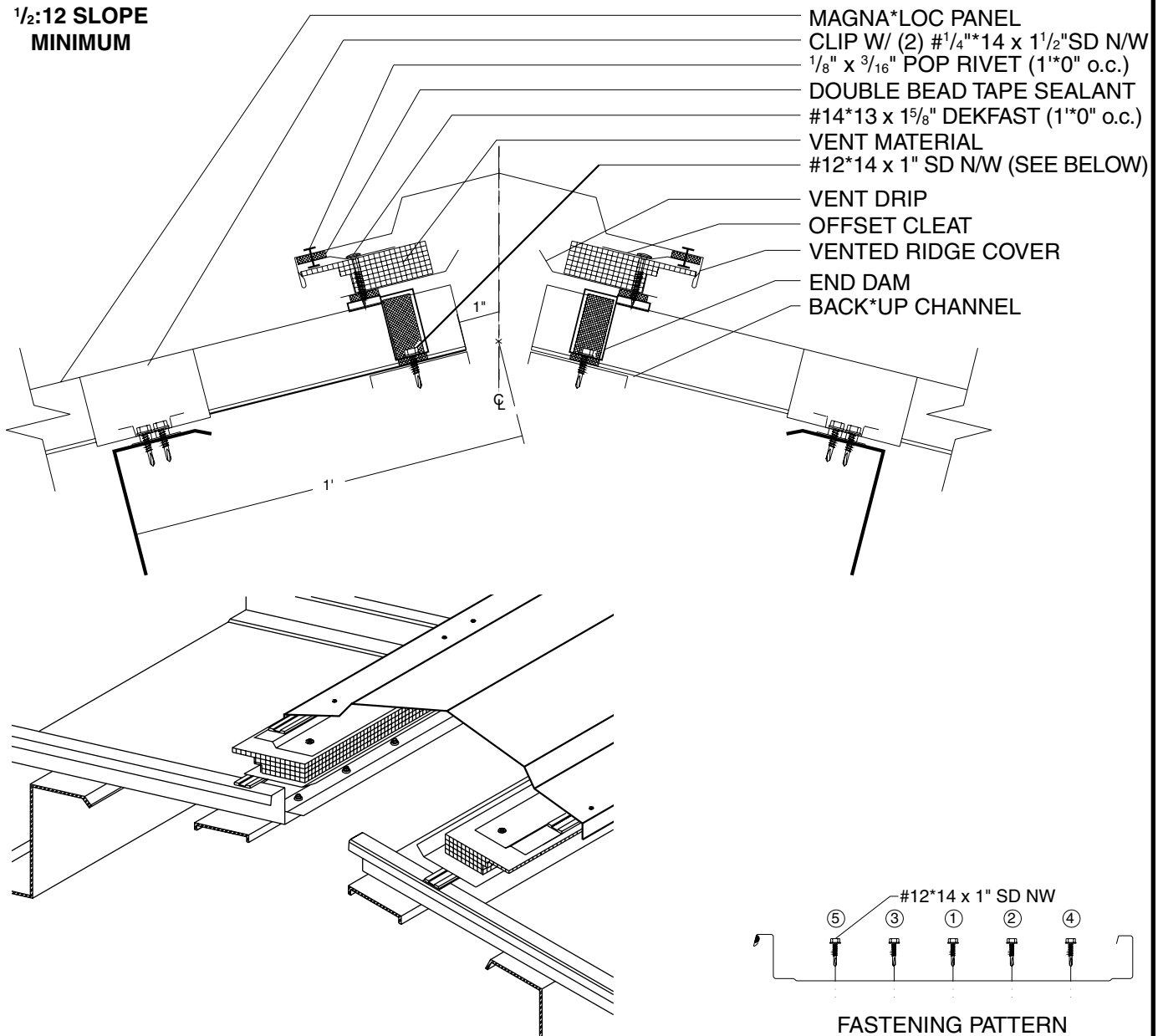


INSTALLATION NOTES

1. Once panels have been installed, slide Back Up Channel under upper edge of panels. Position Back Up Channel to allow for proper installation of hip assembly. Use C clamps to hold Back Up Channel in place.
2. Apply a row of Double Bead Tape Sealant across panel, up and over all ribs approximately 2" - 4" from panel end on both sides of hip.
3. Install field cut Z Closure over tape sealant. (See page 58 for preparing Z Closures.) Before continuing make sure Z Closure placement will accommodate 20" Hip flashing.
4. Once Closure is set in Tape Sealant, fasten through Z Closure, Tape Sealant, Magna Loc panel, and into Back Up Channel with (5) 12 14 x 1" SD N/W per panel. C clamps may be removed once Closures have been fastened.
5. Once all Z Closures have been installed, place a row of Double Bead Tape Sealant across top of Closures on both sides of hip. Tube Sealant must be used to fill any and all gaps left around Z Closures.
6. Install 20" Hip flashing and secure to top leg of Z Closure with #1/4 14 x 7/8" Stitch XL at the spacing shown above.
7. If two or more flashings are required, lap the flashing over the previously installed flashing by a minimum of 2" placing a bead of Tube Sealant between the flashings and securing with Pop Rivets, 2.5" o.c.

MAGNA*LOC VENTED RIDGE OVER OPEN FRAMING

**1/2:12 SLOPE
MINIMUM**



FASTENING PATTERN

INSTALLATION NOTES

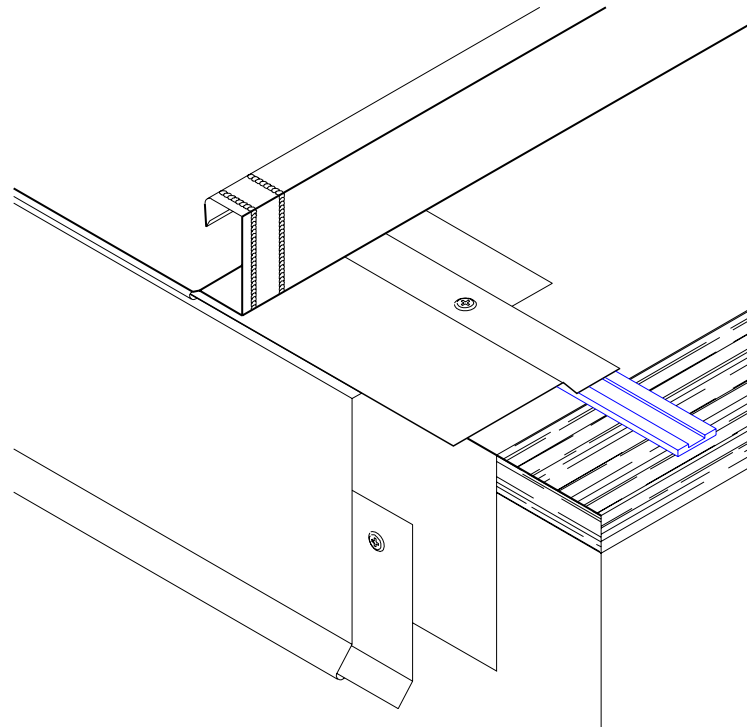
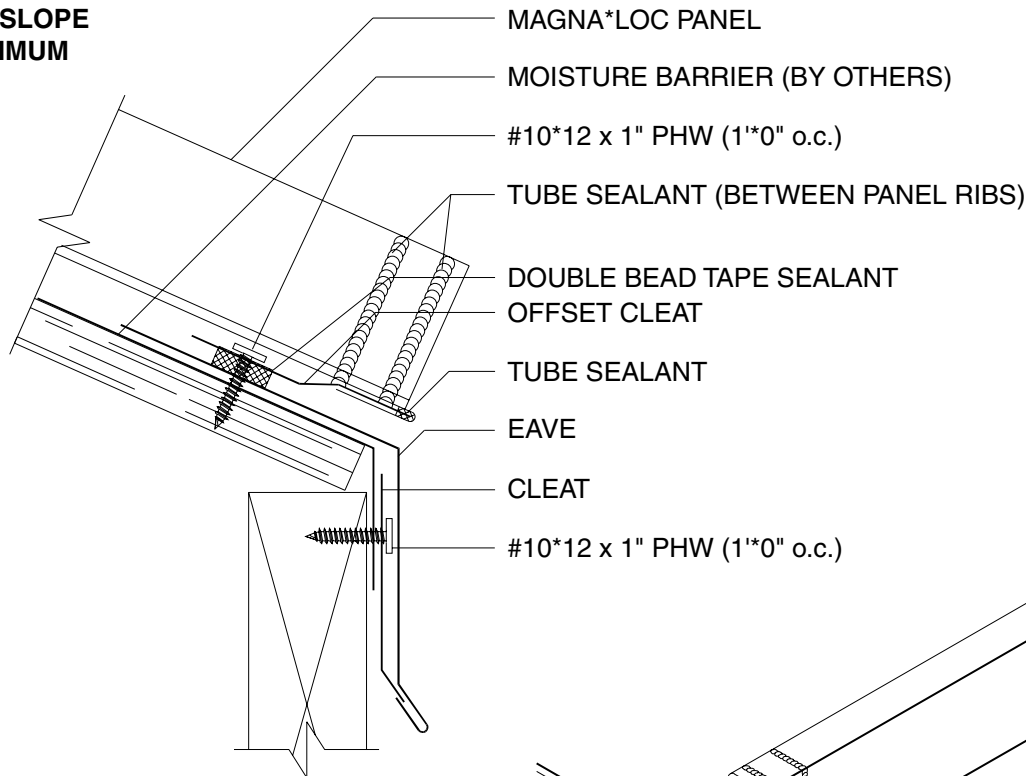
1. Once panels have been installed, slide Back Up Channel under the upper edge of panels. Position Back Up Channel to allow for proper installation of vented ridge assembly. Use C clamps to hold Back Up Channel in place.
2. Apply a row of Double Bead Tape Sealant across panel, up and over all ribs approximately 0" - 2" from panel end on both sides of ridge.
3. Install Magna Loc End Dams over Tape Sealant. Before continuing make sure End Dam placement will accommodate Vented Ridge Cover.
4. Once closure is set in Tape Sealant, fasten through End Dam, Tape Sealant, Magna Loc panel, and into Back Up Channel with (5) 12 14 x 1" SD N/W per panel. C clamps may be removed once Closures have been fastened.
5. Once all End Dams have been installed, place a row of Double Bead Tape Sealant across top of End Dams on both sides of ridge. Tube Sealant must be used to fill any and all gaps left around End Dams.
6. Install Vent Drip, Vent Material, and Offset Cleat (in order) and fasten to top leg of End Dam with #14 Dekfasts at 1' 0" o.c.
7. Apply a row of Double Bead Tape Sealant across outer leg of Offset Cleat.
8. Install Vented Ridge Cover and secure to outer leg of Offset Cleat with Pop Rivets at 1' 0" o.c.
9. If two or more flashings are required, lap the flashing over the previously installed flashing by a minimum of 2" placing a bead of Tube Sealant between the flashings and securing with Pop Rivets 2.5" o.c.

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**1/2:12 SLOPE
MINIMUM**



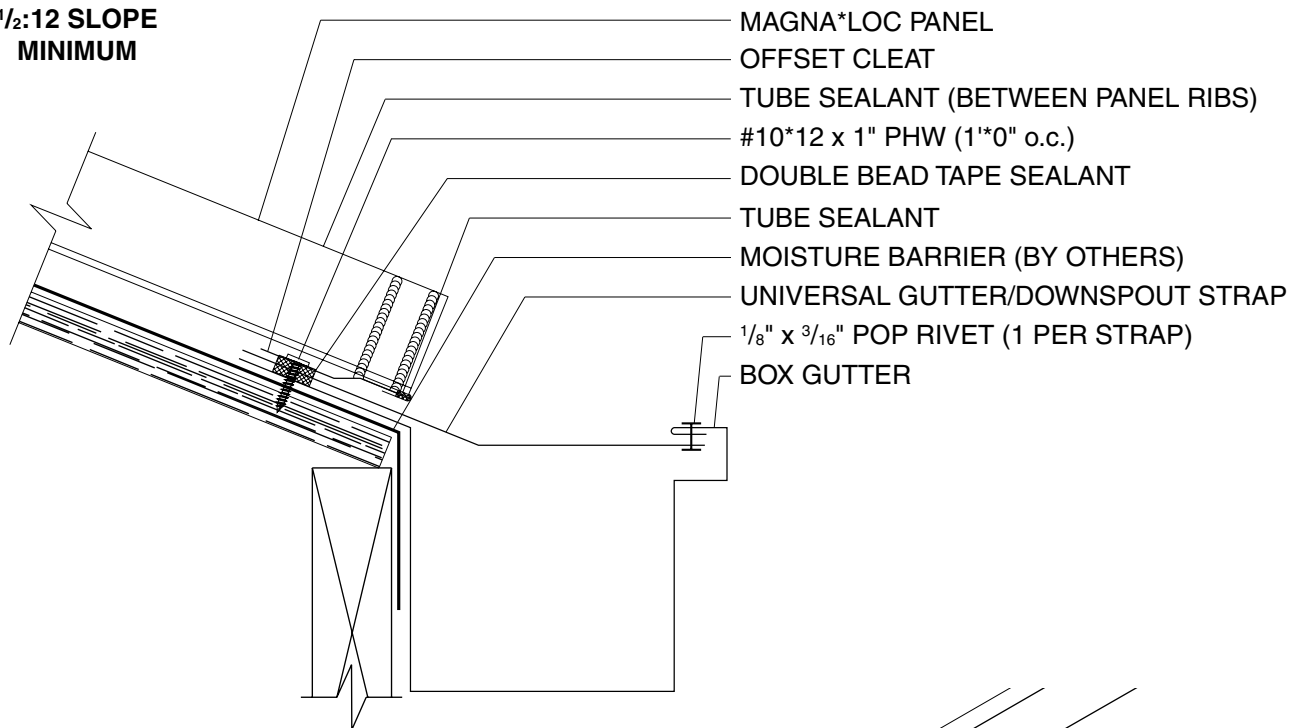
INSTALLATION NOTES

All Eave flashings must be installed prior to panel installation.

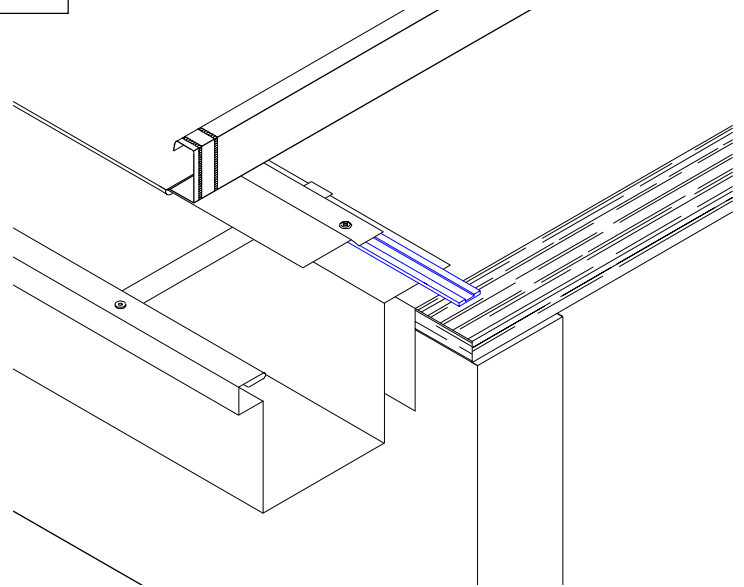
1. Position and install Cleat to wall with appropriate fastener, 12" o.c. Make sure Cleat allows for proper Eave attachment.
2. Install Eave flashing by sliding open hem onto Cleat and resting the Eave flashing back against substrate. To hold Eave flashing in place fasten to substrate with #10 12 x 1" Pancake Head fastener, 4' 0" o.c.
3. Apply a row of Double Bead Tape Sealant across Eave flashing approximately 2" - 3" from face of Eave flashing.
4. Properly align and install Offset Cleat so that Magna Loc panel will be flush with Eave flashing. Fasten through Offset Cleat, Tape Sealant, Eave Flashing and into substrate with Pancake Head fastener at 1' 0" o.c.
5. Apply a continuous bead of Tube Sealant along outer edge of Offset Cleat in panel hem.
6. If two or more flashings are required, lap the flashing over the previously installed flashing by a minimum of 2" placing a bead of Tube Sealant between the flashings and securing with Pop Rivets, 2.5" o.c.
7. Install Magna Loc panel by engaging field hemmed panel end (see page 61) over Offset Cleat. Two beads of Tube Sealant must be applied up and over male leg of each Magna Loc panel during panel installation (see page 28).

MAGNA*LOC BOX GUTTER OFFSET OVER DECKING

**1/2:12 SLOPE
MINIMUM**



MAGNA*LOC PANEL
OFFSET CLEAT
TUBE SEALANT (BETWEEN PANEL RIBS)
#10*12 x 1" PHW (1'*0" o.c.)
DOUBLE BEAD TAPE SEALANT
TUBE SEALANT
MOISTURE BARRIER (BY OTHERS)
UNIVERSAL GUTTER/DOWNSPOUT STRAP
1/8" x 3/16" POP RIVET (1 PER STRAP)
BOX GUTTER



CAUTION

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

INSTALLATION NOTES

All Gutter flashings must be installed prior to panel installation.

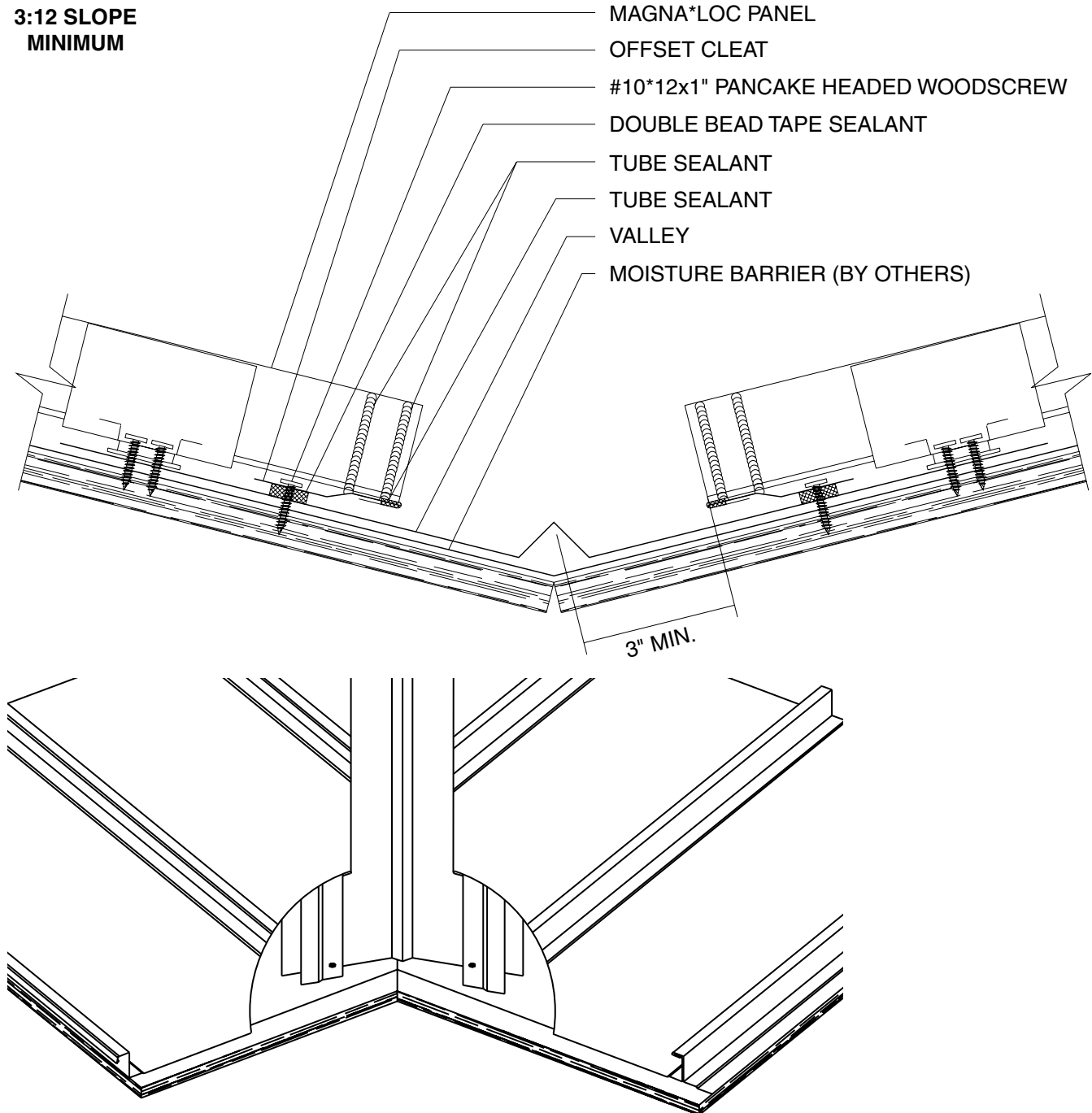
1. Install Box Gutter flashing back against substrate. To hold Box Gutter flashing in place fasten to substrate with #10 12 x 1" Pancake Head fastener, 4' 0" o.c.
2. Install Universal Gutter/Downspout Straps every 3' 0" of gutter length. Fasten to Box Gutter under front lip with Pop Rivets.
3. Apply a row of Double Bead Tape Sealant across Box Gutter flashing approximately 2" 3" from inside of Box Gutter flashing.
4. Properly align and install Offset Cleat so that Magna Loc panel will be flush with inside of Box Gutter flashing. Fasten through Offset Cleat, Tape Sealant, Universal Gutter Strap, Box Gutter and into substrate with Pancake Head fastener 1' 0" o.c. Fastener must pass through Universal Gutter Downspout Strap.
5. If two or more flashings are required, lap the flashing over the previously installed flashing by a minimum of 2" placing a bead of Tube Sealant between the flashings and securing with Pop Rivets, 2.5" o.c.
6. Install Magna Loc panel by engaging field hemmed panel end (see page 61) over Offset Cleat. Two beads of Tube Sealant must be applied up and over male leg of each Magna Loc panel during panel installation (see page 28).

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**3:12 SLOPE
MINIMUM**

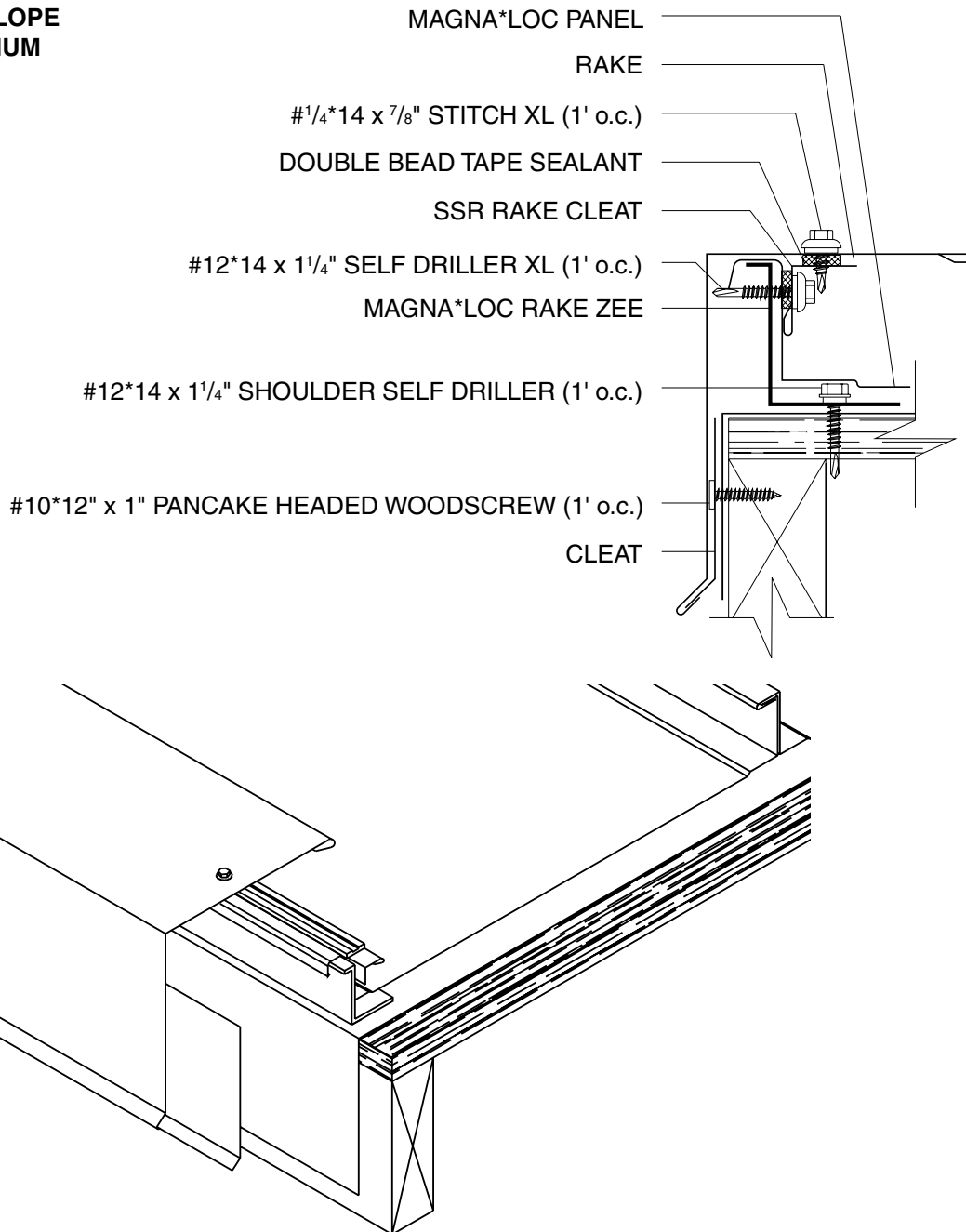


INSTALLATION NOTES

Valley flashing must be installed working from eave to peak if two or more flashings are required. It is recommended that an ice and water shield be placed along the valley beneath the flashing for added protection against moisture.

1. Install Valley flashing back against substrate. To hold Valley flashing in place fasten to substrate with #10 12 x 1" Pancake Head fastener, 4' 0" o.c.
2. If two or more flashings are required, lap the flashing over the previously installed flashing by a minimum of 2" placing a bead of Tube Sealant between the flashings and securing with Pop Rivets, 2.5" o.c.
3. Place a continuous row of Double Bead Tape Sealant across bottom leg of Offset Cleat and apply to both sides of valley.
4. Fasten through Offset Cleat, Tape Sealant, Valley flashing and into substrate with Pancake Head fastener, 1' 0" o.c.
5. Install Magna Loc panel by engaging field hemmed panel end (see page 61) over Offset Cleat. Two beads of Tube Sealant must be applied up and over male leg of each Magna Loc panel during panel installation (see page 28).

**1/2:12 SLOPE
MINIMUM**

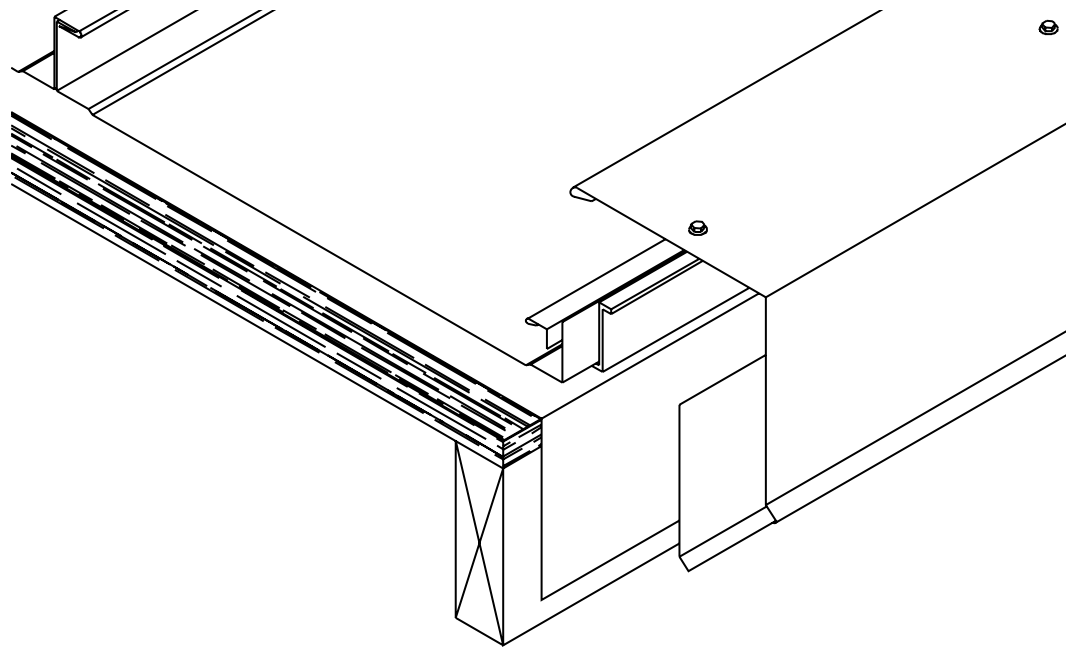
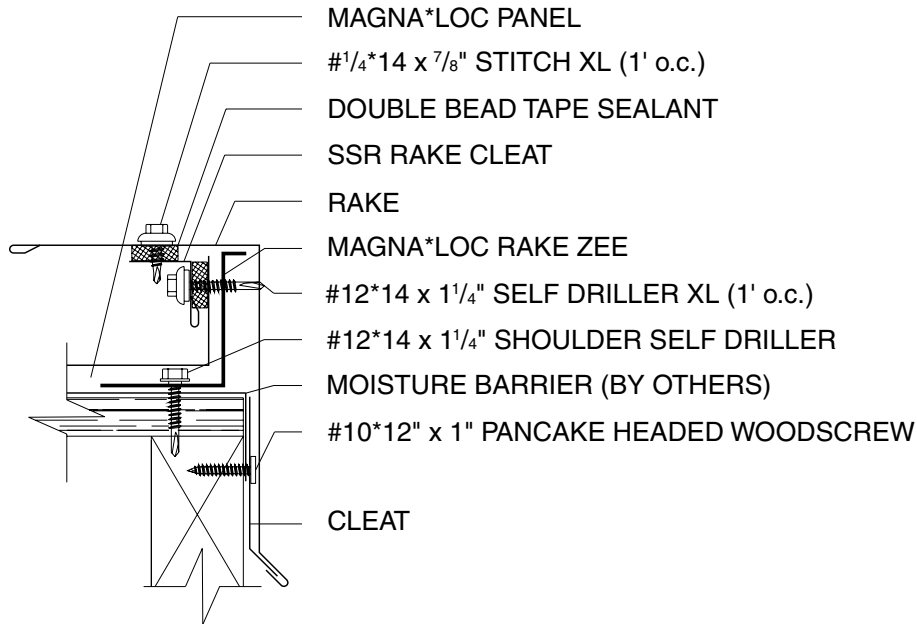


INSTALLATION NOTES

Magna*Loc Floating Rake Zee and Magna*Loc panels must be installed prior to rake installation (see pages 22*32).

1. Position and install Cleat to wall with appropriate fastener, 12" o.c. Make sure Cleat installation allows for proper Rake attachment.
2. Install SSR Rake Cleat over Double Bead Tape Sealant. Fasten through SSR Rake Cleat, Tape Sealant, panel, and into Floating Rake Zee with #12 14 x 1/4" Self Driller XL screws, 1' 0" o.c.
3. Apply a row of Double Bead Tape Sealant across top leg of SSR Rake Cleat.
4. Install SSR Rakewall so that top of flashing is flush with top of SSR Rake Cleat and panel rib. Fasten through SSR Rakewall, Tape Sealant, and into SSR Rake Cleat with #1/4 14 x 7/8" Stitch XL, 1' 0" o.c.
5. Install Counter Flashing, Reglet, or wall panel and fasten to parapet wall with appropriate fastener, 12" o.c. If Counter Flashing or Reglet is used, seal to parapet wall with Tube Sealant. Do NOT fasten SSR Rakewall to parapet wall.
6. If two or more flashings are required, lap the flashing over the previously installed flashing by a minimum of 2" placing a bead of Tube Sealant between the flashings and securing with Pop Rivets, 2.5" o.c.

**1/2:12 SLOPE
MINIMUM**

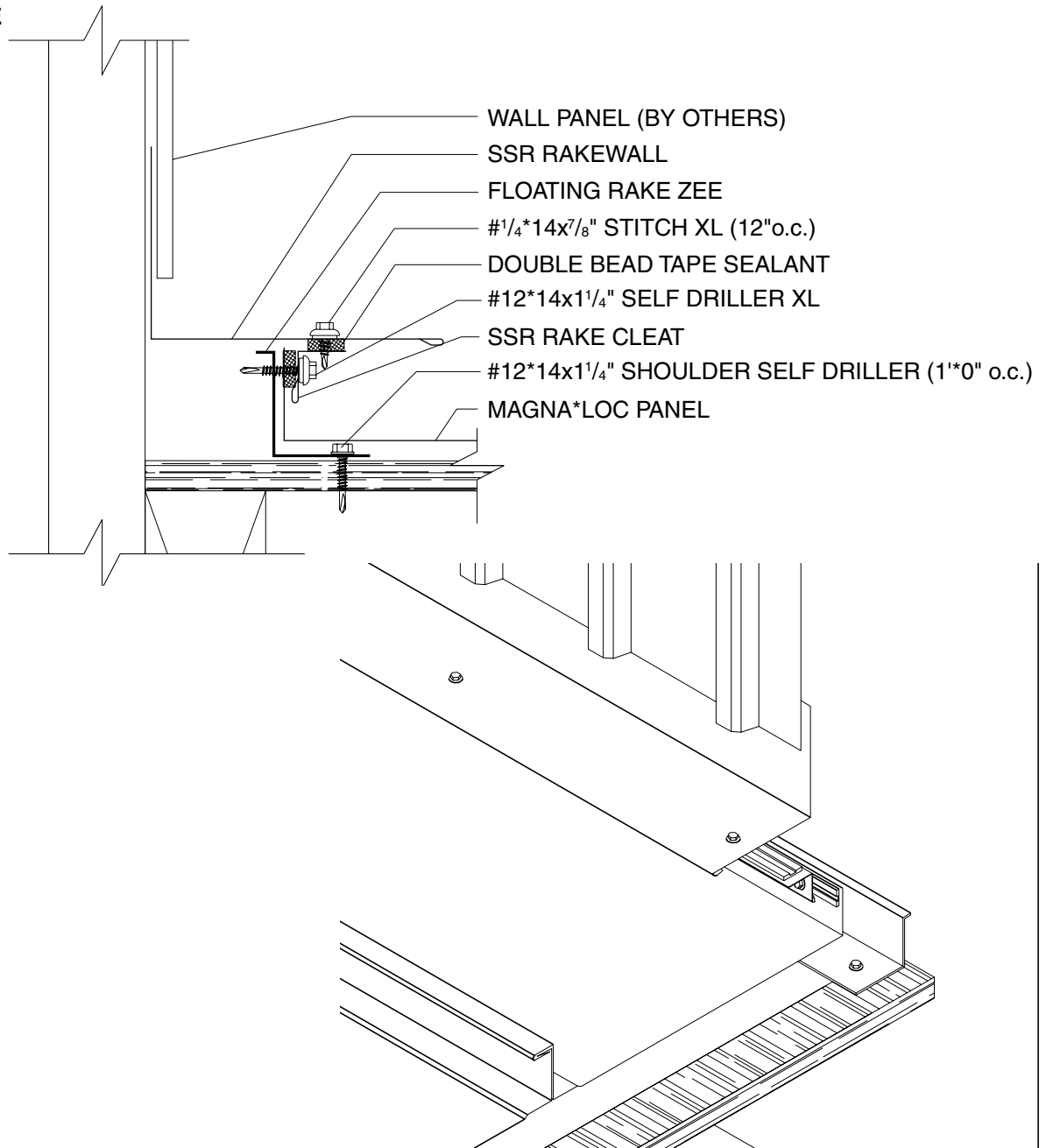


INSTALLATION NOTES

Magna*Loc Floating Rake Zee and Magna*Loc panels must be installed prior to rake installation (see pages 22*32).

1. Position and install Cleat to wall with appropriate fastener, 12" o.c. Make sure Cleat installation allows for proper Rake attachment.
2. With Magna Loc panel properly nested and fastened against Magna Loc Floating Rake Zee, apply a row of Double Bead Tape Sealant across top of panel rib.
3. Install Rake flashing by sliding open hem onto Cleat and resting the Rake flashing on top of panel rib. Fasten through Rake, Sealant, and into Floating Rake Zee with 1/4 14 x 7/8" Stitch XL, 12" o.c.
4. If two or more flashings are required, lap the flashing over the previously installed flashing by a minimum of 2" placing a bead of Tube Sealant between the flashings and securing with Pop Rivets 2.5" o.c.

1/2:12 SLOPE
MINIMUM



INSTALLATION NOTES

Magna*Loc Floating Rake Zee and Magna*Loc Panels must be installed prior to Rakewall installation (See pages 22*32).

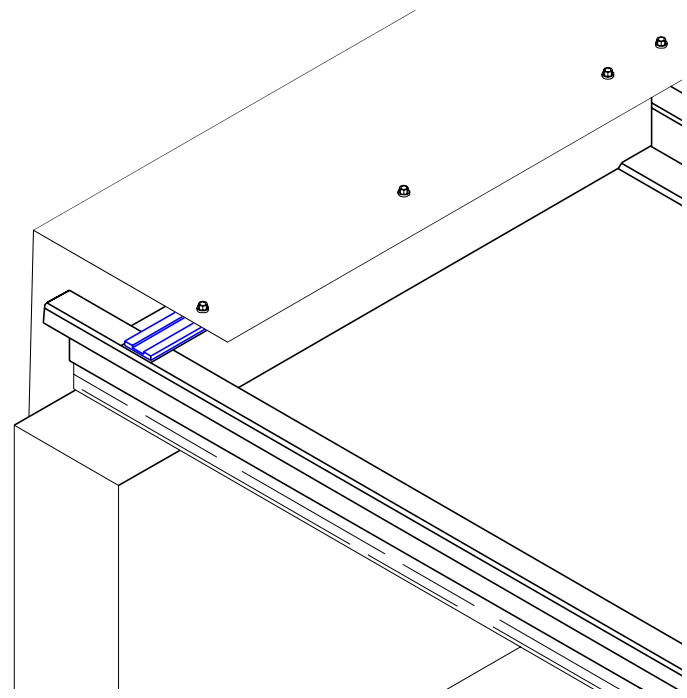
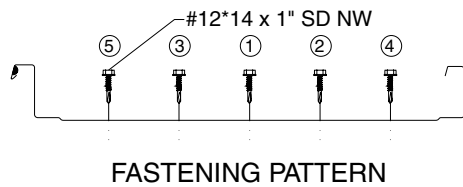
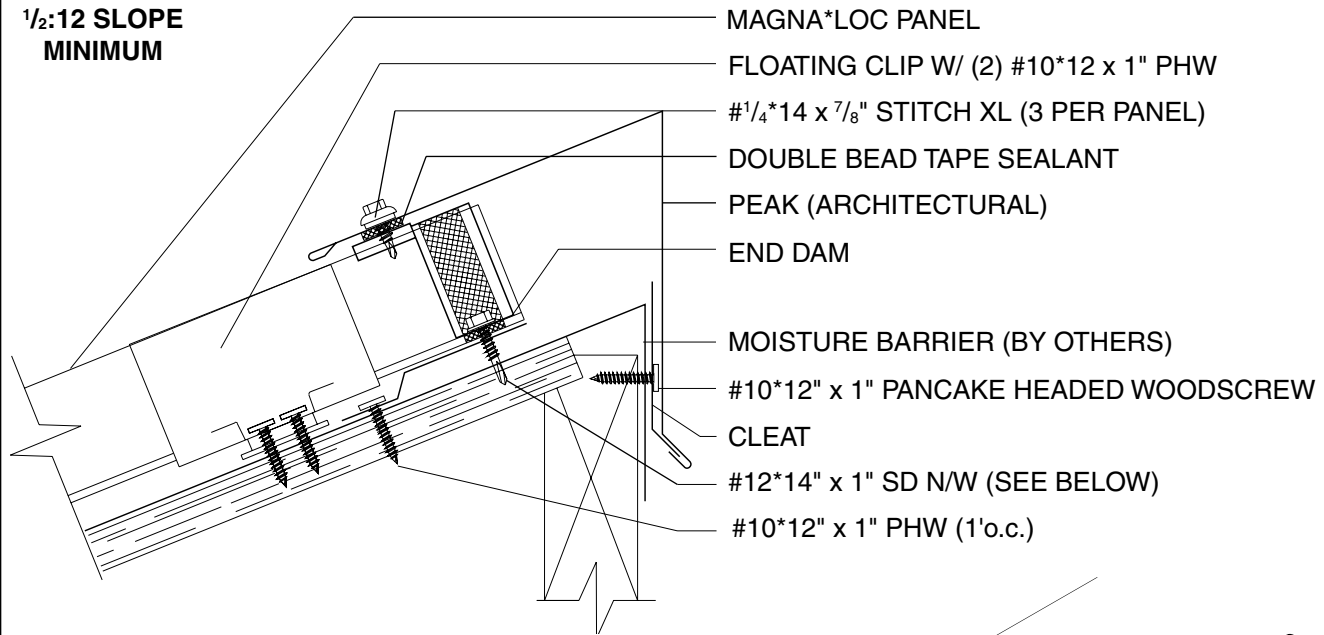
1. With Magna Loc panel nested against Magna Loc Floating Rake Zee, apply a row of Double Bead Tape Sealant across upper side of field bent panel rib. (See page 30 for proper bending of panel.)
2. Install SSR Rake Cleat over Double Bead Tape Sealant. Fasten through SSR Rake Cleat, Tape Sealant, panel, and into Floating Rake Zee with #12 14 x 1 1/4" Self Driller XL screws, 1' 0" o.c.
3. Apply a row of Double Bead Tape Sealant across top leg of SSR Rake Cleat.
4. Install SSR Rakewall so that top of flashing is flush with top of SSR Rake Cleat and panel rib. Fasten through SSR Rakewall, Tape Sealant, and into SSR Rake Cleat with #1/4 14 x 7/8" Stitch XL, 1' 0" o.c.
5. Install Counter Flashing, Reglet, or wall panel and fasten to parapet wall with appropriate fastener, 12" o.c. If Counter Flashing or Reglet is used, seal to parapet wall with tube sealant. Do NOT fasten SSR Rakewall to parapet wall.
6. If two or more flashings are required, lap the flashing over the previously installed flashing by a minimum of 2" placing a bead of Tube Sealant between the flashings and securing with Pop Rivets, 2.5" o.c.

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**1/2:12 SLOPE
MINIMUM**



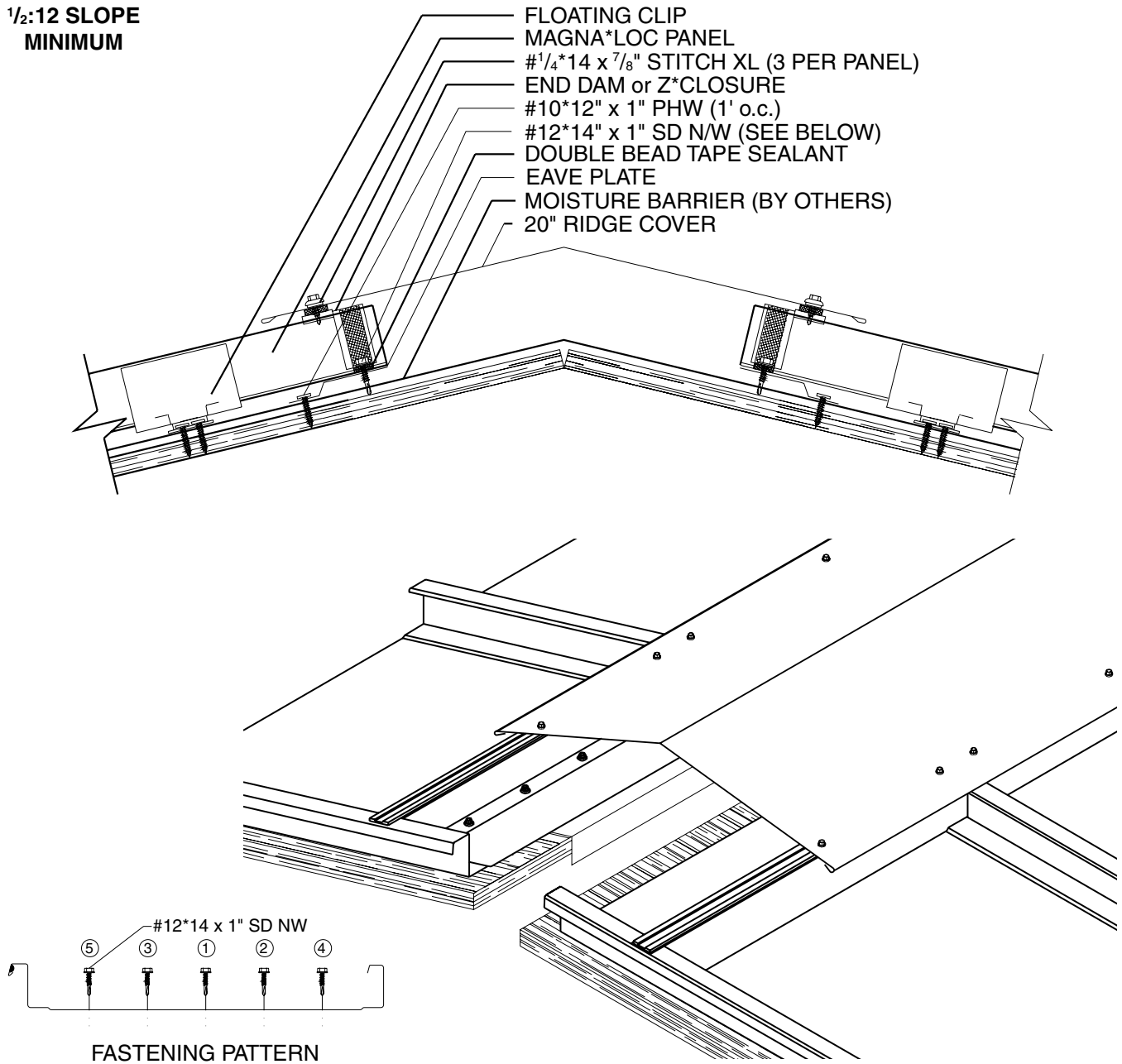
INSTALLATION NOTES

Magna*Loc Eave Plate and Magna*Loc panels must be installed prior to peak installation (see page 23).

1. Once panels have been installed and properly sealed, (see page 24) apply a row of Double Bead Tape Sealant across panel, up and over all ribs approximately 2" - 4" from panel end.
2. Install Magna Loc End Dams over Tape Sealant. Before continuing make sure End Dam placement will accommodate Peak Flashing.
3. Once closure is set in Tape Sealant, fasten through End Dam, Tape Sealant, Magna Loc panel, and into Eave Plate with (5) #12 14x1" SD N/W per panel.
4. Once all End Dams have been installed, place a row of Double Bead Tape Sealant across top of End Dams. Tube sealant must be used to fill any and all gaps left around End Dams.
5. Position and install Cleat to wall with appropriate fastener, 12" o.c. Make sure Cleat allows for proper Peak attachment.
6. Install Peak flashing by sliding open hem onto Cleat and resting the Peak flashing back over End Dams. Secure to top leg of End Dams with #1/4 14 x 7/8" Stitch XL at the spacing shown above.
7. If two or more flashings are required, lap the flashing over the previously installed flashing by a minimum of 2" placing a bead of Tube Sealant between the flashings and securing with Pop Rivets, 2.5" o.c.

MAGNA*LOC 20" RIDGE/HIP COVER (WITH ENDDAM (FIXED) OVER DECKING)

1/2:12 SLOPE
MINIMUM



INSTALLATION NOTES

Magna*Loc Eave Plate and Magna*Loc panels must be installed prior to Ridge/Hip installation (see pages 22*32).

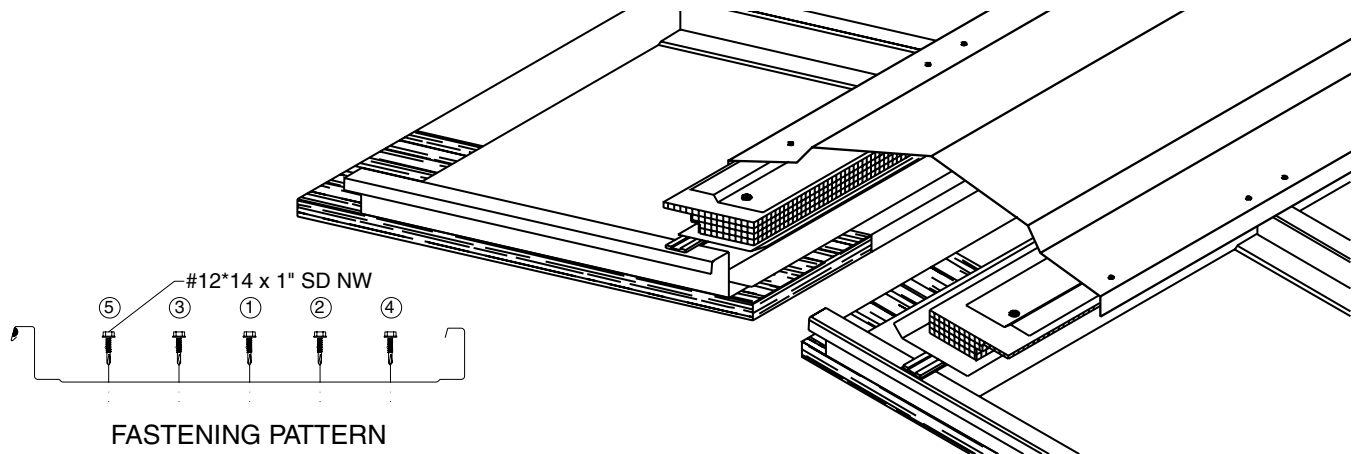
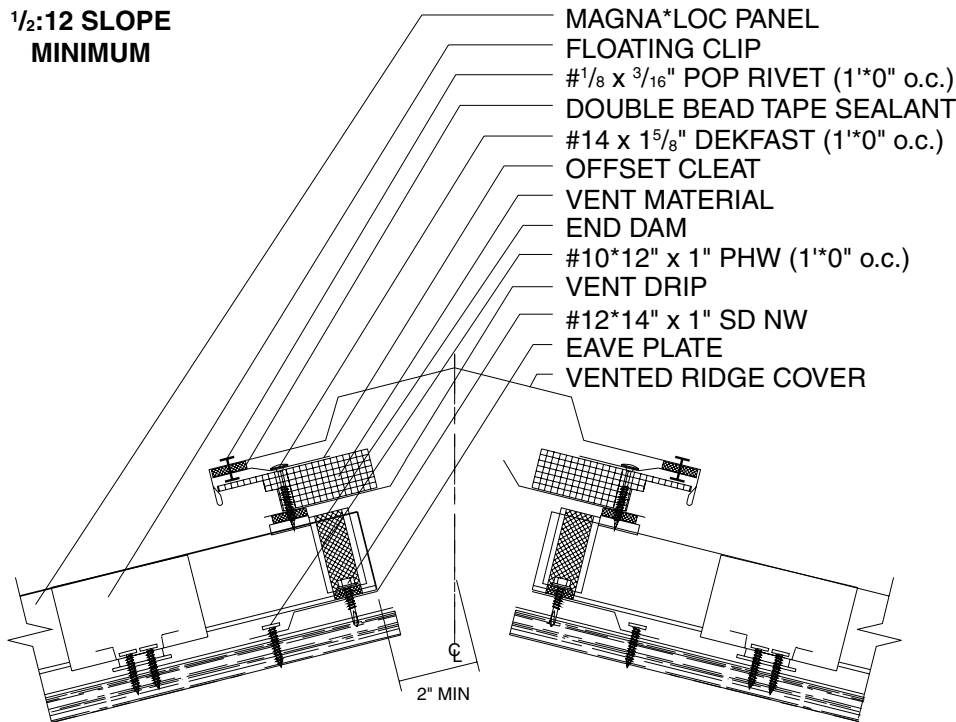
1. Once panels have been installed and properly sealed, (see page 24) apply a row of Double Bead Tape Sealant across panel, up and over all ribs approximately 2" - 4" from panel end on both sides of ridge/hip.
2. For a ridge, install Magna Loc End Dams over Tape Sealant. For a hip, install a field cut Z closure over Tape Sealant (see page 58 for preparing Z Closures). Before continuing make sure End Dam placement will accommodate 20" Ridge/Hip Cover.
3. Once Closure is set in Tape Sealant, fasten through End Dam, Tape Sealant, Magna Loc panel, and into Eave Plate with (5) #12 14 x 1" SD N/W per panel.
4. Once all End Dams have been installed, place a row of Double Bead Tape Sealant across top of End Dams on both sides of ridge/hip. Tube Sealant must be used to fill any and all gaps left around End Dams.
5. Install 20" Ridge/Hip flashing and secure to top leg of End Dams with #1/4 14 x 7/8" Stitch XL at the spacing shown above.
6. If two or more flashings are required, lap the flashing over the previously installed flashing by a minimum of 2" placing a bead of Tube Sealant between the flashings and securing with Pop Rivets 2.5" o.c.

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**1/2:12 SLOPE
MINIMUM**



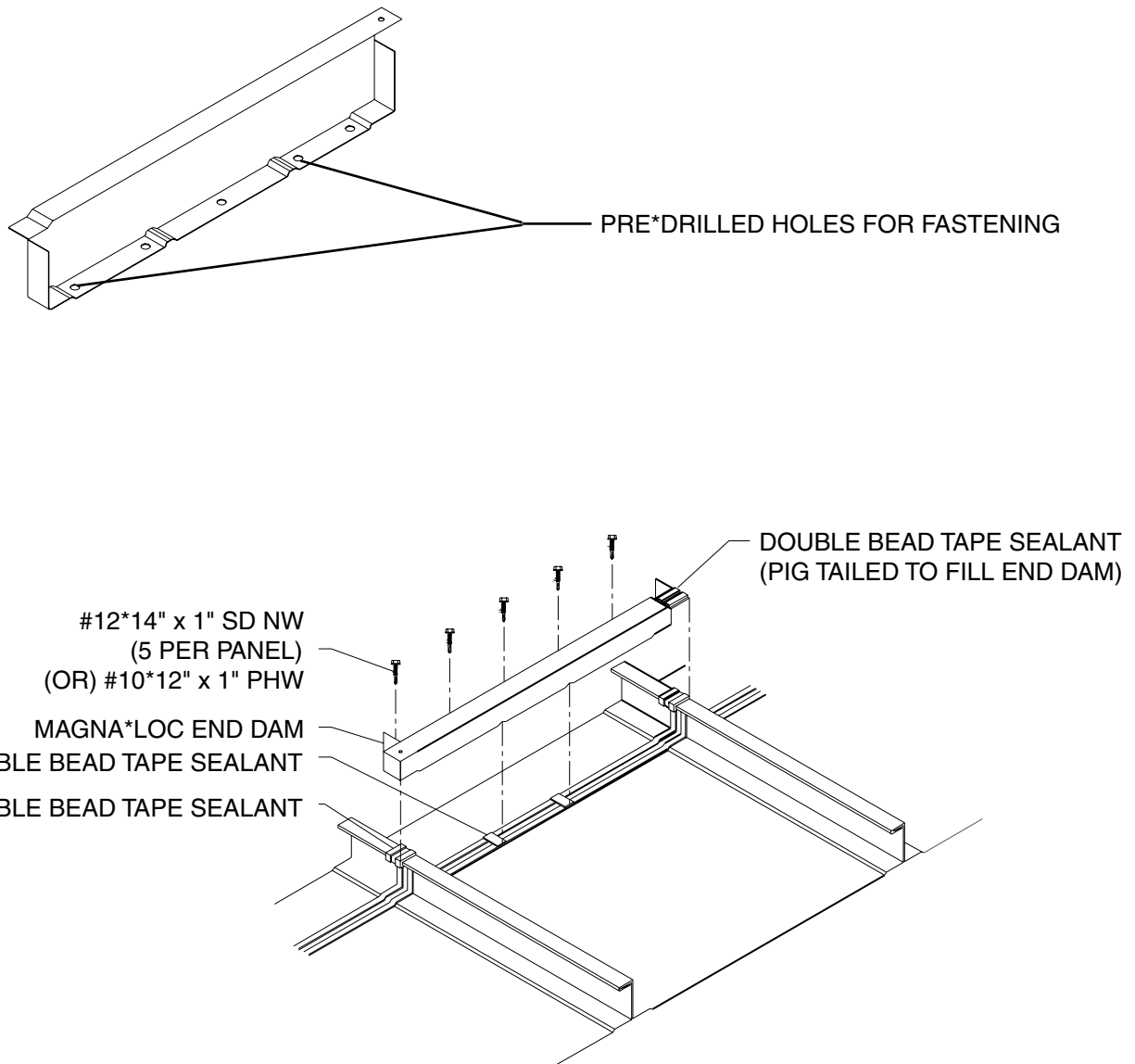
FASTENING PATTERN

INSTALLATION NOTES

Magna*Loc Eave Plate and Magna*Loc panels must be installed prior to Vented Ridge installation (see pages 22*32).

1. Once panels have been installed, slide Back Up Channel under upper edge of panels. Position Back Up Channel to allow for proper installation of vented ridge assembly. Use C clamps to hold Back Up Channel in place.
2. Apply a row of Double Bead Tape Sealant across panel, up and over all ribs approximately 0" - 2" from panel end on both sides of ridge.
3. Install Magna Loc End Dams over Tape Sealant. Before continuing make sure End Dam placement will accommodate Vented Ridge Cover.
4. Once closure is set in Tape Sealant, fasten through End Dam, Tape Sealant, Magna Loc panel, and into Back Up Channel with (5) #12 14 x 1" SD N/W per panel. C clamps may be removed once Closures have been fastened.
5. Once all End Dams have been installed, place a row of Double Bead Tape Sealant across top of End Dams on both sides of ridge. Tube Sealant must be used to fill any and all gaps left around End Dams.
6. Install Vent Drip, Vent Material, and Offset Cleat (in order) and fasten to top leg of End Dam with #14 Dekfasts at 1' 0"o.c.
7. Apply a row of Double Bead Tape Sealant across outer leg of Offset Cleat.
8. Install Vented Ridge Cover and secure to outer leg of Offset Cleat with Pop Rivets at 1' 0"o.c.
9. If two or more flashings are required, lap the flashing over the previously installed flashing by a minimum of 2" placing a bead of Tube Sealant between the flashings and securing with Pop Rivets, 2.5"o.c.

MAGNA*LOC INSTALLATION OF END DAM



*(PIG TAILED TO FILL PENCIL RIBS IN END DAM)

INSTALLATION NOTES

Note: The End Dam is used to close off the high end of the panel on applications over open framing. Before installation of End Dam can begin, all roof panels must be seamed. (See seaming panels on pages 31 and 32 for proper seaming instructions.)

Steps:

1. Apply Double Bead Tape Sealant down the female leg. across the panel and up the male leg 2" from the end of the panel.
2. Place the End Dam on Double Bead Tape Sealant making sure the punched lower leg is towards the ridge. The punched lower leg should be 2" from the end of the panel.
3. Slide a Back Up Channel under the end of the panel and center 2" from the edge of the panel so that the rake end of the Back Up Channel rests on the rake.
4. Fasten the End Dam with five (5) #12 14 x 1" SD NW screws. Fasteners must penetrate the End Dam, sealant, panel, and Back Up Channel.
5. Apply a continuous $\frac{3}{8}$ " diameter bead of Tube Sealant (if necessary) where the End Dams meet the panel seams.

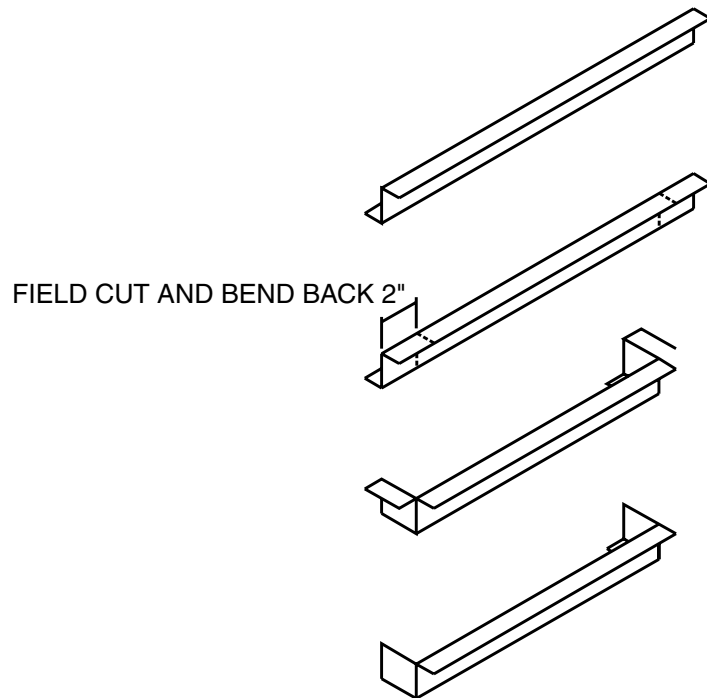
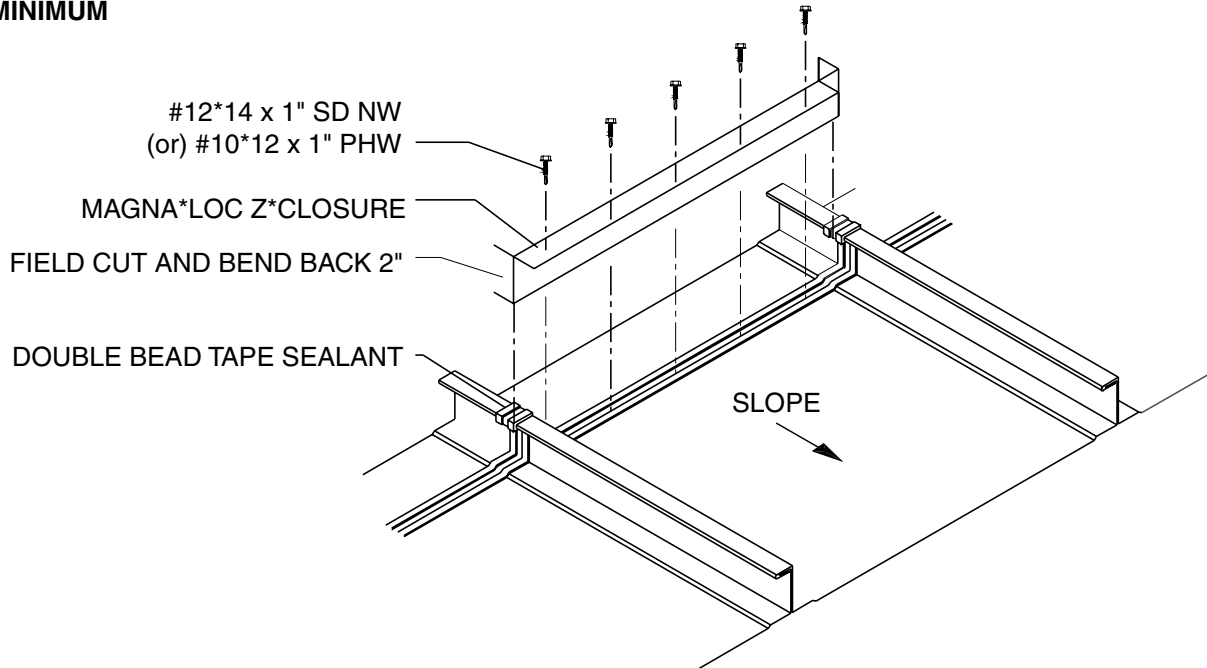
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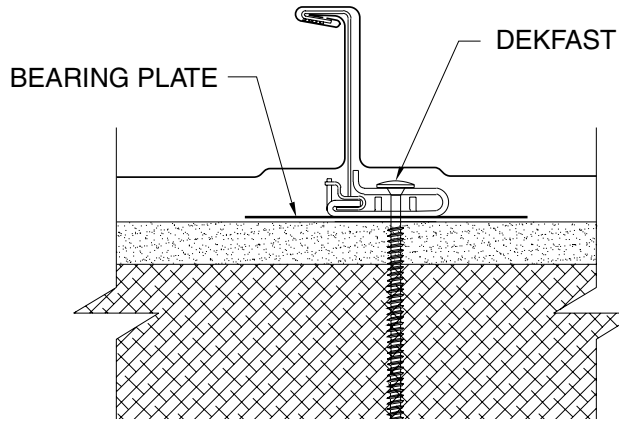
MAGNA*LOC Z*CLOSURE INSTALLATION

3:12 SLOPE
MINIMUM

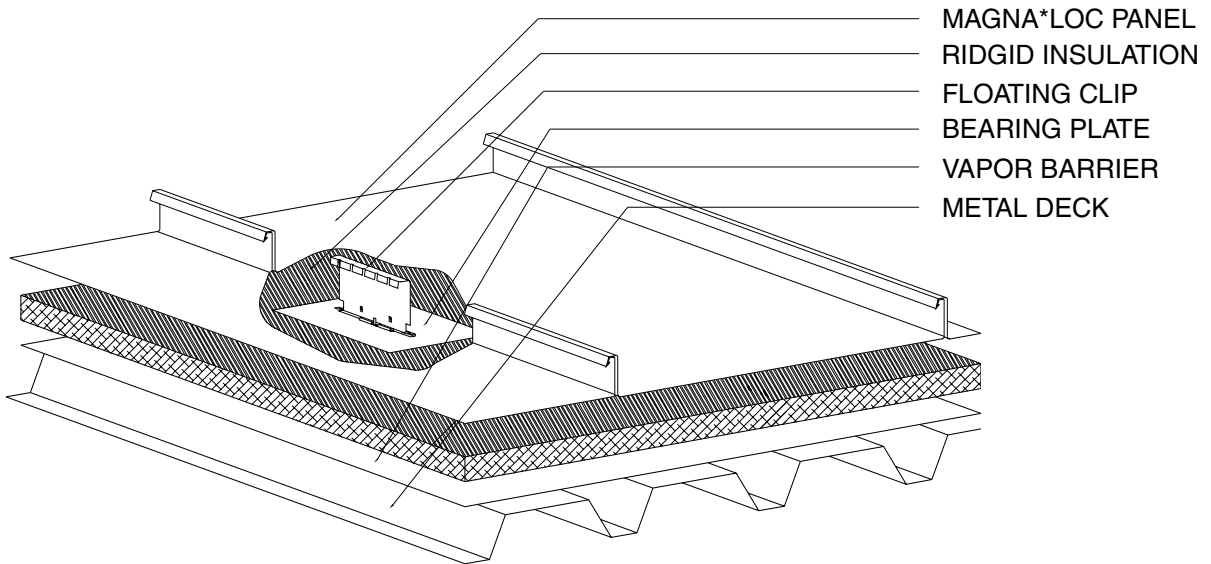


INSTALLATION NOTES

1. Place a row of Double Bead Tape Sealant across panel and over each rib approximately 4" from panel end. Before proceeding, make sure Z Closure placement will accommodate flashing.
2. Field cut the Z Closure 4" longer than the panel width. Snip the top and bottom leg of the Z Closure and bend both sides back (as shown above).
3. Fasten through the Z Closure, Tape Sealant, Magna Loc panel, and substrate with appropriate fasteners.
Note: For Open Framing, the substrate will be the Back*Up Channel shown in the details.
4. Apply a row of Double Bead Tape Sealant across the top of the Z Closure filling any gaps or openings around the panel ribs. This will be fastened through when the flashing is installed.



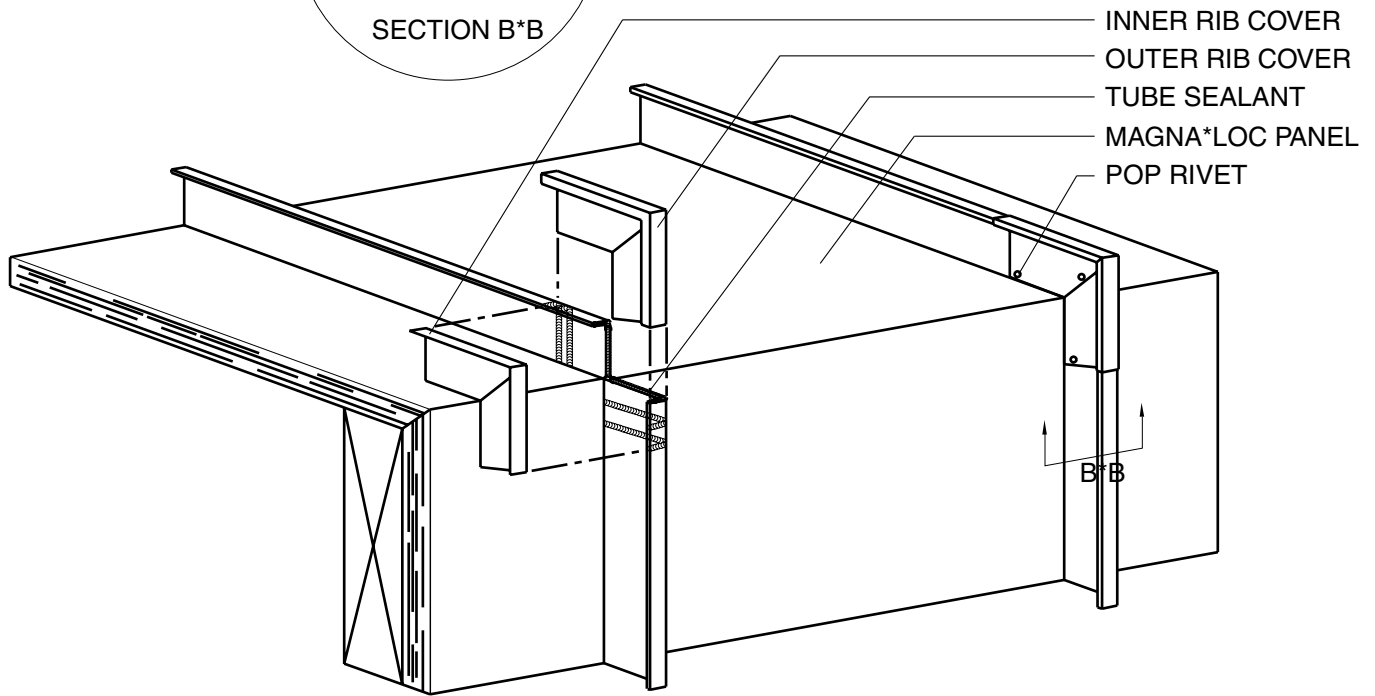
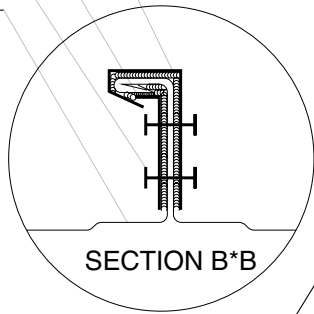
FLOATING SYSTEM WITH BEARING PLATE



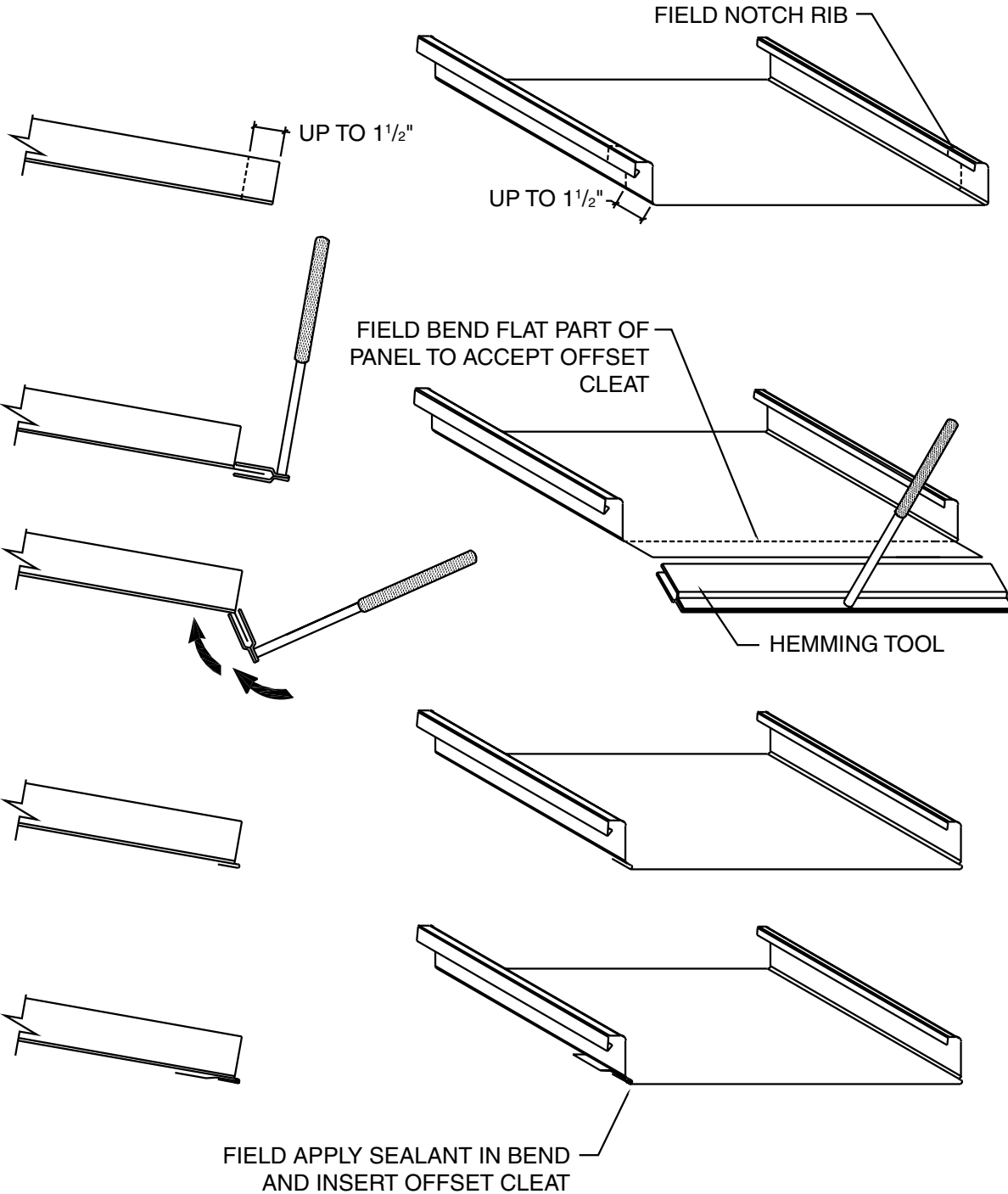
**FLOATING SYSTEM WITH BEARING PLATE
*ISOMETRIC***

MAGNA*LOC TRANSITION DETAIL

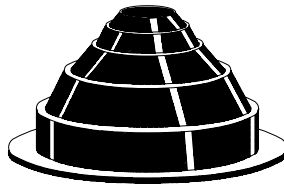
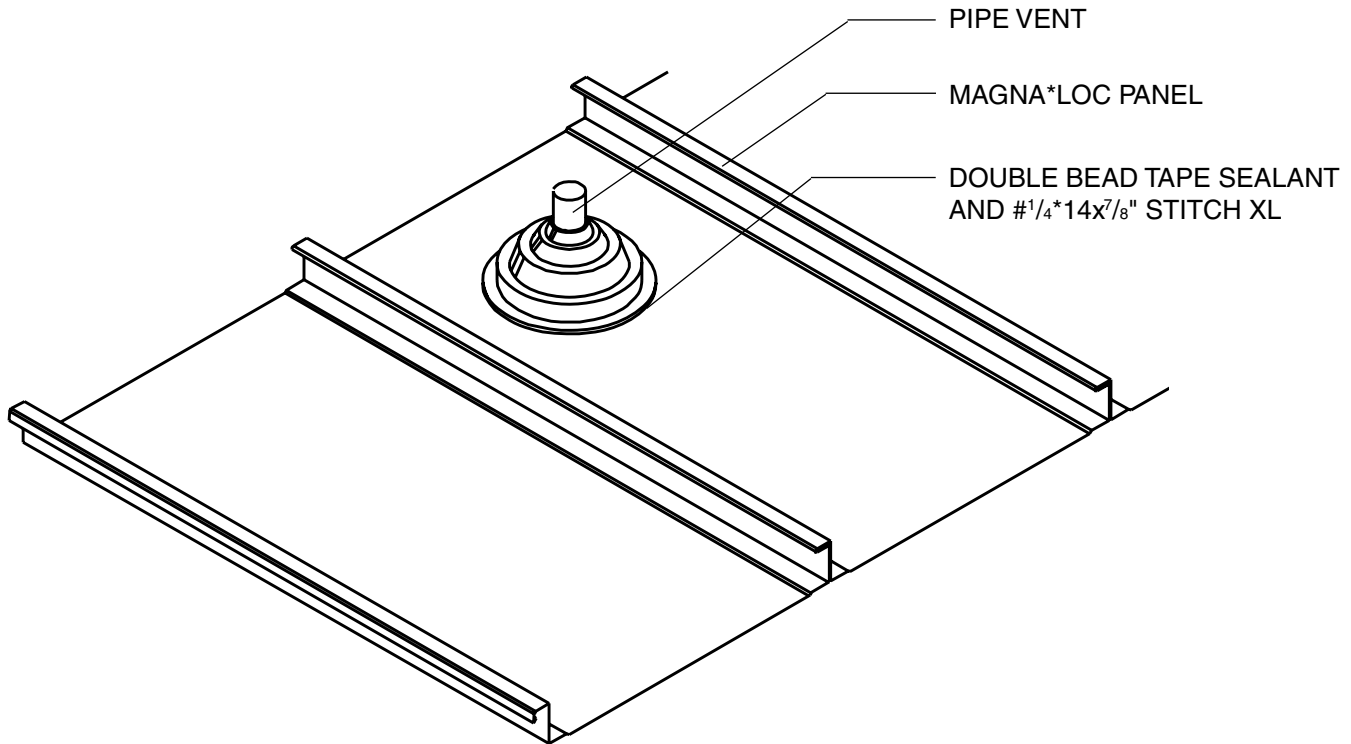
OUTER RIB COVER
INNER RIB COVER
POP RIVET
MAGNA*LOC PANEL



MAGNA*LOC HEMMING DETAIL



MAGNA*LOC ROOF PENETRATION



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)

TEMP RANGE: *30° to +250°

GENERAL NOTES

Size and location of all roof penetrations should be an important consideration. Areas around roof vents or rooftop units may show that corrosive fumes are emitted from a process within the building.

INSTALLATION NOTES

NOTE: The following procedures are for vent pipes 6" or less and not transmitting extremely hot or caustic materials. When installing vent pipes abide by the local plumbing codes.

1. Determine the size and length of the vent pipe to be raised.
2. Take the appropriate measurements for the vent location and mark them on the Magna Loc panel. The vent pipe must extend through the flat of the roof panel. If the vent pipe extension cannot be raised directly into the flat of the new roof panel, elbows should be used to offset the pipe. Cut the panel to fit the vent pipe properly.
3. Use a light gauge angle to secure and plumb the vent pipe to the framing system.
4. Flash the vent pipe with a Rubber Roof Jack or similar pipe flashing.
5. Apply Tube Sealant between the panel and the base of the Rubber Roof Jack as well as the top where the boot meets the pipe.
6. Attach the base of the Rubber Roof Jack to the panel using #1/4 14 x 7/8" Stitch XL fasteners.

MAGNA*LOC CARE AND MAINTENANCE

Though factory applied prepainted finishes are very durable and will last many years, eventually it may be desirable to thoroughly clean or repaint them.

Dirt pickup may cause apparent discoloration of the paint when it has been exposed in some dirt laded atmospheres for long periods of time. In areas of strong sunlight, slight chalking may cause some change in appearance. A good cleaning will often restore the appearance of these buildings and render repainting unnecessary. An occasional light cleaning will help maintain a good appearance.

In many cases, simply washing the building with plain water using a hose or pressure sprayer will be adequate. In areas where heavy dirt deposits dull the surface, a cloth or soft bristle brush and solution of water and detergent ($\frac{1}{3}$ cup of laundry detergent per gallon of water for example) may be used. This should be followed by an adequate rinse of water. Do not use wire brushes, abrasives, or cleaning tools which will abrade the coating surface.

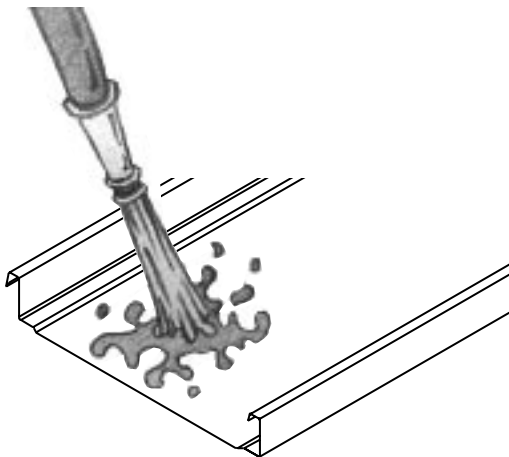
Mildew may occur in areas subject to high humidity but is not normally a problem due to the high inherent mildew resistance of the baked finish that is used. However, mildew can grow on dirt and spore deposits in some cases. To remove mildew along with the dirt, the following solution is recommended.

- $\frac{1}{3}$ cup detergent (Tide® or equivalent)
- $\frac{2}{3}$ cup trisodium phosphate (Solex® or equivalent)
- 1 quart of 5% sodium hypochlorite solution (Clorox® or equivalent)
- 3 quarts of water

Strong solvents and abrasive type cleaners should be avoided. Most organic solvents are flammable and toxic, and must be handled accordingly. When using a solvent, consult maintenance professionals and label instructions for proper handling and disposal of washings. If required, a mild solvent such as mineral spirits can be used to remove caulking compounds, oil, grease, tars, wax, and similar substances. Use a cloth dampened with mineral spirits and apply only to areas which are contaminated. Follow up the use of this mild solvent with detergent cleaning and rinsing.



**DO NOT USE A
WIRE BRUSH**



**HOSE OR PRESSURE SPRAY
FOR ADEQUATE CLEANING**



**USE MILD DETERGENT AND WATER
FOR HEAVY DIRT DEPOSITS**



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