

V A R C O P R U D E N B U I L D I N G S

SSR Roof Installation



The Field Guide for correctly storing and installing a
VP Buildings Standing Seam Roof System



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PREFACE

All materials, components and accessories sold to Builders are provided subject to written agreements signed by VP Buildings. Any applicable warranties are as set forth in those written agreements. Except as provided in those written agreements, **VP BUILDINGS MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.**

This Installation Guide is intended to provide VP Builders and/or their erectors with the recommended procedures for constructing VP Buildings as efficiently as possible. However, VP Buildings does not guarantee and is not liable for the quality of erection nor assume any responsibility for building defects that may be attributed to improper erection techniques, or the negligence of other parties.

VP Buildings are designed for versatility, simplicity, and economy. When assembled according to plans and instructions they give superior performance to satisfied customers.

The SSR ROOF is covered by the following patents:

UNITED STATES	CANADA
4.193.247	1.090.524
4.213.282	1.090.525
4.224.775	1.090.980
4.296.581	1.131.871
4.420.913	1.192.369
4.467.586	
4.651.489	
4.802.316	

THIS GUIDE IS A SUPPLEMENT TO THE VP BUILDINGS BASIC ERECTION GUIDE

The recommended construction procedures in this manual are an integral part of the SSR roof system design. Use with VP Buildings Erection Drawings, Standard Erection Details, and Shipping Part List to identify the SSR materials, insulation requirements and dimensions for each building.

REVIEW, STUDY, AND UNDERSTAND THESE DOCUMENTS BEFORE INSTALLING THE SSR ROOF SYSTEM. **Call your Engineering Service Center with any questions before proceeding.**

KEY SSR PROCEDURES

SSR WORK POINTS:

Carefully establish all work points prior to installing the SSR roof system. The eave and starting rake work points are of particular importance as they set the location of endlaps, ridge, roof accessories, etc.

SSR MODULE (CRITICAL):

Hold the correct SSR panel module of 2'-0" (610mm) during installation of the SSR roof system. Accurate and proper installation of endlaps, ridge, roof accessories, high and low eave conditions, etc., are only possible when the 2'-0" (610mm) SSR panel module is held. The SSR Seamer tool will operate at best speed, with least maintenance and provide the best possible seams and panel condition when the 2'-0" (610mm) SSR panel module is held. Modularity must be maintained to a tolerance of $\pm 1/8$ " Rib to Rib; not to exceed $\pm 1/4$ " in any 10ft.

SSR CLEANING:

Clean all mating surfaces prior to application of weatherproofing materials. Tape mastics and tube sealants only adhere properly to clean, dry surfaces. REMOVE oil, grease, dust, dirt, mud, rain, dew, frost, snow or ice from all surfaces that contact tape mastics and tube sealants applied during weatherproofing procedures.

Some surfaces included are endlaps, ridge and rake assemblies, eave conditions, height changes and roof accessories.

Check and clean the male and female halves of the SSR seam before assembly.

SSR SEAMING:

The seaming operation joins the individual SSR panels to form the structural and protective SSR roof membranes.

REQUIRED before seamer tool is removed from box:

- SSR panels are installed properly on module;
- Endlaps correctly formed;
- Under seam weather seals are in place;
- Seams checked and properly engaged;
- Seams are clean;
- Seaming instructions studied and understood;

Correct seaming procedures are shown in the "SSR Seamer Tool-Field Manual".

ONLY by following these procedures will it be possible to properly complete installation of the SSR roof panels.

INSULATION:

To prevent damaged insulation do not install faced fiberglass insulation below its minimum recommended installation temperature. Each facing type has a different minimum recommended installation temperature. Therefore, contact the insulation supplier for installation temperatures.

RECEIVING SHIPMENT

When fabrication is complete, shipment is made to the building site. The panels are carefully bundled and inspected to prevent damage during transportation. The transportation company is responsible for delivering these components undamaged.

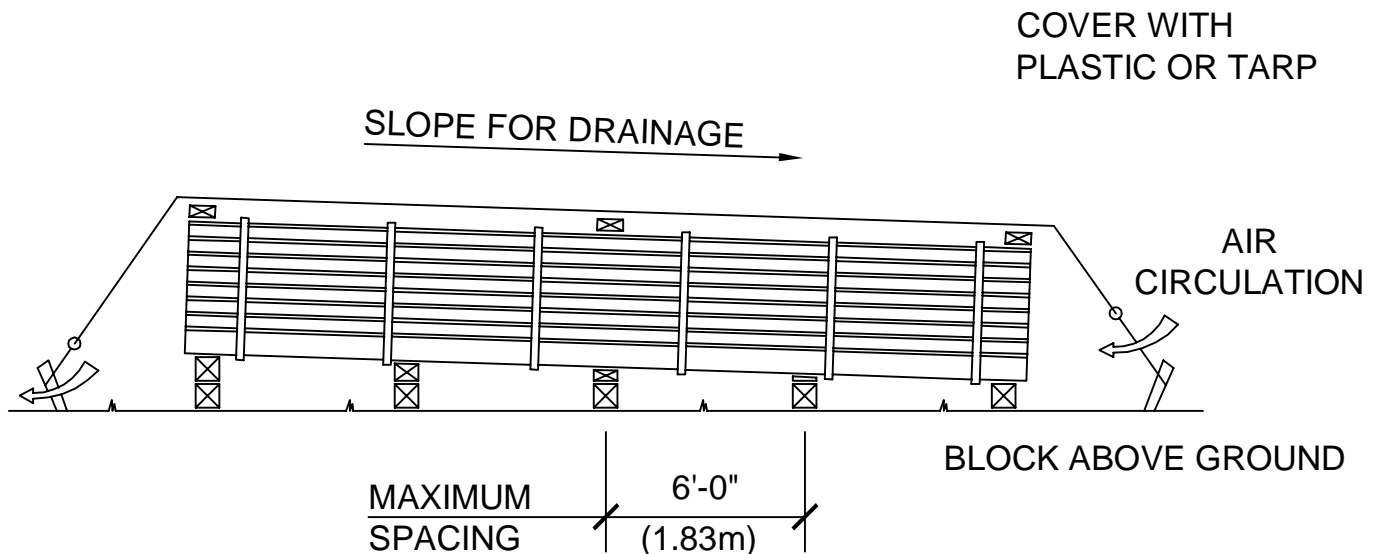
When the shipment is received check each item against the proper shipping document. If a shortage is discovered, have the transportation agent make a notation to the effect on your bill.

Examine your shipment carefully for damage. If damage is found be sure the agent makes a damage notation on the bill before accepting it.

If damage is concealed until packaging is removed, call your agent at once for an inspection and obtain an inspection memorandum covering concealed damage.

ON SITE STORAGE

SSR roof panels shall be stored on the job site following the listed recommendations for on site protection of the panels



Note: Bundles received wet must be dried prior to storage to prevent corrosion or paint damage.

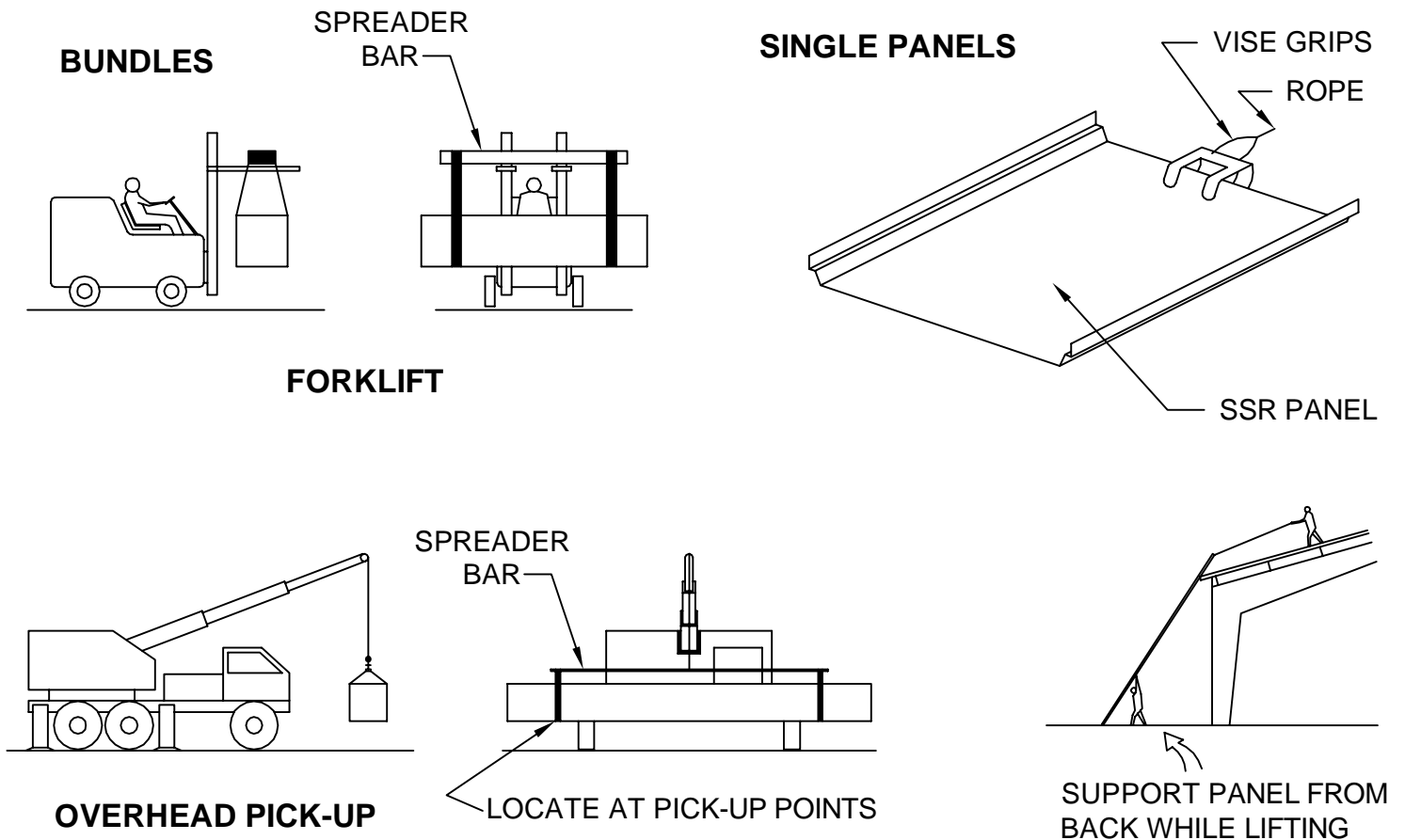
1. Block above ground to keep out water
2. Slope bundles for drainage.
3. Cover with a tarp or plastic to protect from rain or snow.
4. Tie down cover ends away from stack to permit free air movement - do not wrap under or restrict air movement.

HANDLING SSR PANELS

1. SSR Panels are packaged in banded bundles of approximately 22-27 panels per bundle.
2. The banded bundles are quite rigid, but it is recommended that a spreader bar be used when moving bundles by forklift or crane. (See Below)
3. Nylon slings at quarter points should be used to prevent damage. Note: The bottom panel in a bundle is intended to be used and is not a "scrap" sheet. Check for damage when unloading from the truck.
4. Care is required when cutting the bands as the bundles will spring open when tension is released.
5. Single sheets are best carried "on edge" to prevent buckling. Sheets carried "flat" should have one man per 15' (4.57m) of sheet.
6. Galvalume panels may have a protective coating of oil and painted panels may have a wax film. Extreme caution is necessary when walking on the panels to prevent falling during and immediately after erection. These coatings will dissipate upon exposure to the weather.

HANDLING METHODS

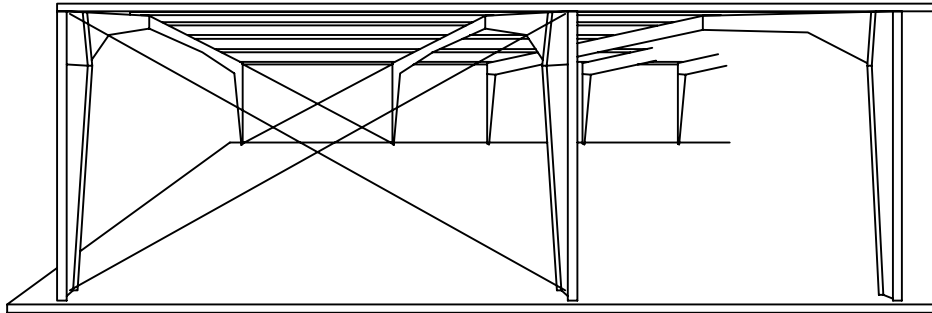
Shown are some suggested methods of handling SSR panels.



PRELIMINARY ERECTION INFORMATION

IMPORTANT

It is extremely important that the building and especially the roof plane be plumb and square before starting the SSR roof system installation. If the building is not square it will be impossible to maintain clip and panel seam alignment.

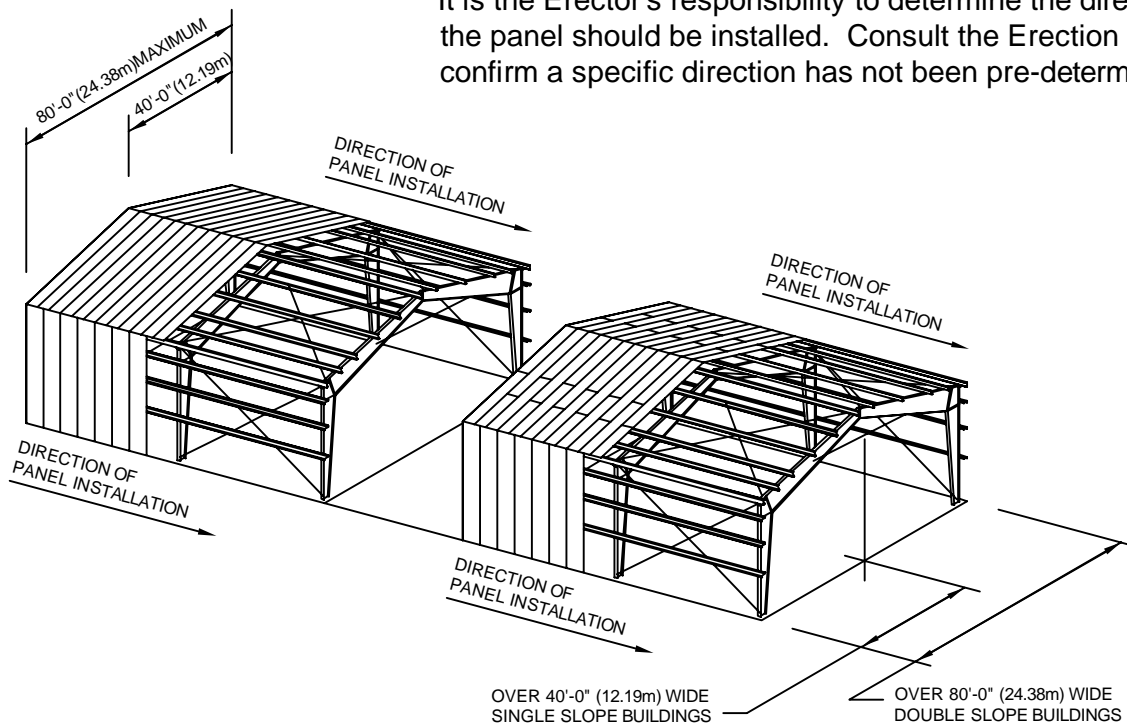


DIRECTION OF PANEL ERECTION

The design of the SSR roof system allows the panel to be erected in either direction, left or right, or left to right. (Refer to the Erection Drawings if VP Buildings requires a specific erection sequence due to certain job conditions).

Panel Direction Note:

Panels shown on Front Roof as LEFT to RIGHT panel direction.
Panel shown on Back Roof as RIGHT to LEFT panel direction.
It is the Erector's responsibility to determine the direction that the panel should be installed. Consult the Erection Drawings to confirm a specific direction has not been pre-determined.



NOTE:

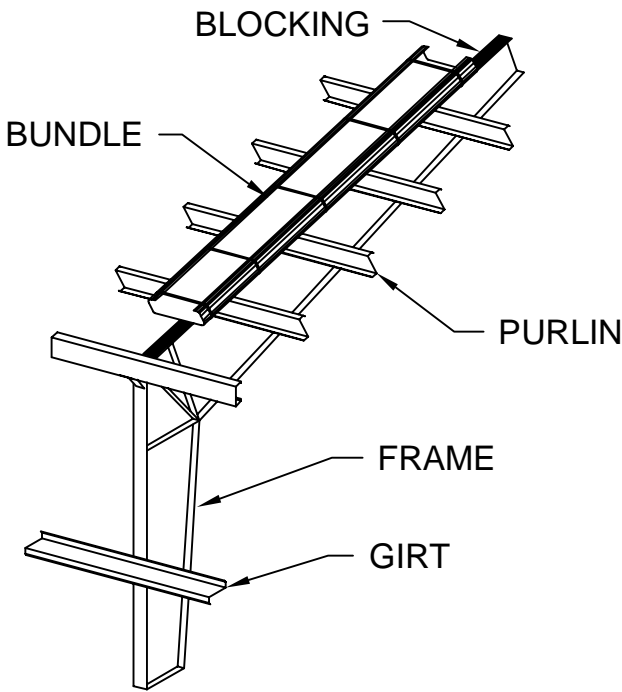
The Erector has the choice of direction of panel installation, with the exception of special conditions. Some buildings require a specific panel installation direction, thus the Erection Drawings should govern.

PURLIN BLOCKING

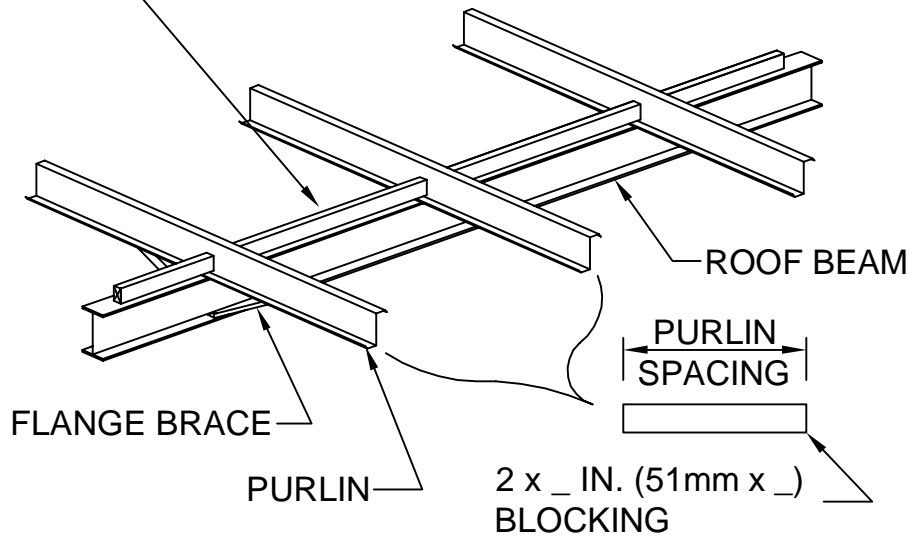
IMPORTANT - READ THIS

Roof panel bundles are often located on roof structures prior to installation. This procedure can cause damage if the bundles are located over unsupported areas. If the bundles are to be located on the roof structure, the following "blocking" procedure must be adhered to:

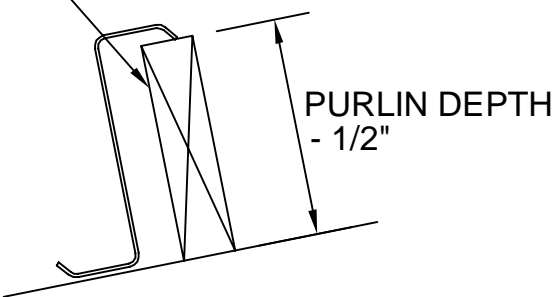
1. All structurals, flange bracing, rod bracing and sag angles must be in place, plumb, and bolts tightened before blocking is installed and panel bundles are placed on the roof.



BLOCKING MUST BE 2 x _ (51MM X _) IN SIZE TO PROVIDE THE RESTRAINT REQUIRED



2 x 4 (51mm x 102mm) BLOCKING LOCATED UNDER LIP OF PURLIN

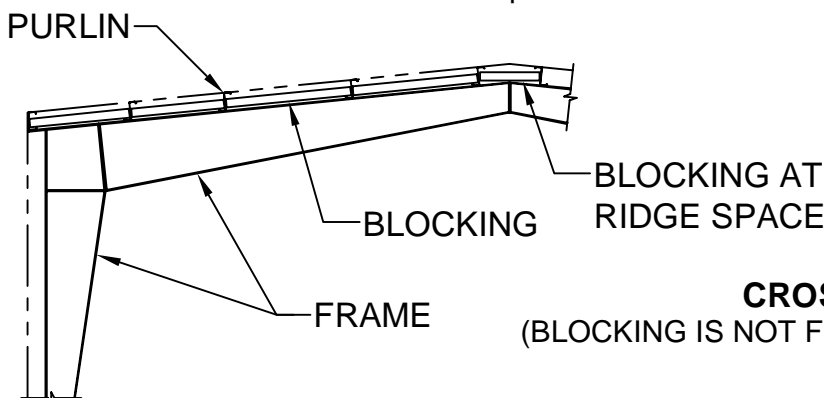


ALTERNATE

BLOCKING METHOD

NOTE: DO NOT LEAVE UNBUNDLED PANELS UNATTENDED FOR EXTENDED PERIODS. SECURE LOOSE PANELS OVERNIGHT.

2. Panel bundle should only be located over the frames. Panel bundle should not be located over jack beams or jack trusses.
3. Blocking should be installed between all purlins at the frames where bundles are to be located. Length of blocking should equal purlin spacing.
4. Remove blocking after panels are installed.
5. When the alternate blocking method is used, the same procedures must be followed.

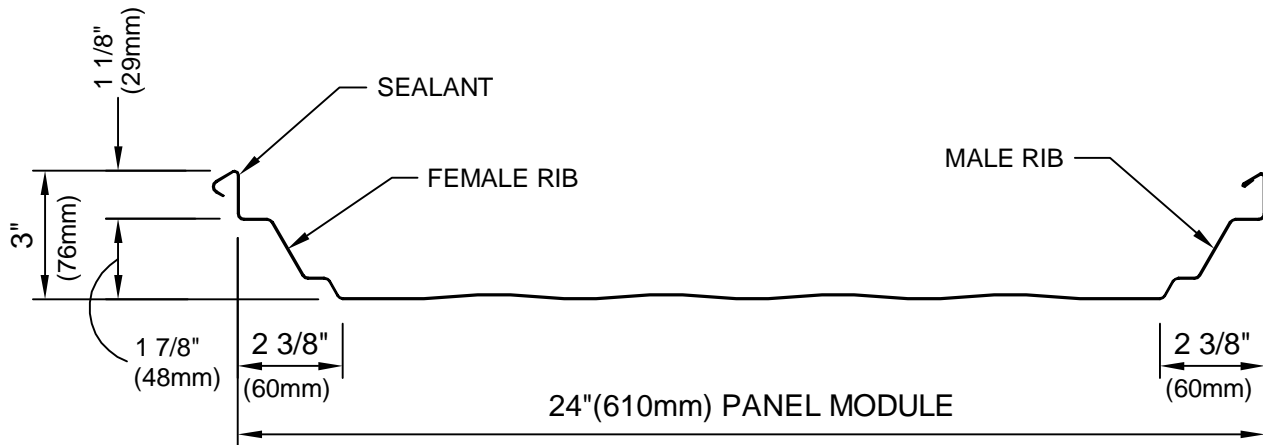


CROSS SECTION

(BLOCKING IS NOT FURNISHED BY VP BUILDINGS)

STANDING SEAM ROOF SYSTEM

PANEL DESCRIPTION



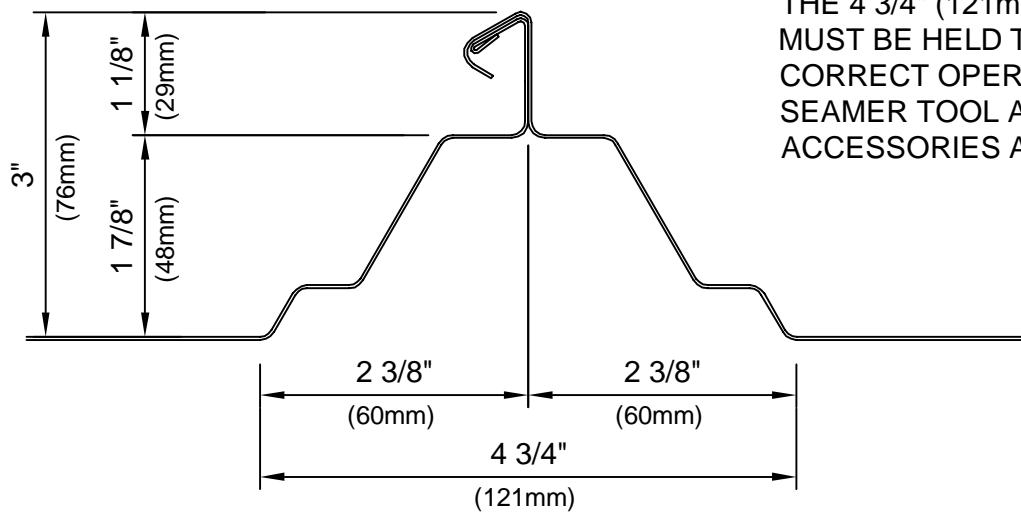
PANEL SECTION

IMPORTANT NOTE

THE SSR JOINT DETAIL IS DESIGNED WITH AN INTERLOCKING FEATURE FOR EASE OF INSTALLATION. HOWEVER, IT IS HIGHLY RECOMMENDED THAT INSTALLED SSR PANELS BE SECURED TO SECONDARY STRUCTURAL MEMBERS AND PROPERLY SEAMED PRIOR TO DEPARTURE FROM THE JOB SITE EACH DAY.

NOTE:

THE 4 3/4" (121mm) DIMENSION MUST BE HELD TO ASSURE CORRECT OPERATION OF THE SEAMER TOOL AND FIT UP OF ACCESSORIES AND CLOSURES

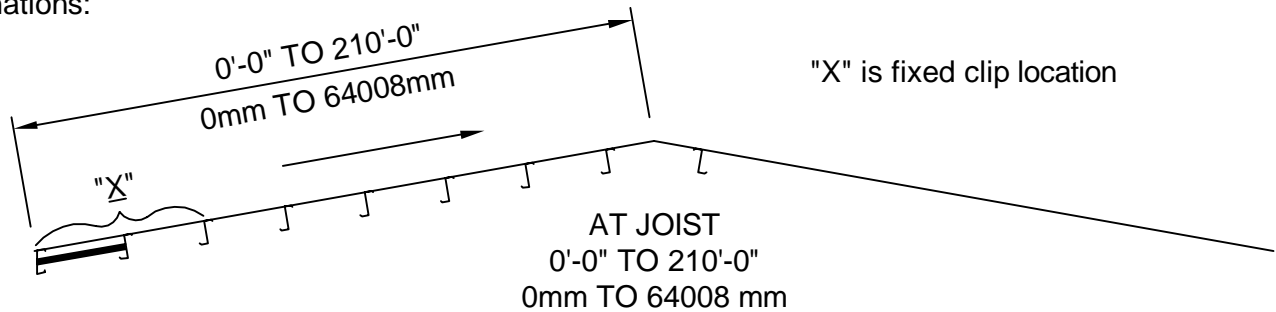


JOINT DETAIL

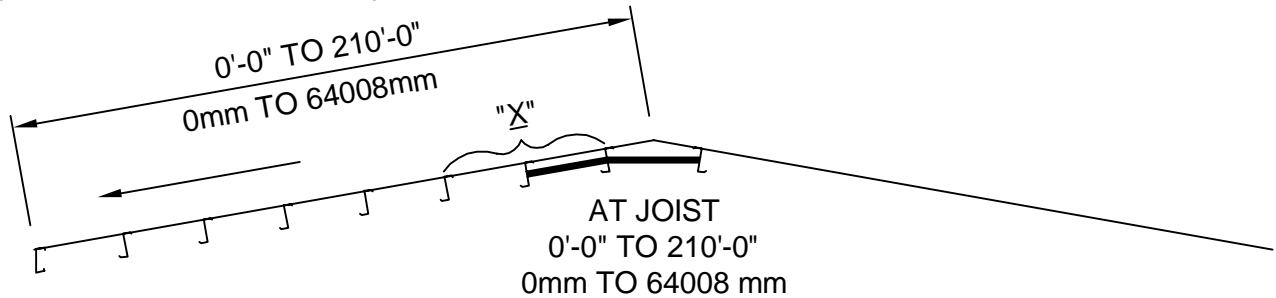
The following pages include information showing placement of panels and specific details regarding attachment methods and structural preparation to receive the standing seam roof system

FIXED & SLIDING SSR CLIPS

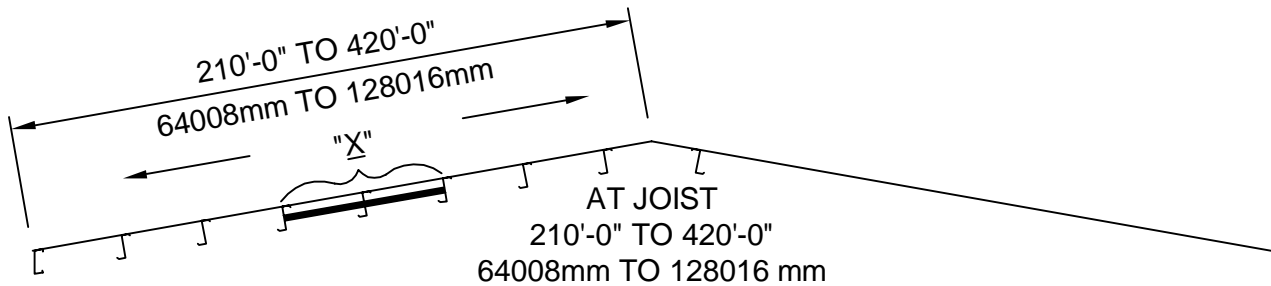
Note: The SSR panel is intended to be secured to the purlins with a combination of sliding and fixed clips. The position of the fixed clips along the slope of the roof will vary with the width of the roof and with special conditions (i.e. multi-gutter, parapets, etc.). It is essential that the fixed clips be installed in the designated locations for proper thermal movement. Refer to the erection drawings for the correct location. If in doubt as to the required location, contact the VP service center for clarification. Below are some possible combinations:



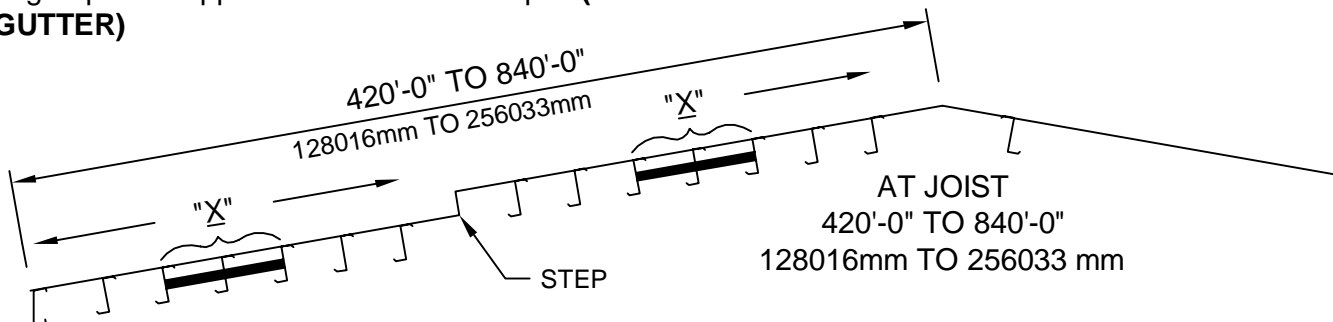
1. Fixed clips at the low eave and movement toward ridge or high side - "fixed eave" conditions with purlin support members at first eave space.



2. Fixed clips at ridge or high side - movement towards the low eave - "floating eave" condition with purlin supports at or near ridge. **(NOT ALLOWED WITH MULTI-GUTTER OR VALLEY GUTTER)**



3. Fixed clips at or near mid-slope - movement towards low eave and ridge or high eave - "floating eave" and ridge - purlin supports at or near mid-slope. **(NOT ALLOWED WITH MULTI-GUTTER OR VALLEY GUTTER)**



4. Very wide roofs may incorporate stepped expansion areas at or near mid slope. These roofs may have a combination of the above conditions on different roof planes.

* Fixed clips will typically be used on only (3) adjacent purlins or joist. Fixed clips will not be used full slope.

STANDING SEAM ROOF SYSTEM

SSR PANEL CLIP VARIATIONS

In addition to the fixed and sliding tab options, SSR clips are available in (4) height variations to accommodate insulation options. The use of the correct clip for the insulation system being installed will enable the erector to maintain panel modularity and improve the performance of the system.

The variations, purpose, and identification of the clips is as follows:

1. Short Clip

Use for blanket insulation thickness from 0" to 6" (152mm) without thermal block and over rigid board. The clip is 3 1/2" (89mm) high from the base to the top of the tab and is identified by "SHORT" stamped into the base.

2. Medium Clip

Use for blanket insulation thickness greater than 6" (152mm) without thermal block. The clip is 4" (102mm) high from the base to the top of the tab and is identified by "MED" stamped into the base.

3. Tall Clip

Use for blanket insulation thickness from 0" to 6" (152mm) with thermal block. The clip is 4 1/2" (108mm) high from the base to the top of the tab and is identified by "TALL" stamped into the base.

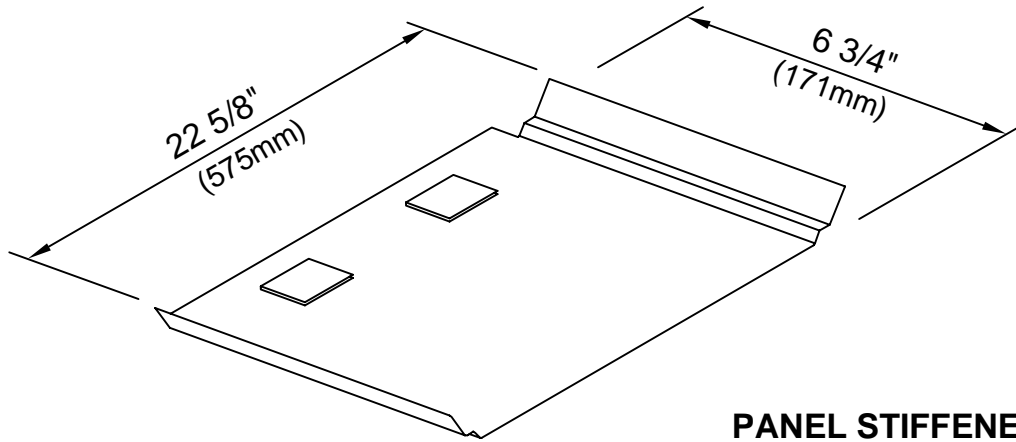
4. Extra Tall

Use for blanket insulation thickness from > 6" (152mm) with thermal block. The clip is 5" (127mm) high from the base to the top of the tab and is identified by "XTALL" stamped into the base.

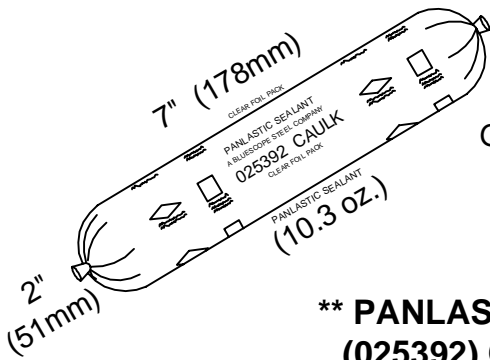
Note: It is not recommended that SSR be installed without insulation between the panel and the purlin or rigid board insulation as roof rumble will occur.

BASIC SSR COMPONENTS

COMPONENTS SHOWN ARE USED THROUGHOUT THE SSR ROOF SYSTEM. LOCATE AND MAKE AVAILABLE TO ROOFING CREW BEFORE BEGINNING ERECTION.

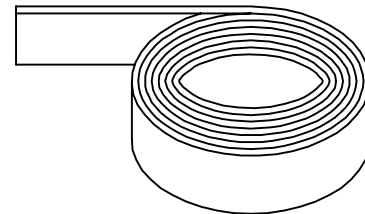


PANEL STIFFENER

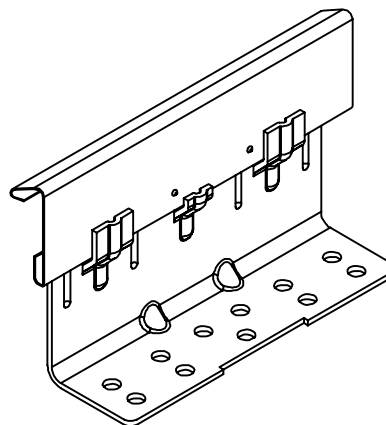


GREY COLOR

**** PANLASTIC SEALANT
(025392) CLEAR FOIL
PACK
(NON-SKINNING)**



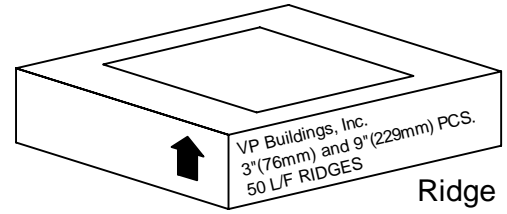
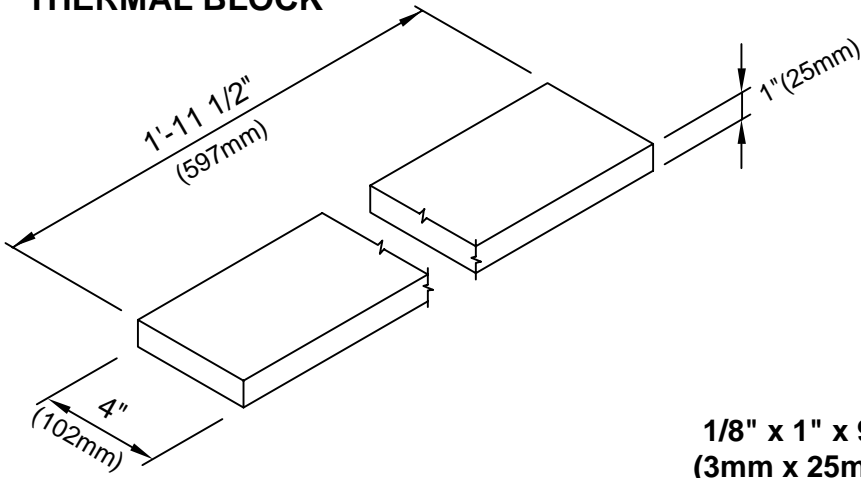
**1/8" x 1" x 25' Roll
(3mm x 25 mm x 8m)
TAPE MASTIC**



**SSR PANEL CLIP
(NOTE: Fixed clip has painted tab)**

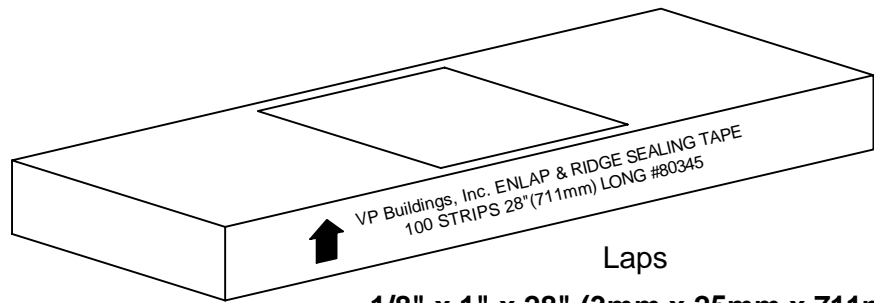
BASIC SSR COMPONENTS

THERMAL BLOCK



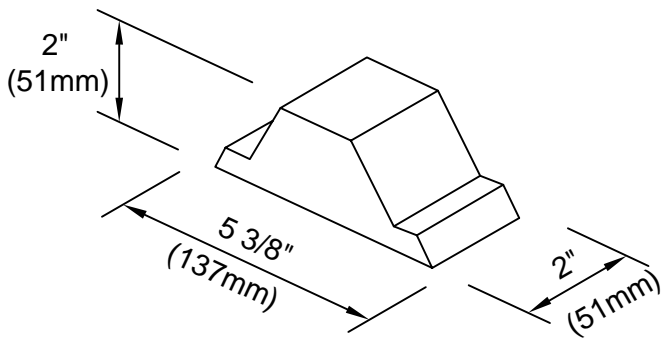
Ridge

1/8" x 1" x 9" (3mm x 25mm x 229mm) + 1/8" x 1" x 3" TAPE MASTIC (3mm x 25mm x 76mm)

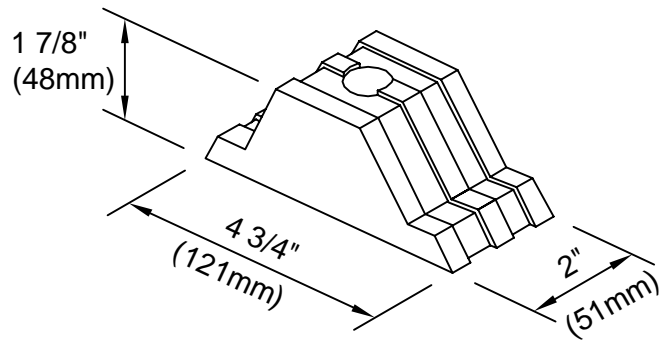


Laps

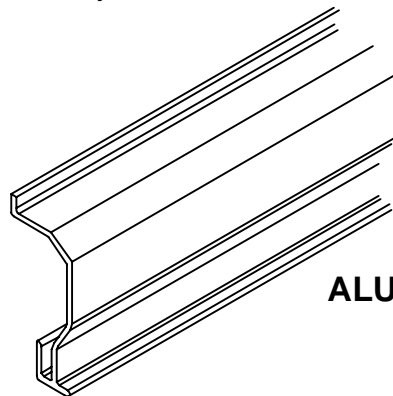
1/8" x 1" x 28" (3mm x 25mm x 711mm) TAPE MASTIC



INSIDE CLOSURE PLUG (FOAM)



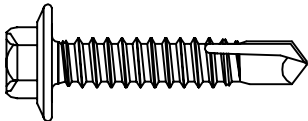
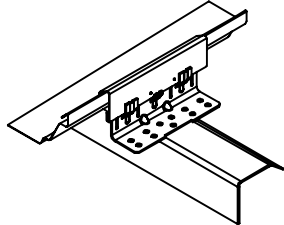
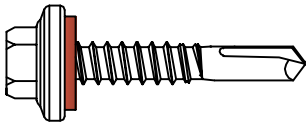
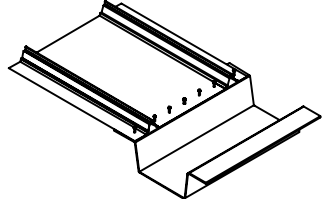
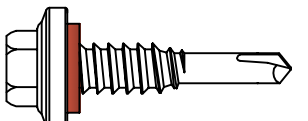
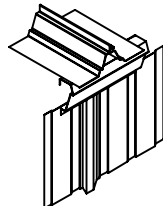

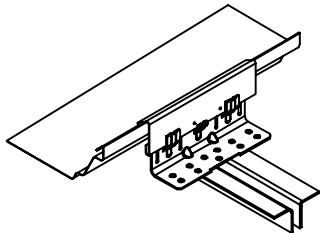
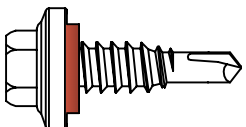
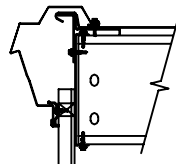
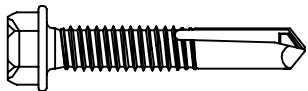
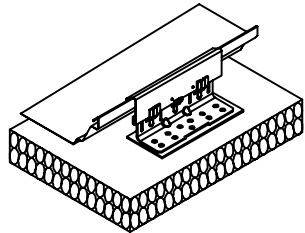
INSIDE CLOSURE PLUG (HARD RUBBER)



10 FT. (3.05m) LENGTHS

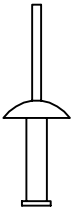
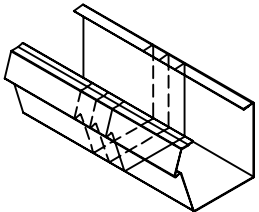

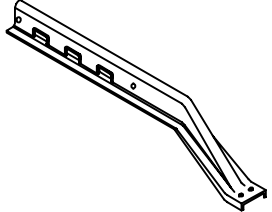
ALUMINUM FASCIA TRIM RETAINER

FASTENER SCHEDULE

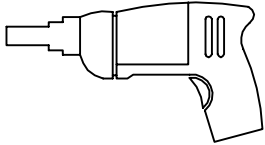
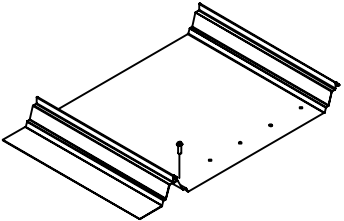
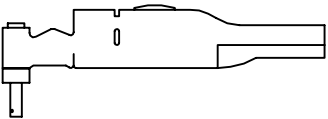
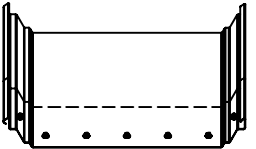
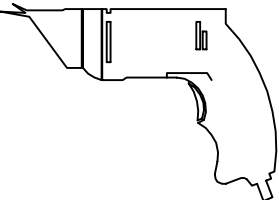
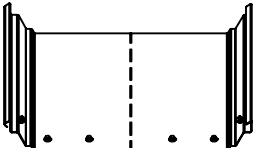
FASTENERS		APPLICATION	
 <p>CARBON ROOF STRUCTURAL</p>	<p>1/4 -14 x 1 1/4" (32mm) UP TO 6" (152mm) BLKT INS. SELF - DRILLING CARBON ROOF STRUCTURAL</p>	<ul style="list-style-type: none"> - SSR PANEL CIPS - SECONDARY STRUCTURAL CONNECTIONS 	
 <p>S.S. ROOF STRUCTURAL</p>	<p>#12-14 x 1 1/4" (32mm) SELF-DRILLING STAINLESS STEEL ROOF STRUCTURAL FASTENER W/ 5/8" (16mm) SEALING WASHER</p>	<ul style="list-style-type: none"> - PANEL TO STRUCTURAL - ACCESSORIES - RAKE FASCIA - ENDLAPS 	
 <p>S.S. ROOF STITCH</p>	<p>1/4 -14 x 7/8" (22mm) SELF -DRILLING STAINLESS STEEL FASTNER W/ 5/8" (16mm) SEALING WASHER</p>	<ul style="list-style-type: none"> - RIDGE - EAVE FASCIA - EAVE GUTTER - ACCESSORIES - PANEL REPAIR 	
<p>NOTE 1</p>  <p>CARBON ROOF STRUCTURAL</p>	<p>12 - 24 x VAR. SELF - DRILLING CARBON ROOF STRUCTURAL</p>	<ul style="list-style-type: none"> - SSR PANEL CLIPS TO JOIST 	
 <p>S.S. WALL STITCH</p>	<p>1/4 - 14 x 7/8" (22mm) SELF - DRILLING STAINLESS STEEL WALL STITCH FASTENER W/ 5/8"(16mm) SEALING WASHER</p>	<ul style="list-style-type: none"> - ALUMINUM FASCIA RETAINER - WALL PANELS TO WALL PANELS - TRIM ATTACHMENTS 	
 <p>SPECIAL LENGTH CARBON ROOF STRUCTURAL</p>	<p>12 - 24 x SPCL. LENGTH SELF DRILLING CARBON</p>	<ul style="list-style-type: none"> - SSR PANEL CLIPS OVER RIGID BOARD INSULATION 	

1. CHECK THE SHIPPING LIST (WAREHOUSE SEC) FOR THE TYPE, LENGTH, COLOR, AND QUANTITY OF FASTENERS SHIPPED.
2. THE ABOVE INFORMATION IS TO BE USED AS AN IDENTIFICATION GUIDE FOR THE PROPER APPLICATION OF EACH TYPE FASTENER.

FASTENER SCHEDULE

FASTENERS		APPLICATION	
	1/8" (3mm) BLIND RIVET	- EAVE FASCIA - EAVE GUTTER - RAKE FASCIA	
	VP-200 RIVET	- GUTTER STRAP	

ADDITIONAL TOOLS REQUIRED FOR SSR

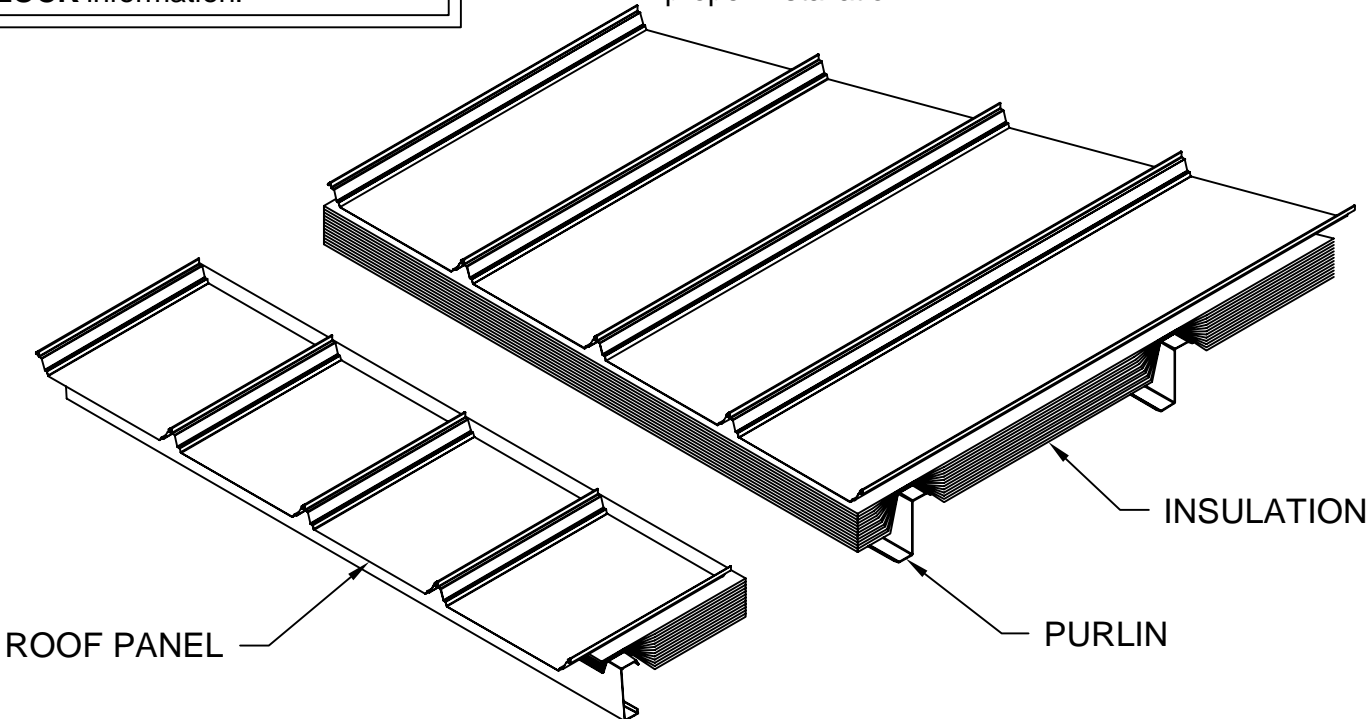
TOOL LIST		APPLICATION	
	SCREW GUN	- SELF DRILLING FASTENERS INSTALLATIONS ROOF AND WALLS	
	LIGHT GAGE NIBBLER	- CUTTING FLAT AND CORRUGATED METAL	
	PORTABLE POWER SHEARS	- CUTTING FLAT METAL	

SYSTEM INSTALLATION

ROOF INSULATION

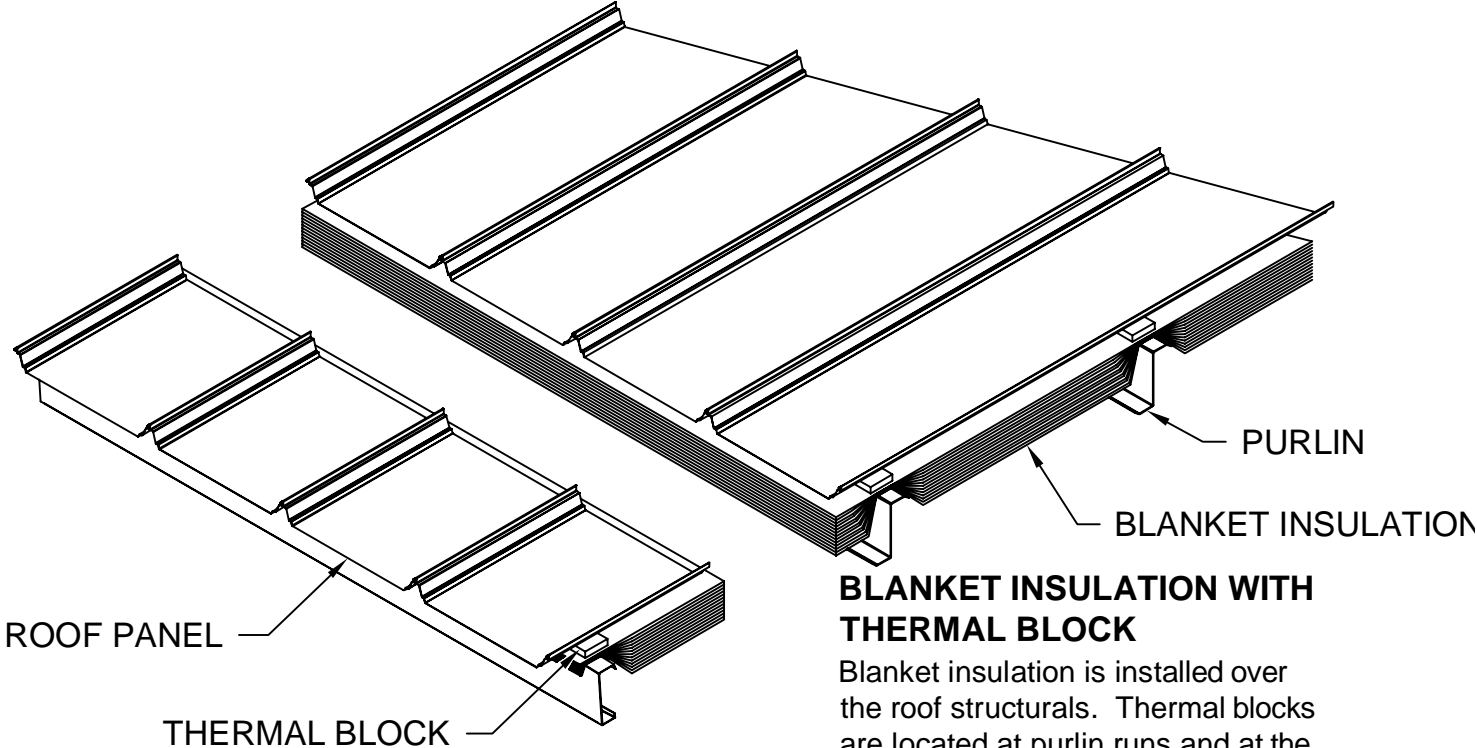
Refer to **STANDARD ERECTION DETAILS** for additional **THERMAL BLOCK** information.

There are four insulation systems for the standing seam roof: blanket insulation, blanket insulation with thermal block, SuperBlock and Rigid Board insulation. Determine which system is to be used on your building to insure proper installation.



CAUTION
To prevent damaged insulation - do not install faced fiberglass insulation below its minimum recommended installation temperature. Each facing type has a different minimum recommended installation temperature. Therefore, contact the insulation supplier for installation temperature.

BLANKET INSULATION
Blanket insulation is installed across roof structures and is compressed over the purlins by the roof panels.



BLANKET INSULATION WITH THERMAL BLOCK
Blanket insulation is installed over the roof structurals. Thermal blocks are located at purlin runs and at the eave.

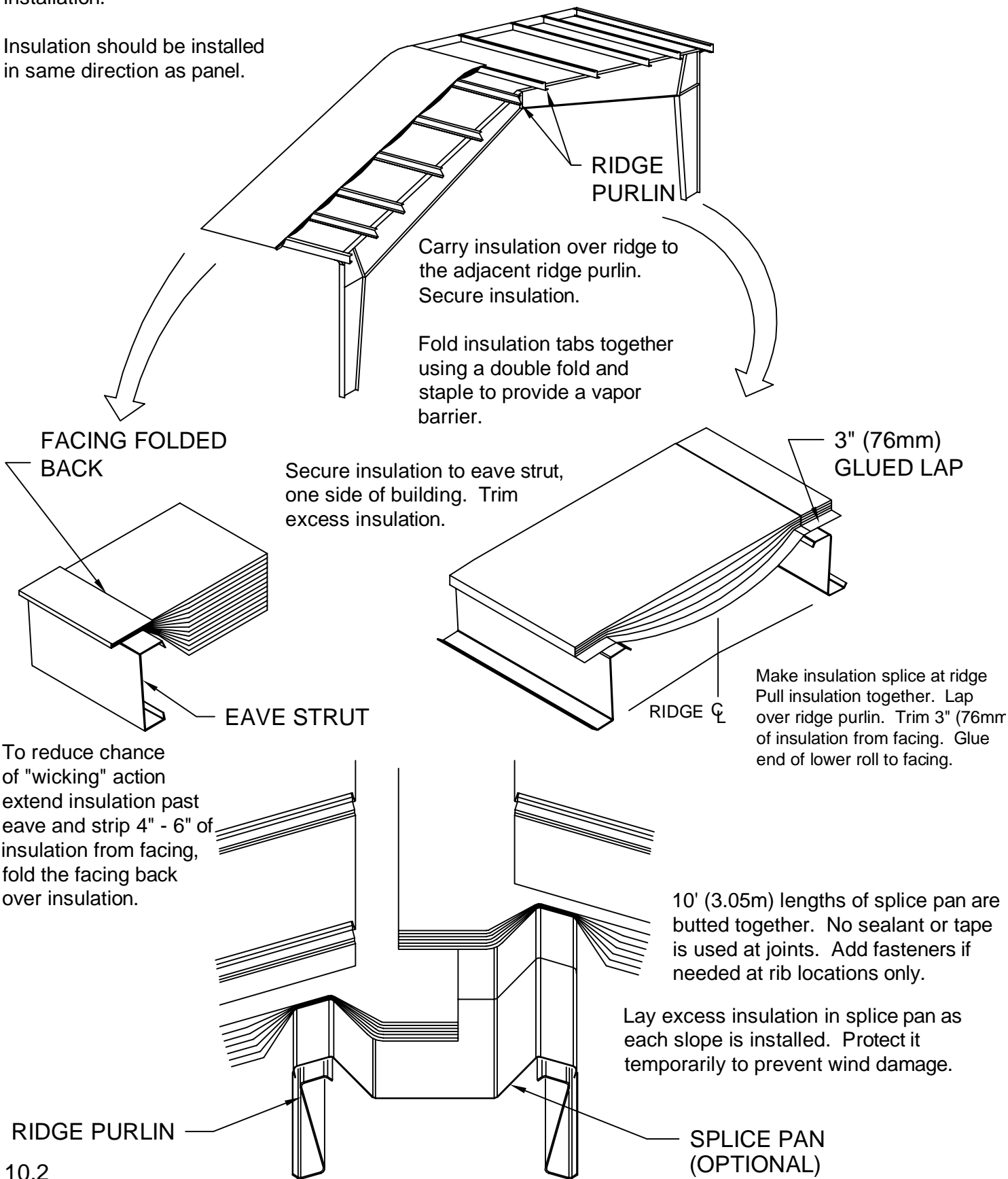
SYSTEM INSTALLATION

ROOF INSULATION - BLANKET INSULATION

Blanket insulation may be shipped on some buildings so that more than one run is included in a roll. Study building requirements to insure enough rolls of material has been furnished.

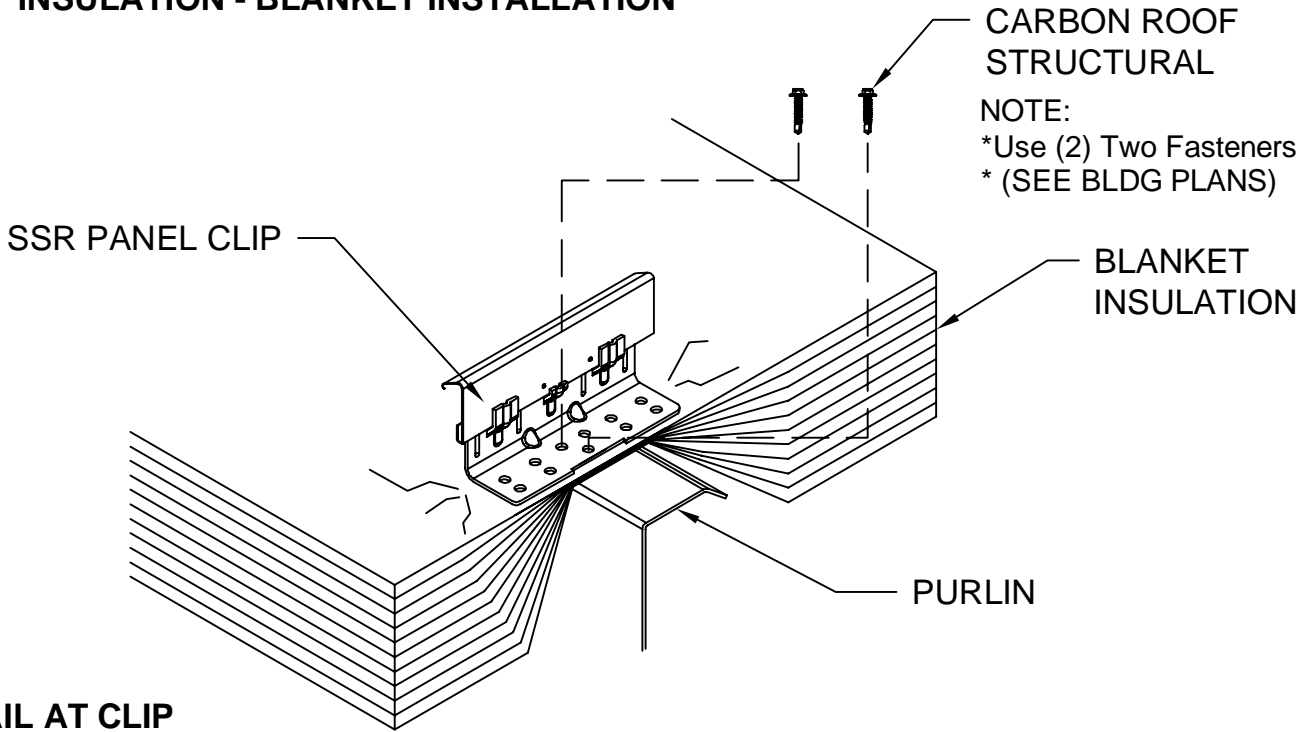
Blanket insulation must be installed from eave purlin to ridge or high eave because of direction of panel installation.

Insulation should be installed in same direction as panel.



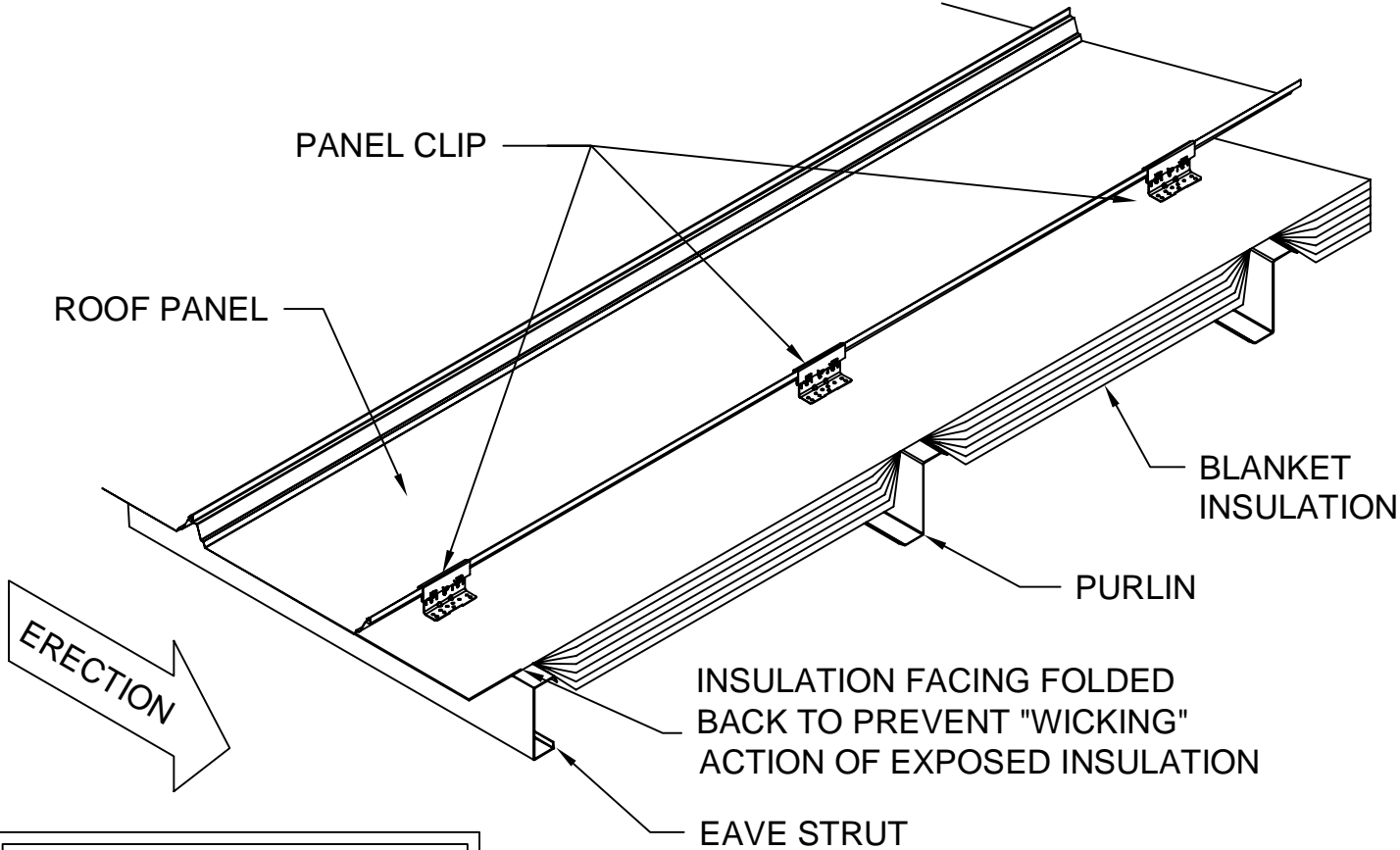
SYSTEM INSTALLATION

ROOF INSULATION - BLANKET INSTALLATION



DETAIL AT CLIP

AFTER INSTALLING THE FIRST RUN OF INSULATION, PANELING CAN BE STARTED. PANEL CLIP MUST SIT ON TOP OF INSULATION.

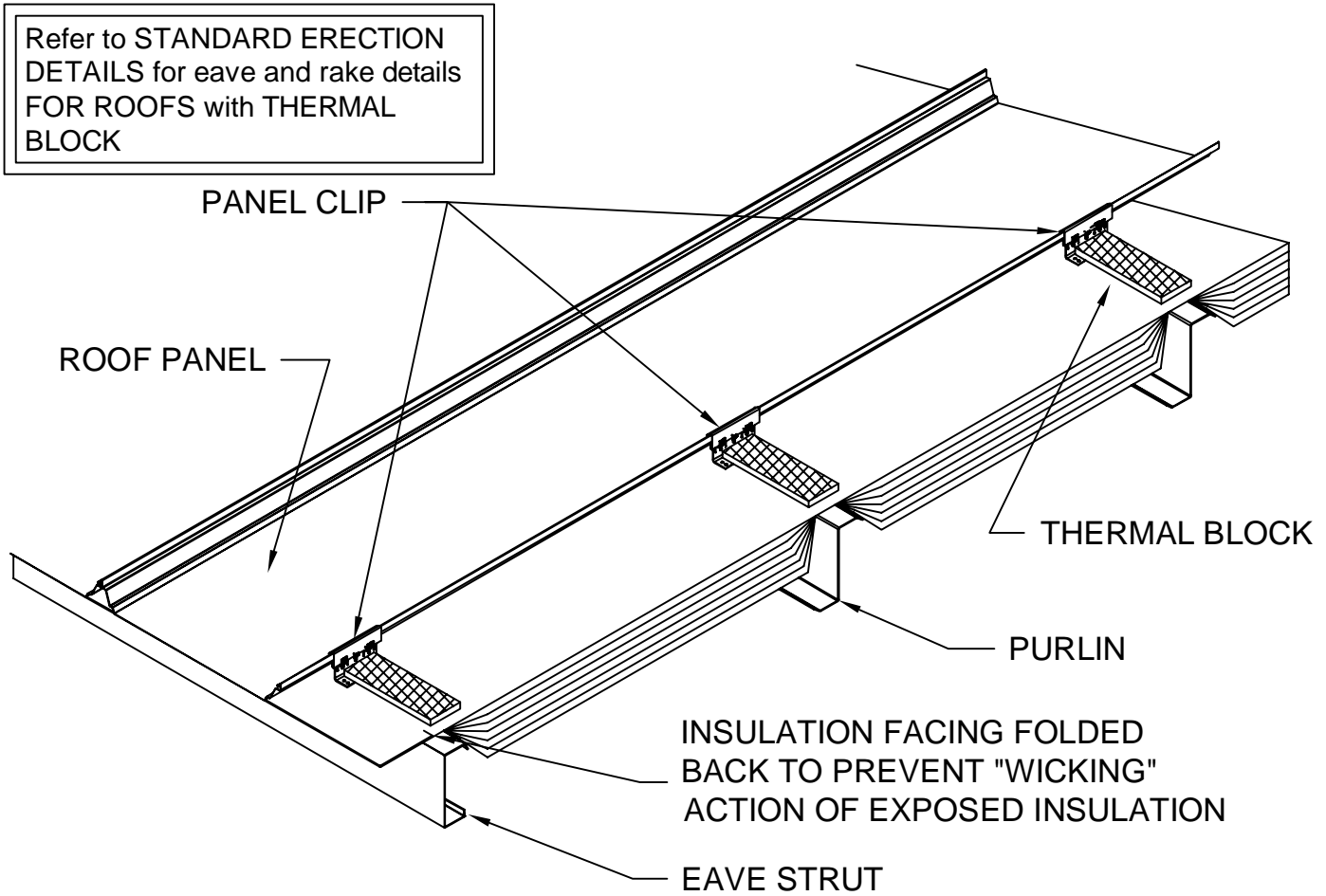


Refer to **STANDARD ERECTION DETAILS** for eave and rake details with blanket insulation

INSTALL PANELS IN NORMAL SEQUENCE.

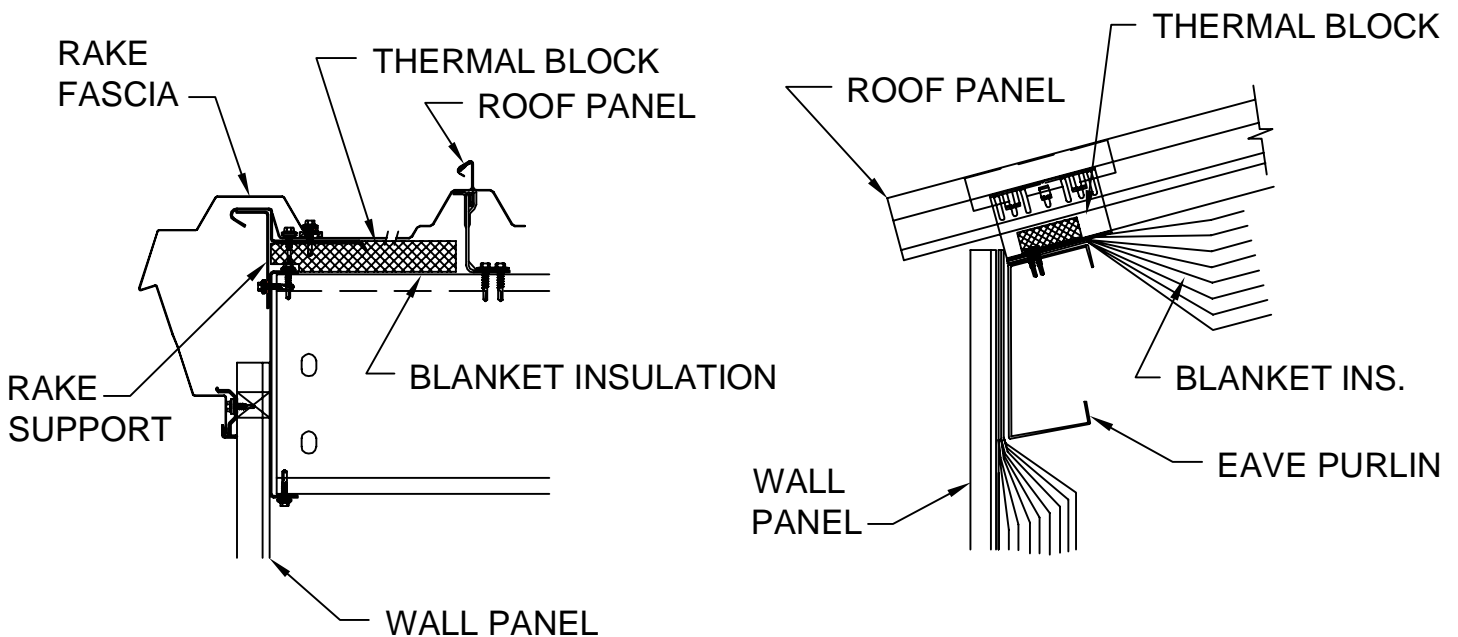
SYSTEM INSTALLATION

BLANKET INSULATION WITH THERMAL BLOCK



After installing a run of blanket insulation, the normal panel sequence can begin. The only change being adding the thermal block at the purlin runs.

The thermal block is forced against the panel clip, then dropped into position. Paneling is then continued.



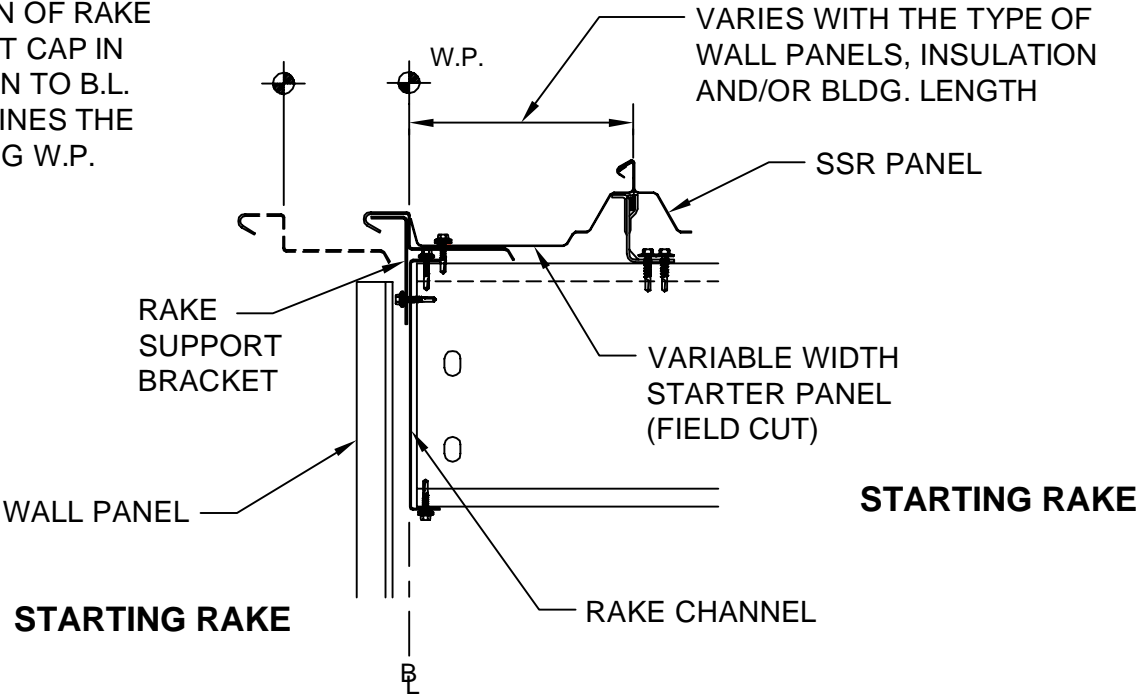
SSR WORK POINTS

IDENTIFY AND MARK THE LOCATION OF SSR WORKPOINTS.

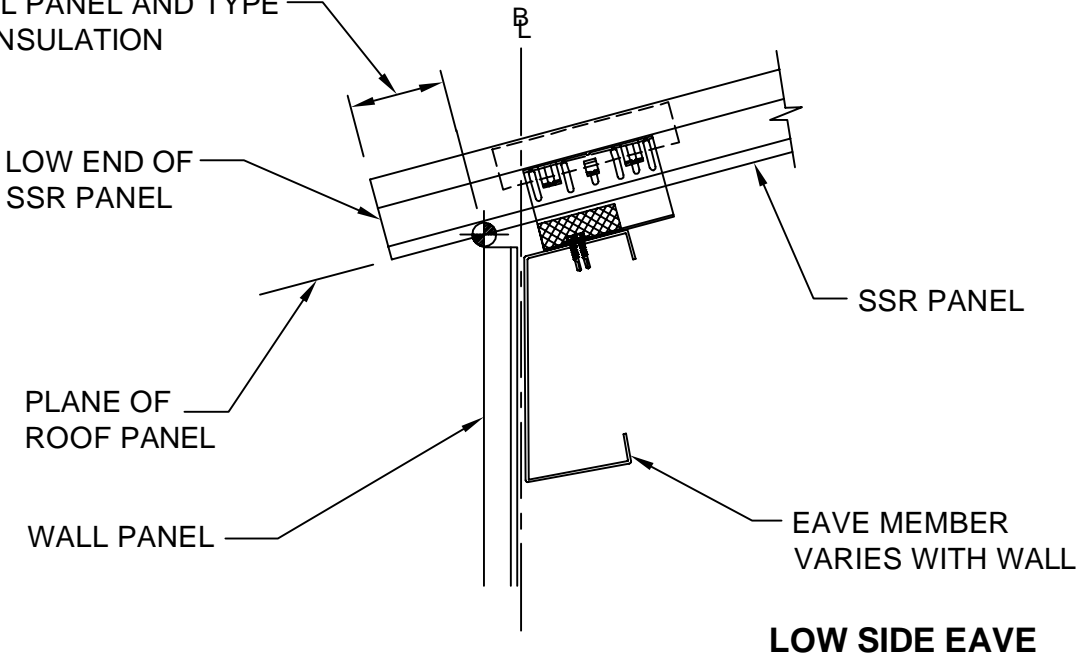
USE THIS MANUAL AND OTHER ERECTION GUIDES PROVIDED, IN CONJUNCTION WITH VP BUILDINGS ERECTION DRAWINGS AND STANDARD ERECTION DETAILS TO ACCURATELY DETERMINE SSR WORKPOINTS FOR YOUR BUILDING.

WORKPOINTS SHOWN ON THIS AND FOLLOWING PAGES DO NOT REFLECT ALL POSSIBLE CONDITIONS. REFER TO APPLICABLE SECTION OF MANUAL FOR EACH SPECIFIC CONDITION.

POSITION OF RAKE SUPPORT CAP IN RELATION TO B.L. DETERMINES THE STARTING W.P.



VARIES WITH TYPE OF WALL PANEL AND TYPE OF INSULATION

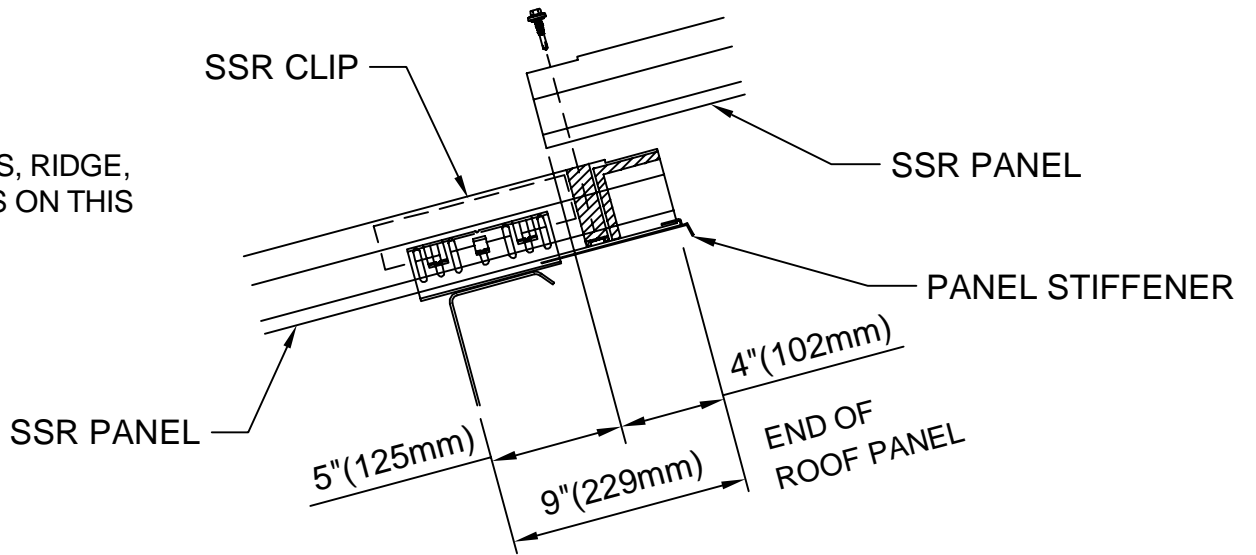


SYSTEM INSTALLATION

SSR WORK POINTS

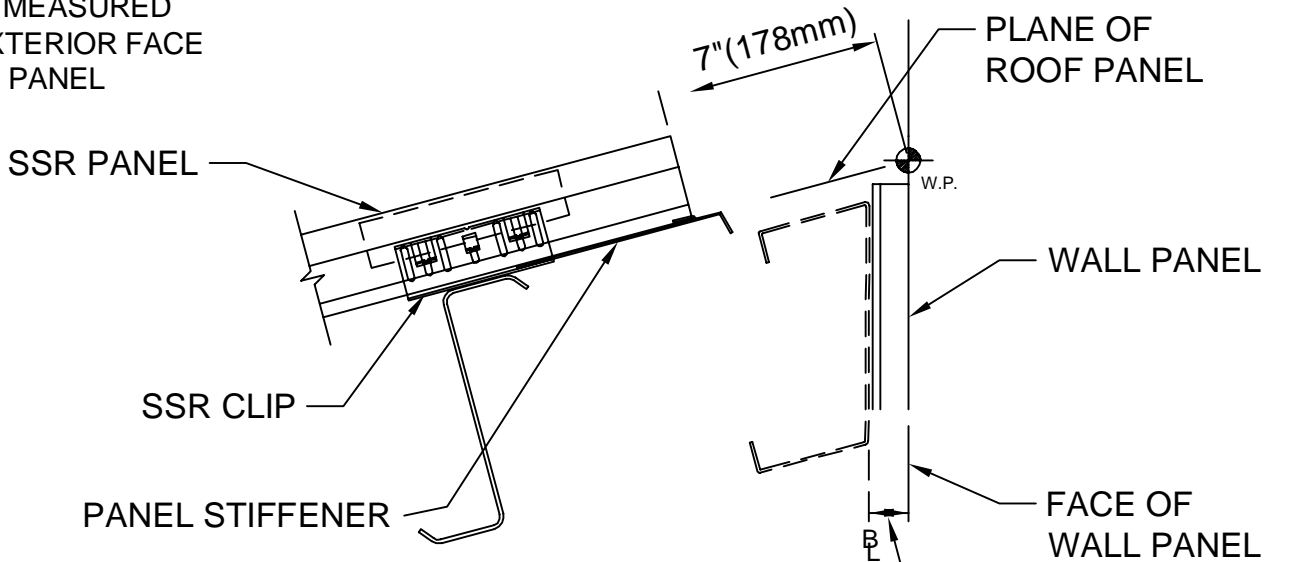
ENDLAP

HOLD THESE DIMENSIONS. NEXT ENDLAPS, RIDGE, ETC. DEPENDS ON THIS



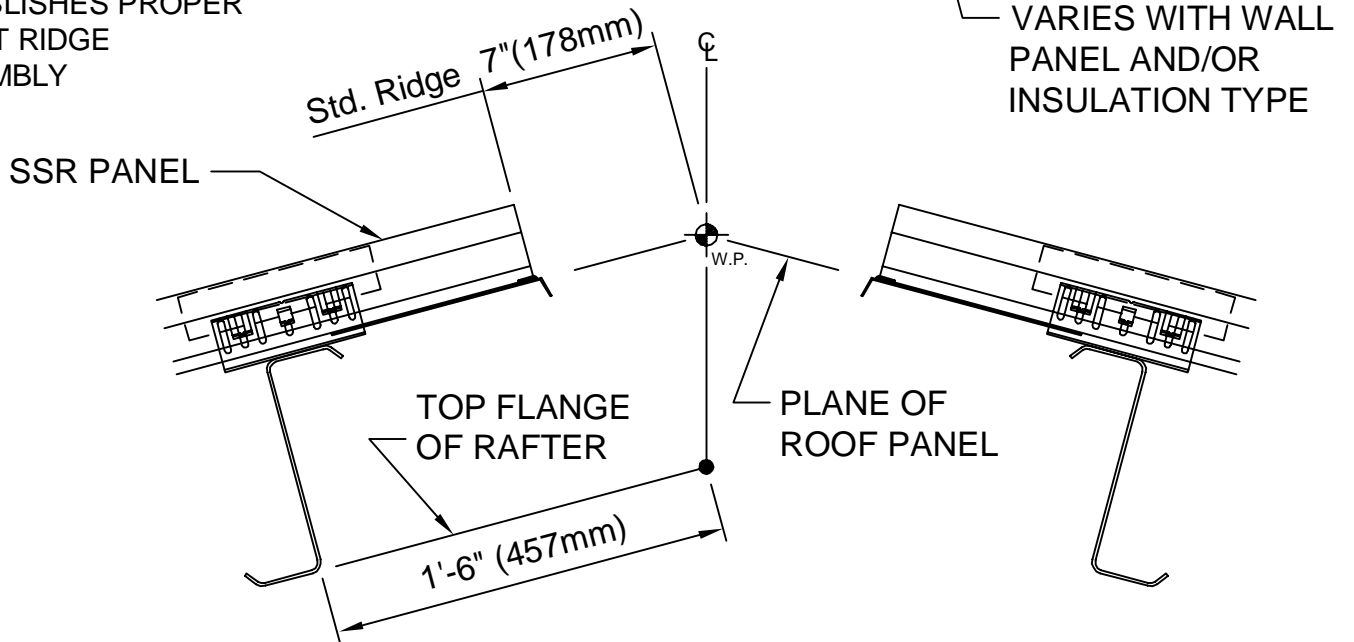
HIGH SIDE EAVE

ALWAYS MEASURED FROM EXTERIOR FACE OF WALL PANEL



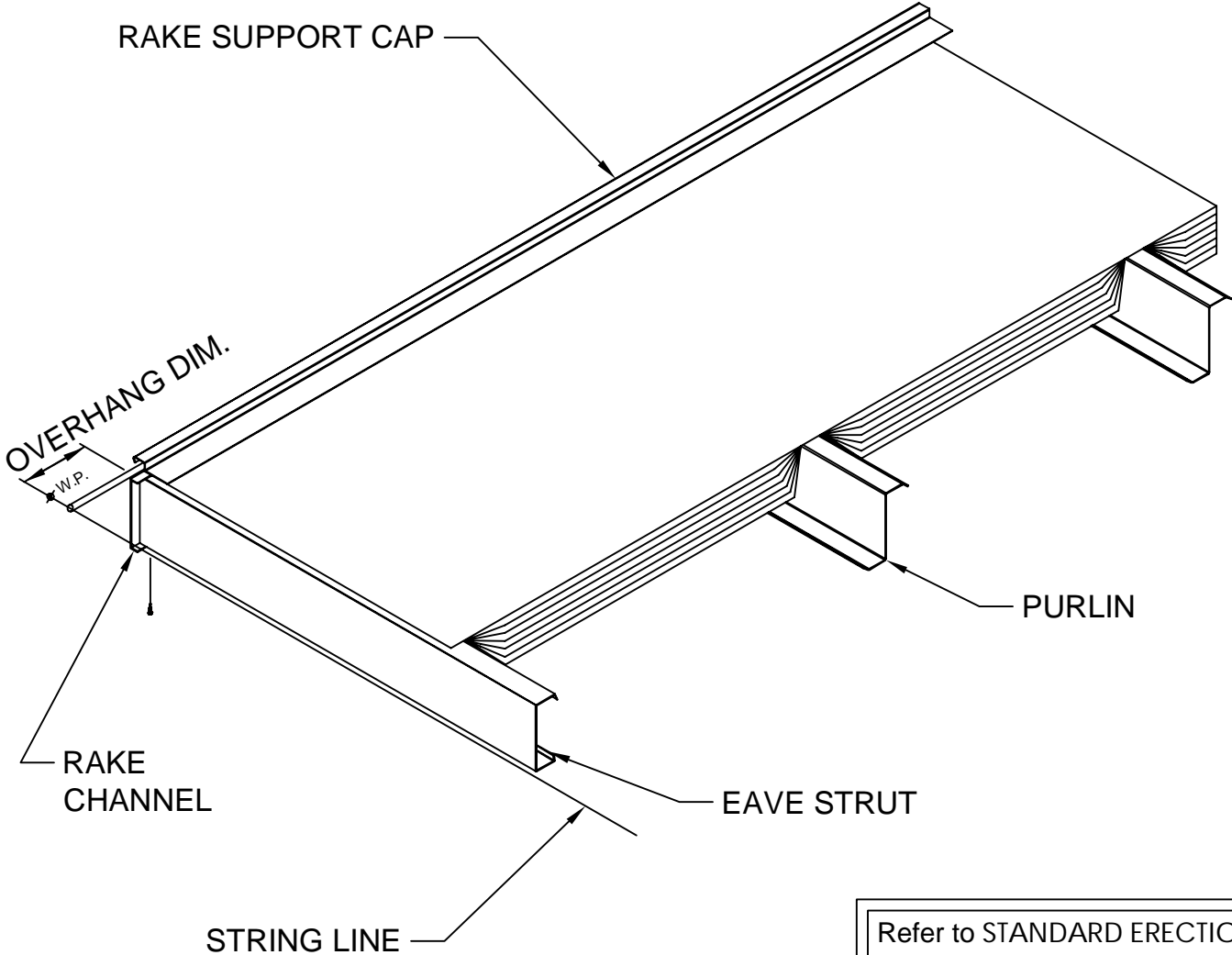
RIDGE

ESTABLISHES PROPER LAP AT RIDGE ASSEMBLY



PANEL INSTALLATION

- 1. Lay first roll of insulation and clamp off.
- 2. Set rake support cap on rake support bracket and insulation.
- 3. Locate a string line at building eave. Set string to correct eave overhang dimension.
- 4. Install rake support cap, butted end to end, the length of the building slope. Start at the eave and stop the rake support cap 6" (152mm) from the center line of the ridge.



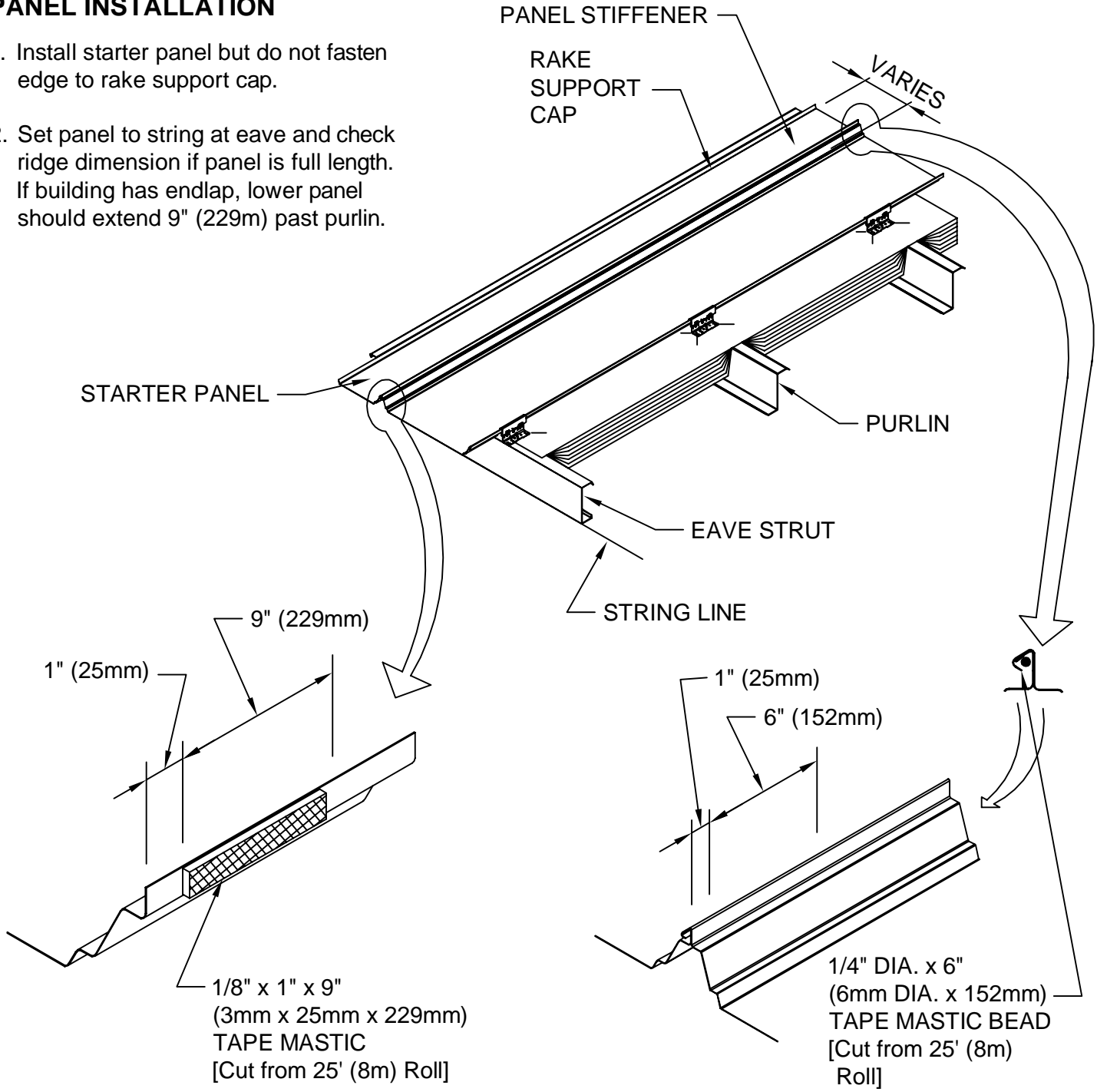
Refer to STANDARD ERECTION
DETAILS for rake channel and
rake support details.

PREPARE RAKE

SYSTEM INSTALLATION

PANEL INSTALLATION

1. Install starter panel but do not fasten edge to rake support cap.
2. Set panel to string at eave and check ridge dimension if panel is full length. If building has endlap, lower panel should extend 9" (229mm) past purlin.



AT EAVE

AT RIDGE

LOW EAVE END OF PANEL

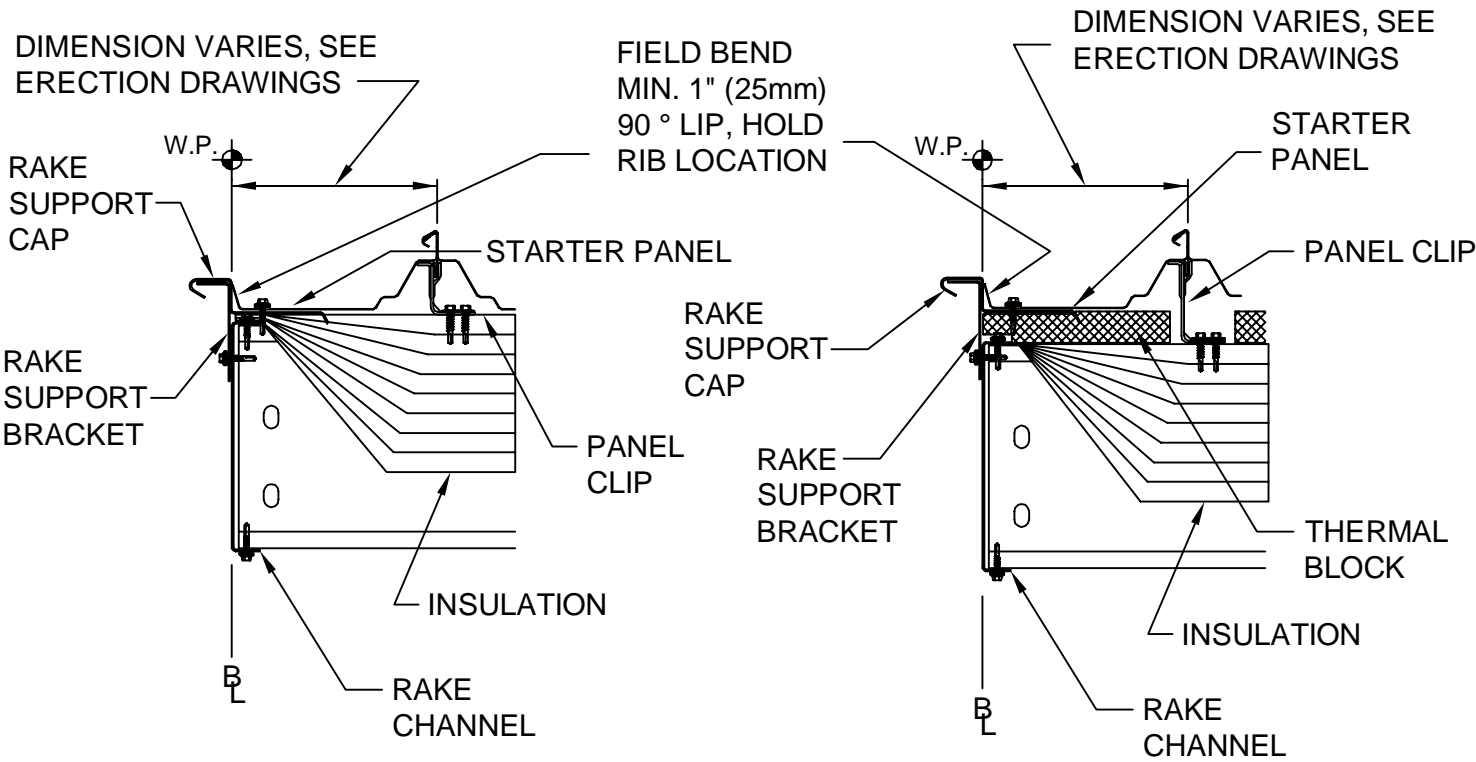
MASTIC IS APPLIED TO THE MALE RIB AS SHOWN TO PREVENT WATER FROM SIPHONING BACK UP THE SEAM AND ENTERING THE BUILDING. MASTIC IS APPLIED BEFORE SETTING NEXT PANEL RUN.

RIDGE END OF PANEL

FORM BEAD OF TAPE MASTIC 1/4" (6mm) DIA. x 6" (152mm) LONG AND PUSH UNDER THE OPEN SEAM. REPEAT AT EACH SEAM ALONG ENTIRE LENGTH OF RIDGE, BOTH SLOPES.

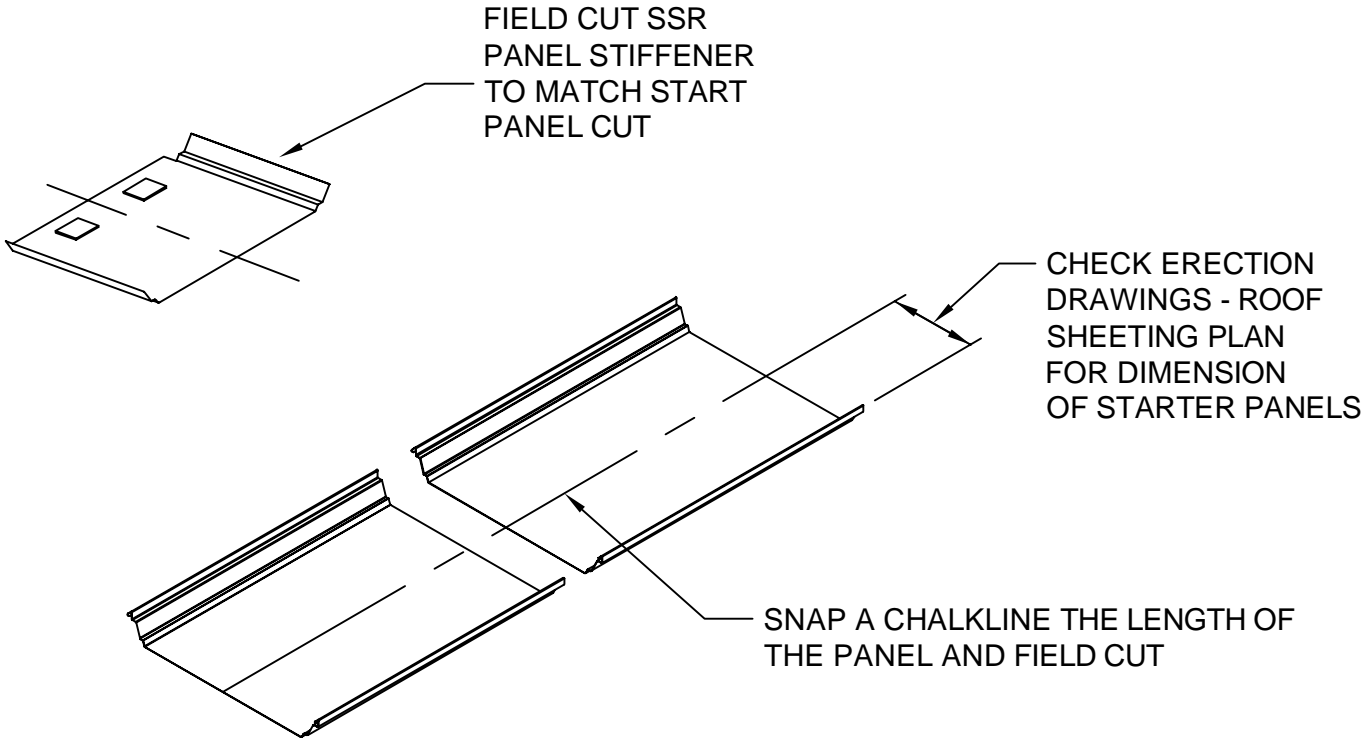
SYSTEM INSTALLATION

PANEL INSTALLATION



SECTION WITHOUT THERMAL BLOCK

SECTION WITH THERMAL BLOCK



FIELD CUT STARTER PANEL

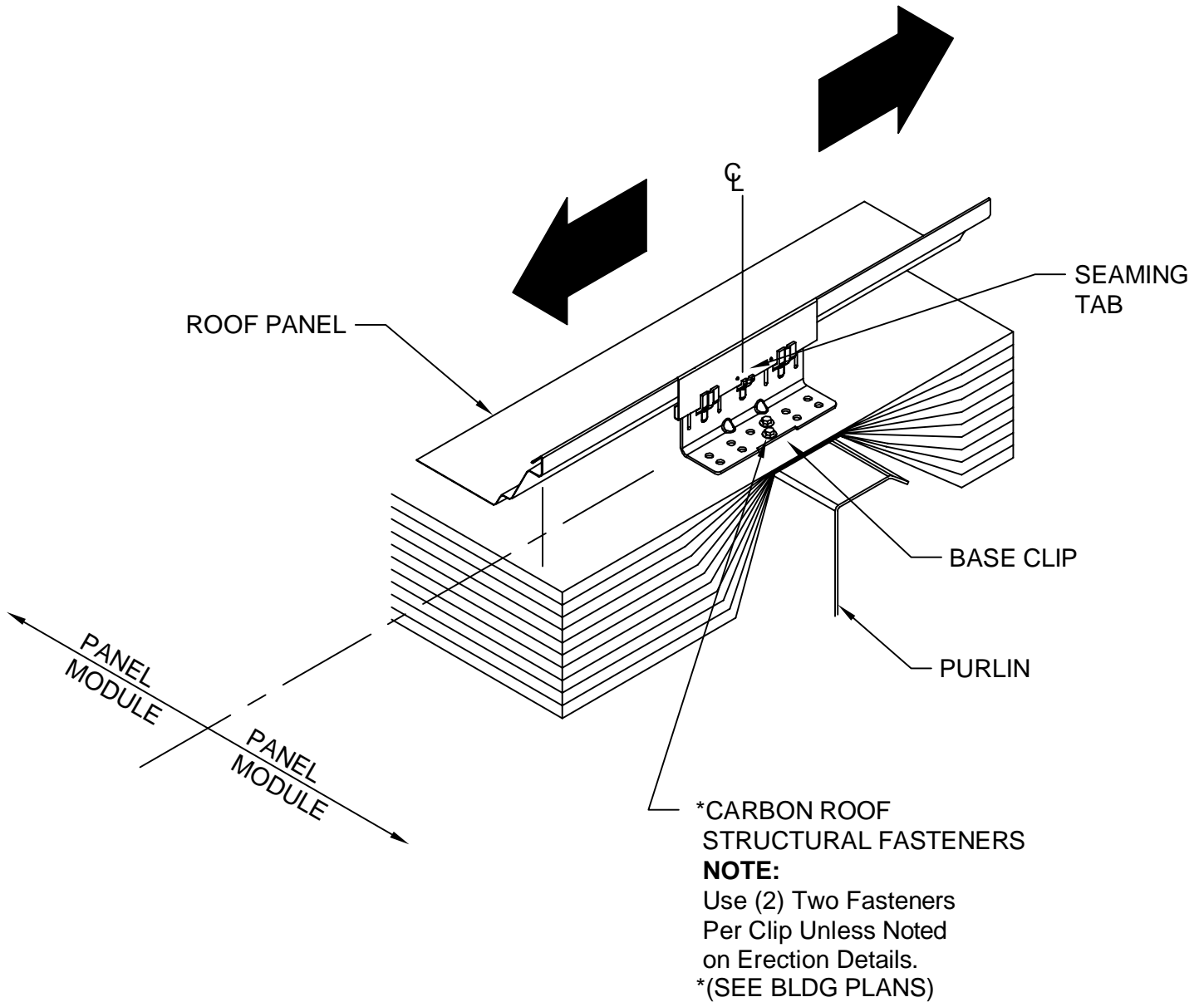
FIELD CUT STARTER PANEL AND STIFFENERS FOR USE AT ENDLAPS AND RIDGE.

SYSTEM INSTALLATION

PANEL INSTALLATION

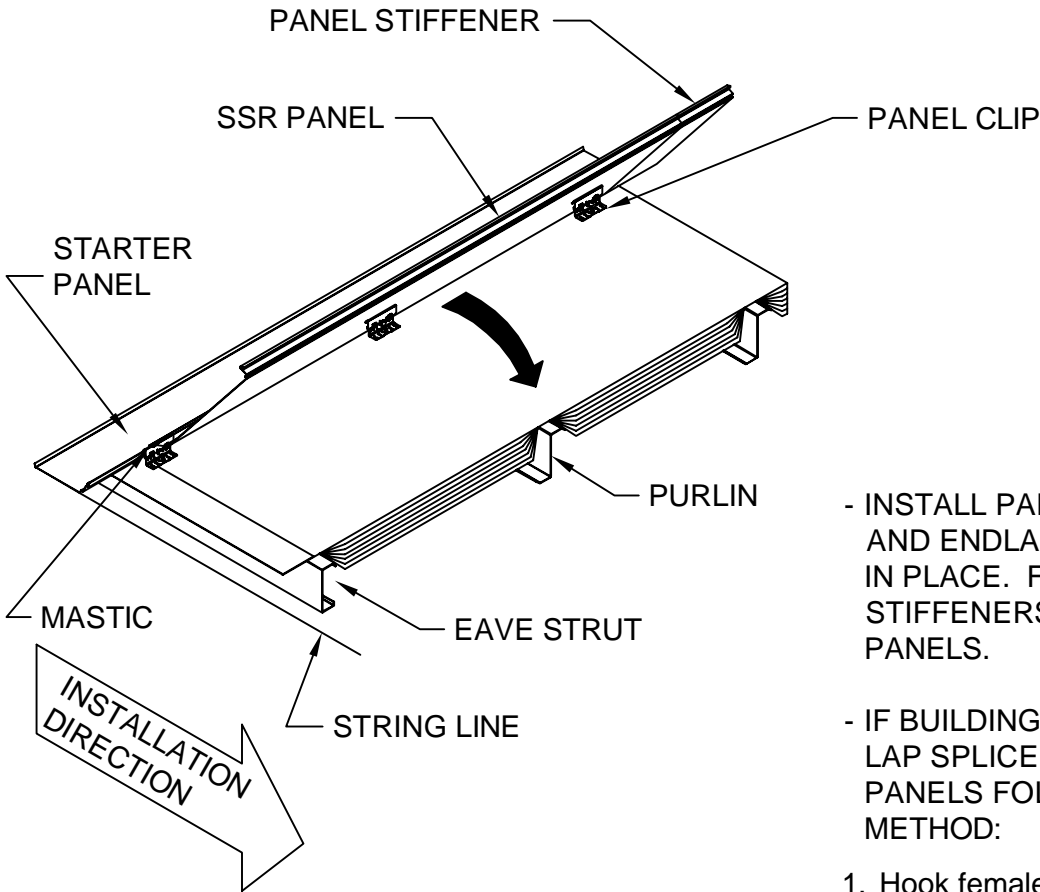
The panel clip consists of a base clip and factory assembled seaming tab. The sliding clip is designed to allow panel movement due to thermal expansion.

The seaming tab must be located at the centerline of the base clip.



PANEL CLIP DETAIL

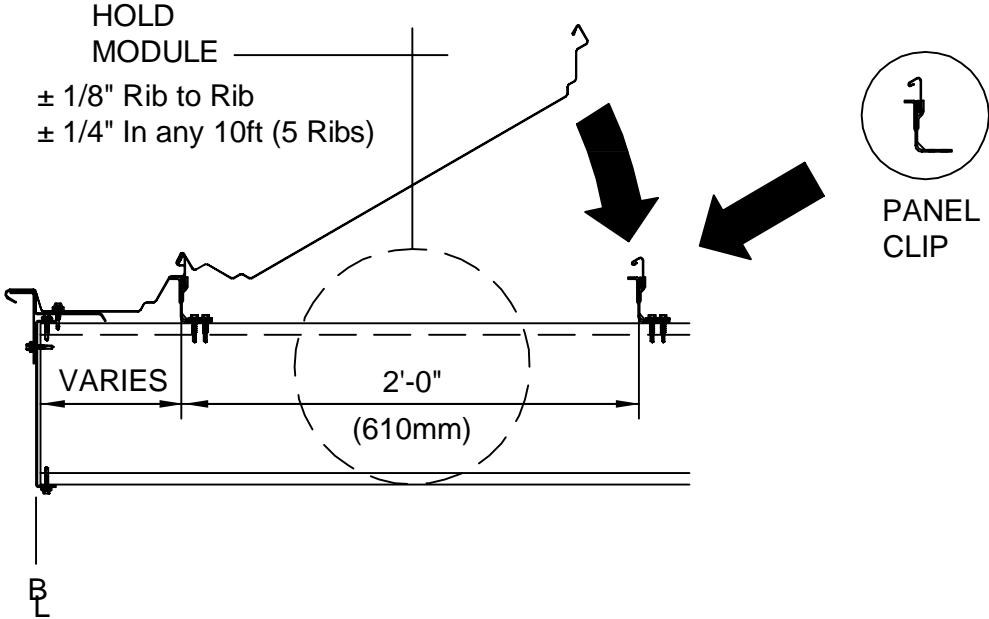
PANEL INSTALLATION



- INSTALL PANEL STIFFENERS AT RIDGE AND ENDLAPS BEFORE SETTING PANEL IN PLACE. FIELD CUT PANEL STIFFENERS AT STARTING AND ENDING PANELS.
- IF BUILDING DOES NOT HAVE AN END LAP SPLICE, CONTINUE TO INSTALL PANELS FOLLOWING THE DESCRIBED METHOD:

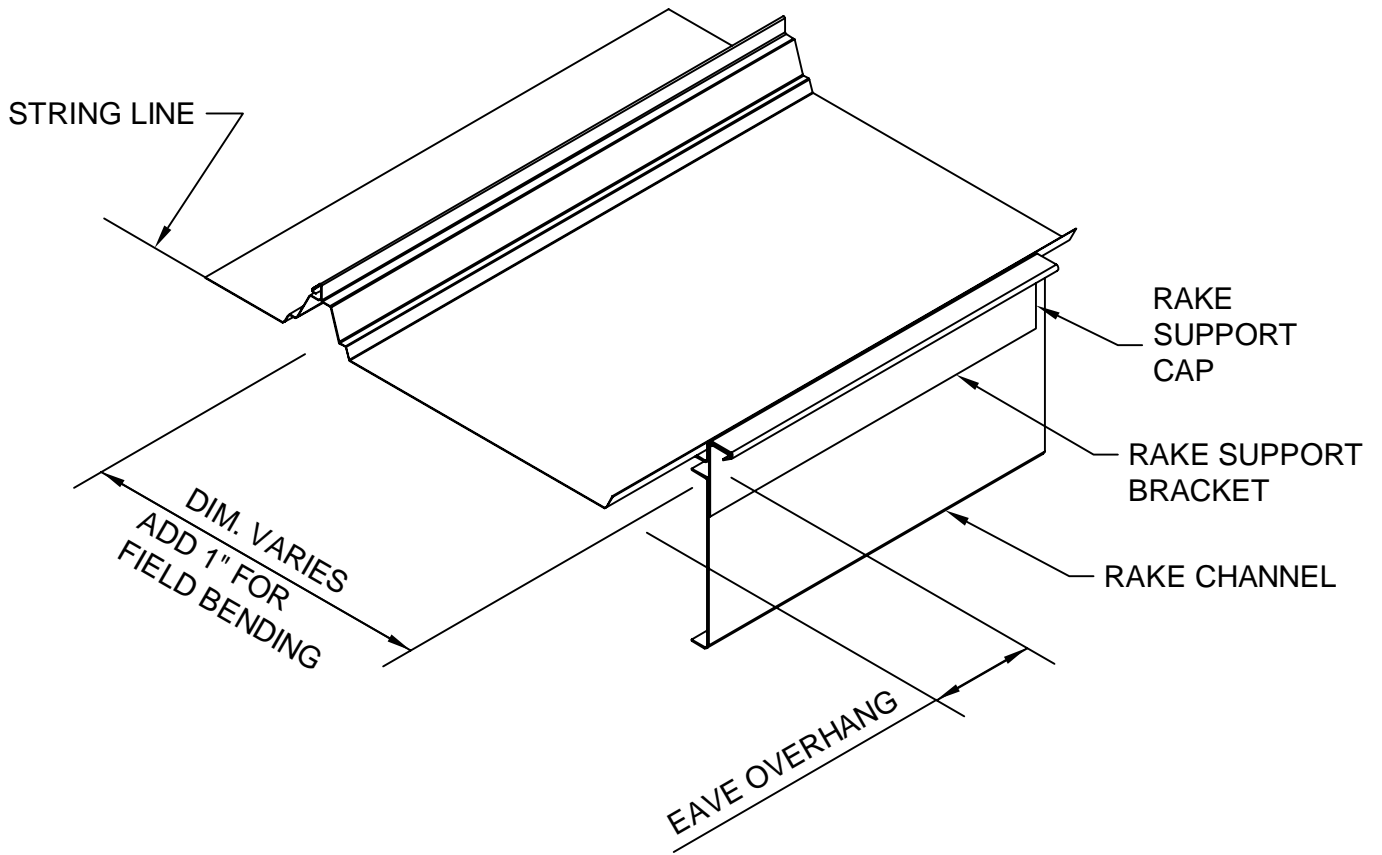
1. Hook female edge of panel over the male edge of the panel in place.
2. Lower the panel in place.
3. Locate clips and check clip alignment with panel edge.
4. Screw clip in place.
5. Apply mastic to exposed male rib at eave and tape mastic under open seam at ridge.
6. Repeat steps 1 - 5 until roof is sheeted.

IMPORTANT
 CHECK AND MAINTAIN THE 2'-0" (610mm) MODULE OF PANELS AS INSTALLATION PROCEEDS USING RIDGE PANEL AS MODULE TOOL. MODULE MUST BE HELD FOR CORRECT FIT-UP OF RIDGE ASSEMBLY ENDLAPS, ACCESSORIES, CLOSURES, AND SEAMING OPERATION.

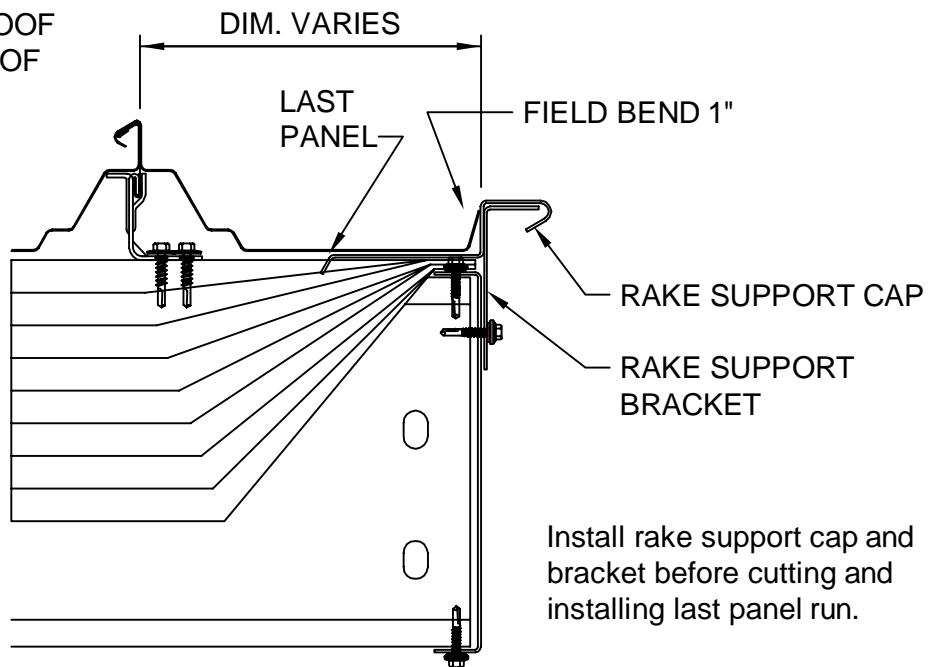


SYSTEM INSTALLATION

PANEL INSTALLATION - LAST PANEL RUN



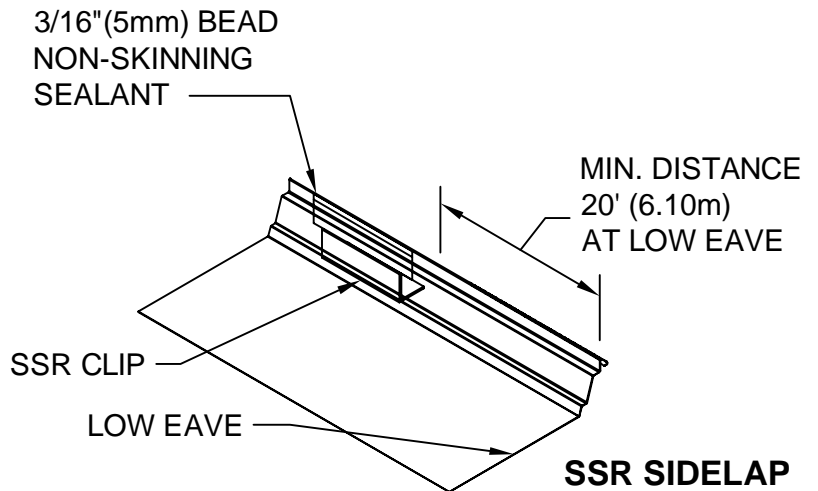
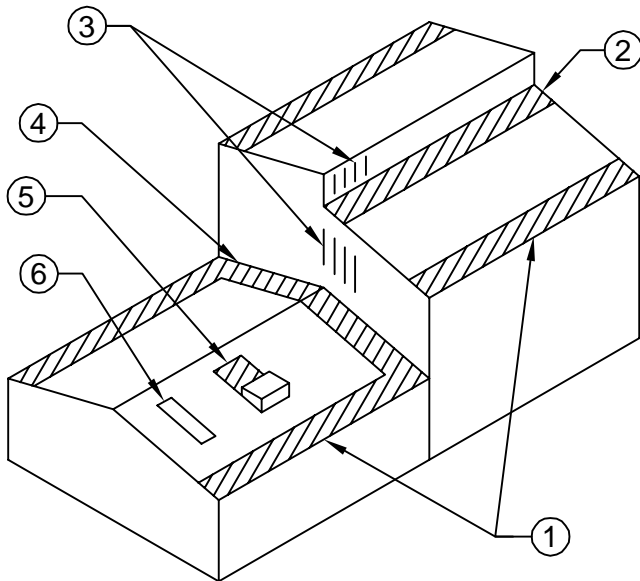
CHECK ERECTION DRAWINGS - ROOF SHEETING PLAN FOR DIMENSION OF END PANELS.



RAKE DETAIL

SSR ALTERNATE ICE DAMMING WEATHERSEAL

CLEAN ALL SURFACES TO BE WEATHER SEALED. REMOVE FABRICATING OILS, RAIN, SNOW, ICE, DEW, DUST, AND DIRT PRIOR TO APPLICATION OF MASTICS AND SEALANTS.



SUGGESTED AREAS OF APPLICATION

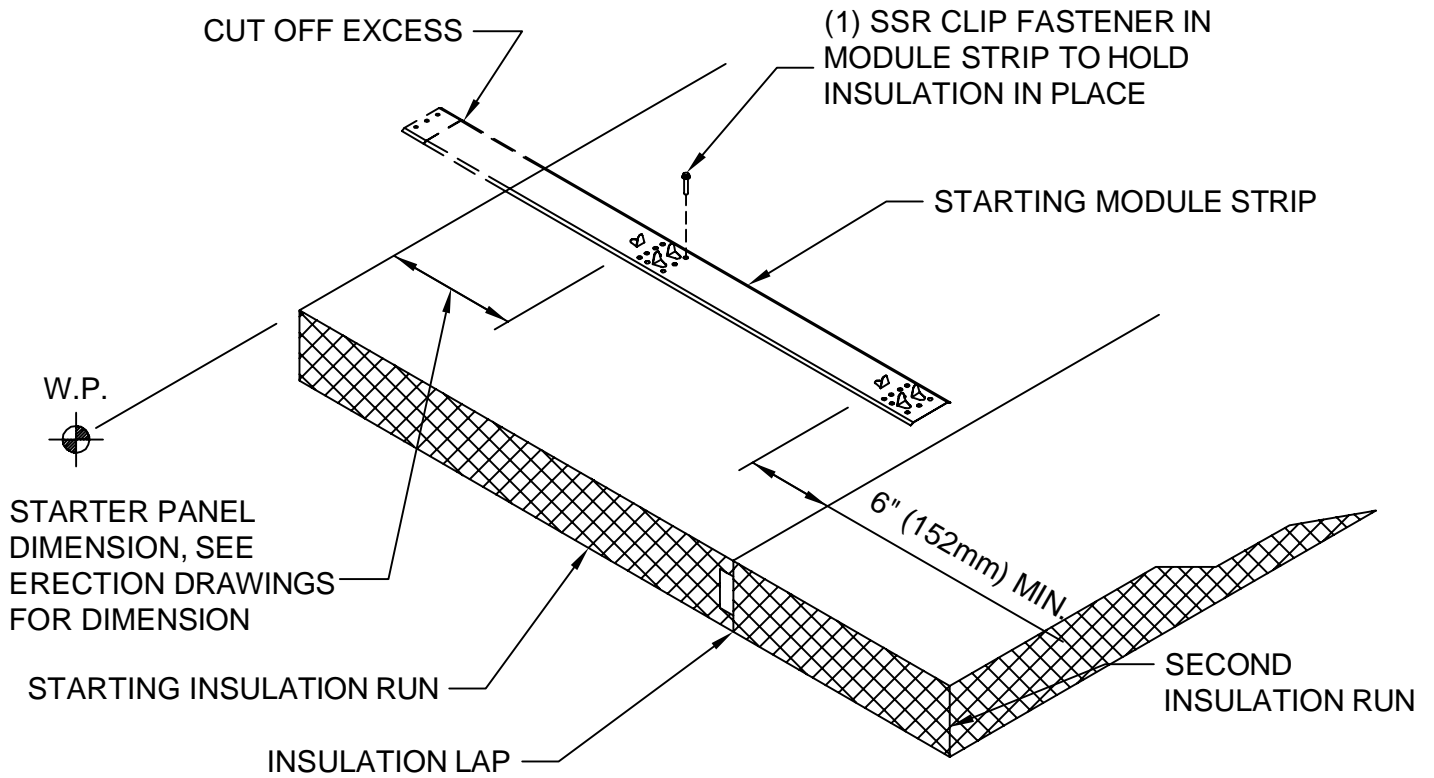
ICE DAMMING = THE APPLICATION OF ADDITIONAL SEALANTS AT AREAS WHERE SNOW OR ICE WILL BUILD UP AND REMAIN ON THE ROOF FOR AN EXTENDED AMOUNT OF TIME (ALL STANDARD SEALANT APPLICATIONS STILL APPLY, SEE APPROPRIATE DETAILS) (REFER TO ERECTION DRAWINGS FOR ICE DAMMING REQUIREMENTS)

1. LOW EAVE: Field applied 3/16" (5mm) bead of non-skinning sealant = 20 L.F. (6.1m) up on each sidelap. Standard 1/8" x 1" x 6" (3mm x 25mm x 152mm) mastic still applies at eave and ridge.
2. ROOF HEIGHT CHANGE/SSR PANEL BELOW "WALL TO ROOF" STEP: Field applied 3/16" (5mm) bead of non-skinning sealant = 10 L.F. (3.05m) down on each sidelap. Standard 1/8" x 1" x 6" (3mm x 25mm x 152mm) mastic still applies at eave and ridge.
3. STEPPED WALL CHANGES: At height changes, 1/8" x 1" x 6'-0" (3mm x 25mm x 1.83m) mastic at each wall sidelap. Use stainless steel wall structural & stitch fasteners.
4. ROOF HEIGHT CHANGE/SSR PANEL BELOW "ROOF HEIGHT CHANGE" STEP: Field applied 3/16" (5mm) bead of non-skinning sealant at 'THREE' PANEL sidelaps next to ROOF HEIGHT CHANGE condition for ENTIRE length of step.
5. ROOF CURBS: Field applied 3/16" (5mm) bead of non skinning sealant = 10' (3.05m) minimum distance ABOVE & BELOW curb and 'THREE' sidelaps away from curb sides.
6. TUF-LITES: Field applied 3/16" (5mm) bead of non-skinning sealant = 10' (3.05m) continuous at sidelaps (BOTH SIDES).

NOTE: STANDARD MASTIC OR SEALANT APPLICATION REQUIRED AT RIDGE, RAKE, EAVE, ENDLAPS, MULTI/VALLEY GUTTER, ETC. CONDITIONS (SEE APPROPRIATE DETAILS)

SYSTEM INSTALLATION

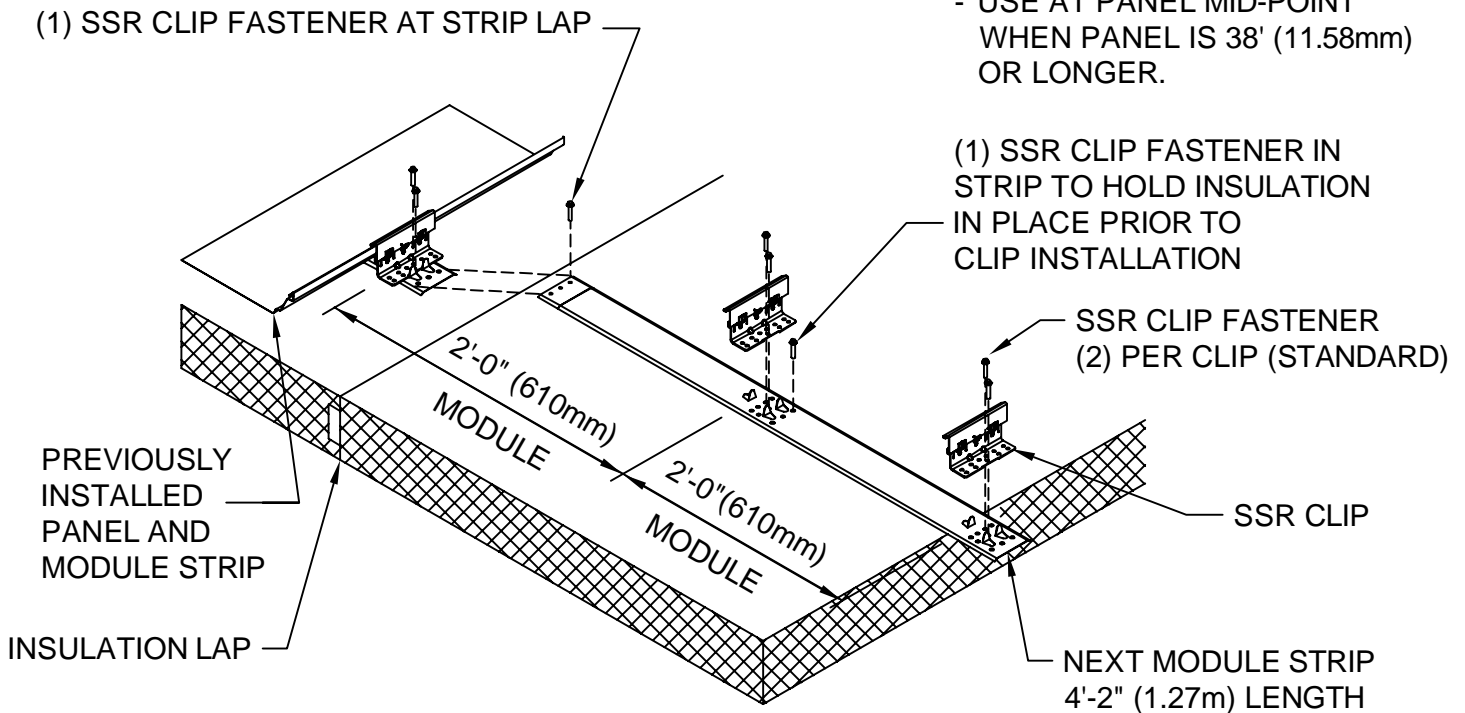
SSR MODULE STRIP INSTALLATION (OPTIONAL)



STARTING MODULE STRIP

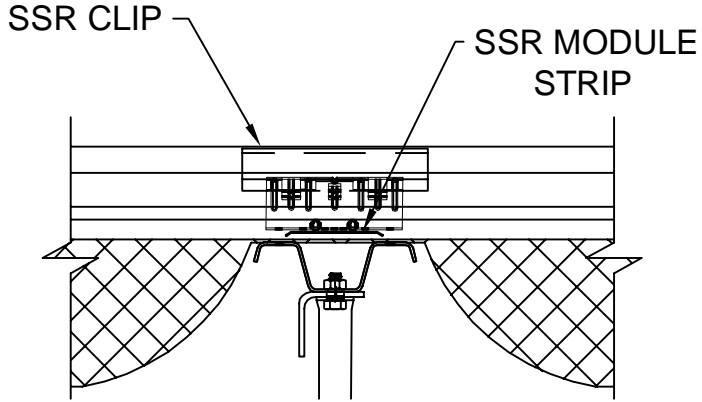
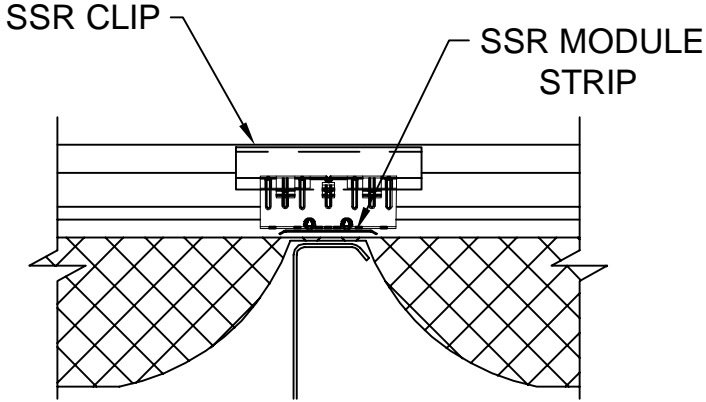
- USE AT ENDLAPS, FIRST CLIP FROM RIDGE AND FIRST CLIP FROM EAVE.

- USE AT PANEL MID-POINT WHEN PANEL IS 38' (11.58mm) OR LONGER.

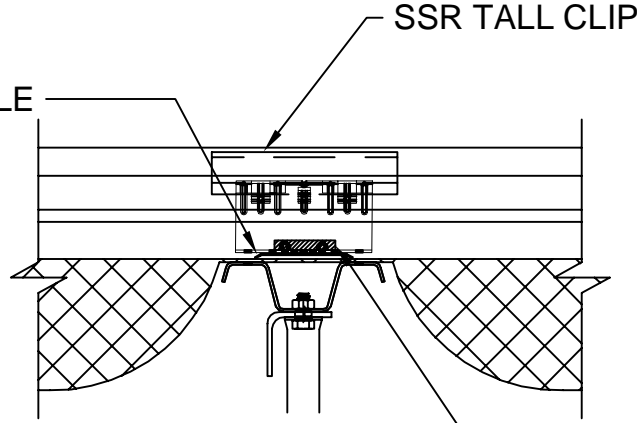
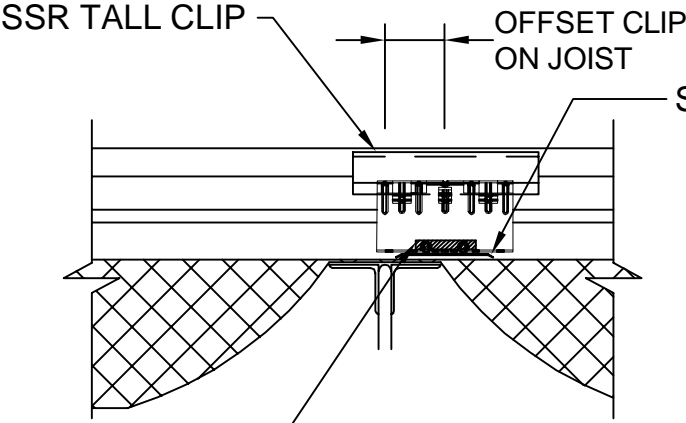


TYPICAL MODULE STRIP INSTALLATION
(NOTE: 2 Clip Fasteners Required per Module Strip)

SSR MODULE STRIP INSTALLATION (OPTIONAL)

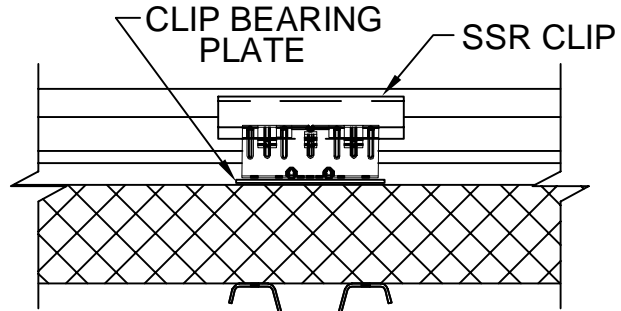
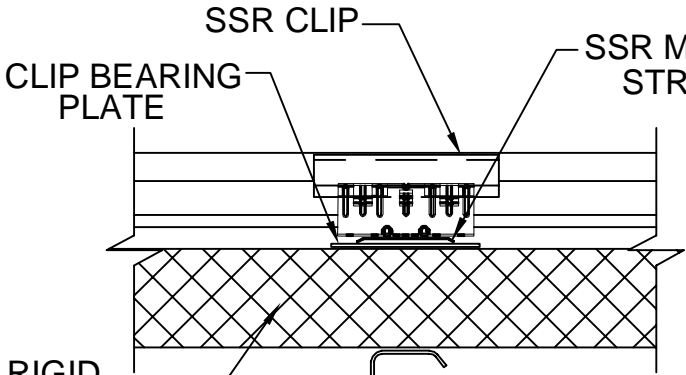


MODULE STRIP ON PURLIN / TRUSS WITH BLANKET INSULATION
BLANKET INSULATION ONLY



MODULE STRIP ON JOIST / TRUSS WITH THERMAL BLOCK

BLANKET INSULATION w/ THERMAL BLOCK



NOTE:
ROOF RUMBLE MAY OCCUR WITH RIGID BOARD INSULATION WITHOUT ISOLATOR BETWEEN INSULATION AND ROOF PANEL.

MODULE STRIP ON PURLIN WITH RIGID BOARD INSULATION

CLIP BEARING PLATE ON TRUSS WITH RIGID BOARD INSULATION

RIGID BOARD INSULATION

SYSTEM INSTALLATION

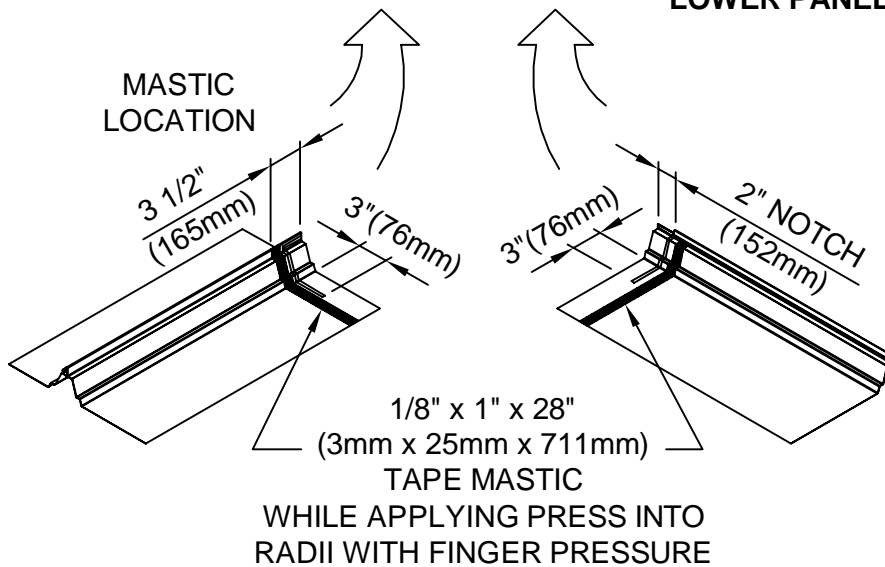
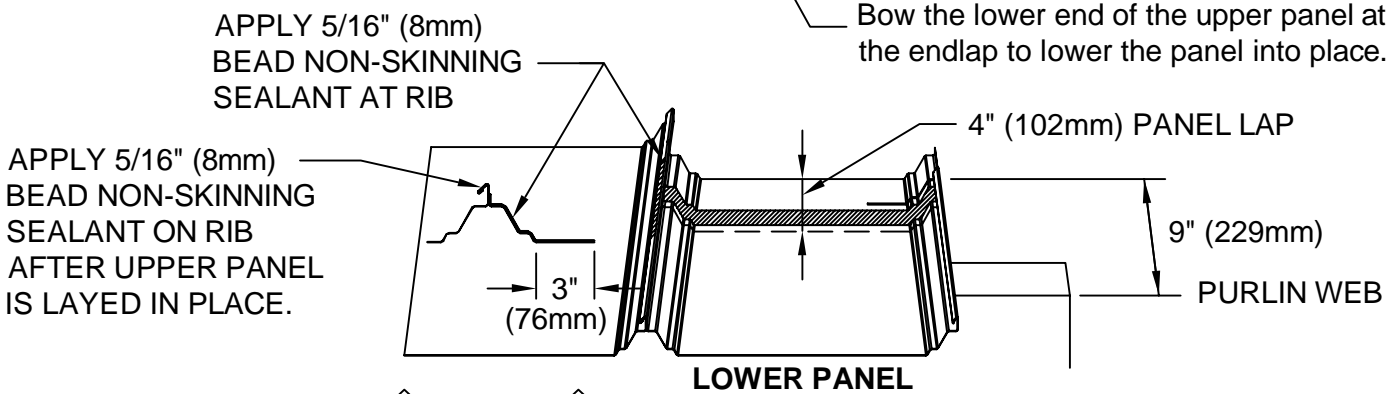
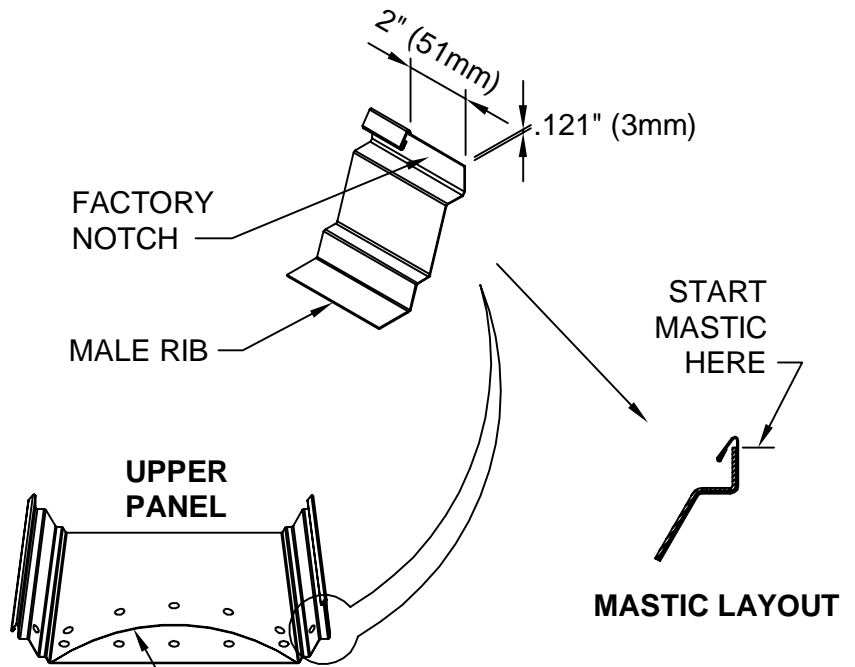
ENDLAP INSTALLATION

1. Install lower panel. Check for proper lap dimension over purlin of 9" (229mm).

2. Raise panel and install panel stiffener.

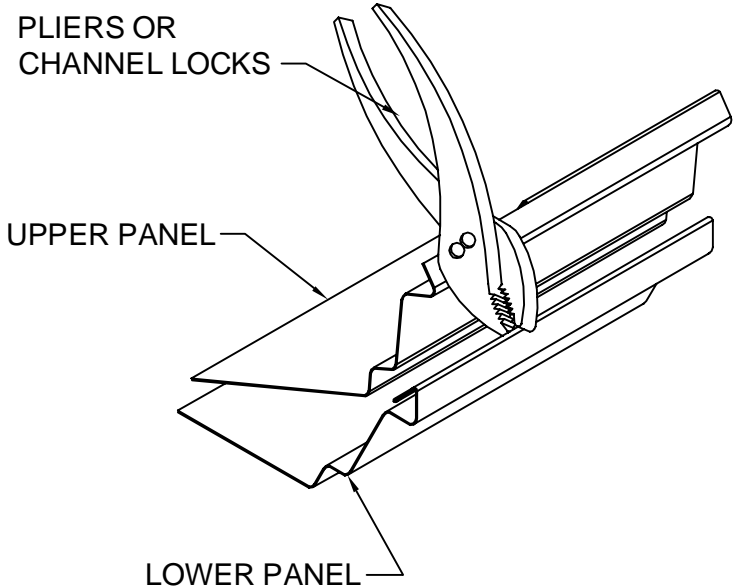
IMPORTANT

Clean **all** mating surfaces to be weather sealed, including the lower edge of the upper panel. Remove fabrication oils, rain, snow, ice, dew, dust, and dirt prior to application of mastics and sealants.



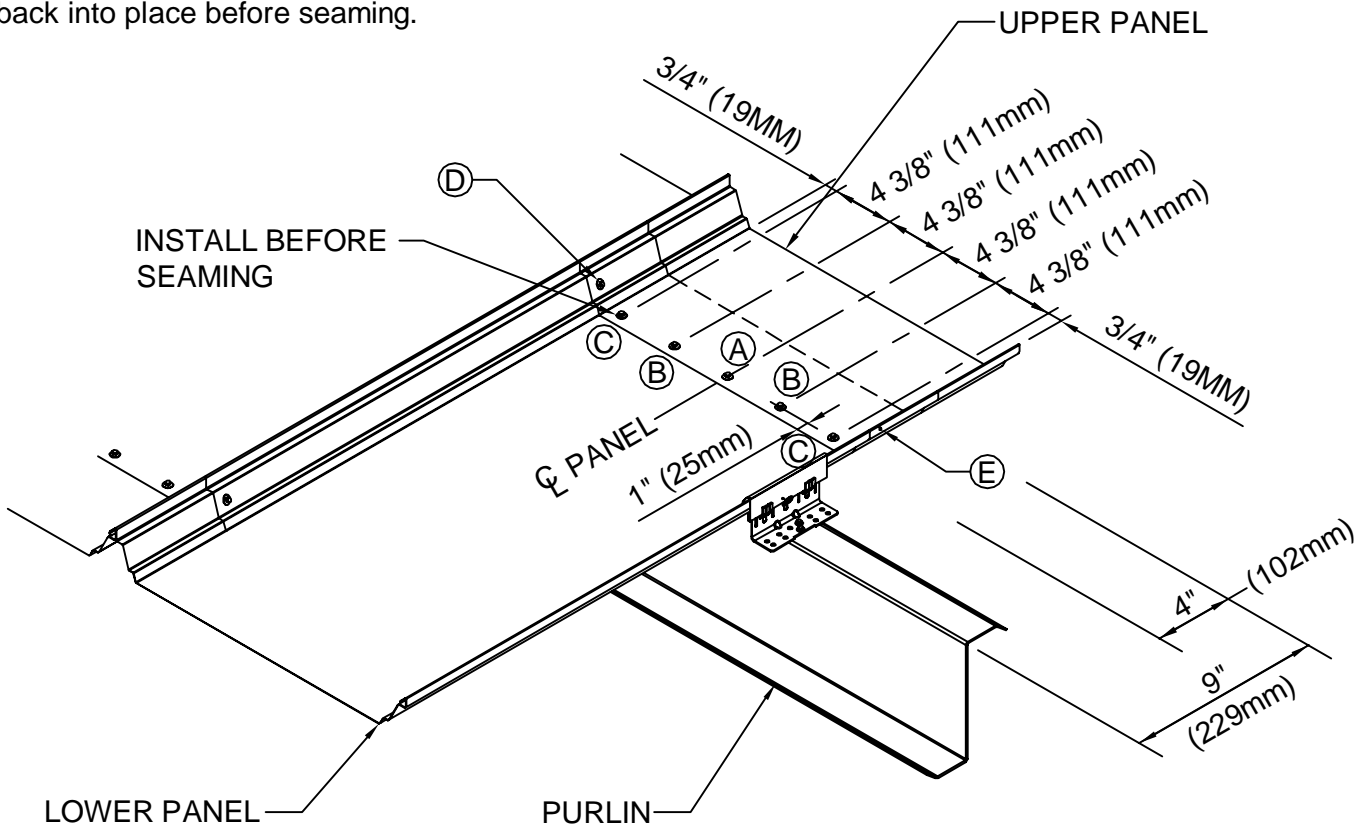
3. Lay in-place one run of 28" (711mm) long tape mastic. Start on male side of lap and follow contour of SSR panel. Do not stretch the mastic. (Leave paper in place until just prior to installing upper panel.)
4. Apply sealant to panel notch in location as shown above.
5. Install upper panel. Upper panel must lap lower panel 4" (102mm).
6. Install SSR panel clip making sure when tab and clip are rolled into place, the shoulder of the clip is inserted under the top flange of the panel stiffener. When in place, the top flanges of both sides of the panel stiffener will rest on the shoulders of the SSR clips. This is very important to assure alignment of the rib area and the to provide back-up for the end lap fasteners that will be installed in the rib area.

FASTENER INSTALLATION

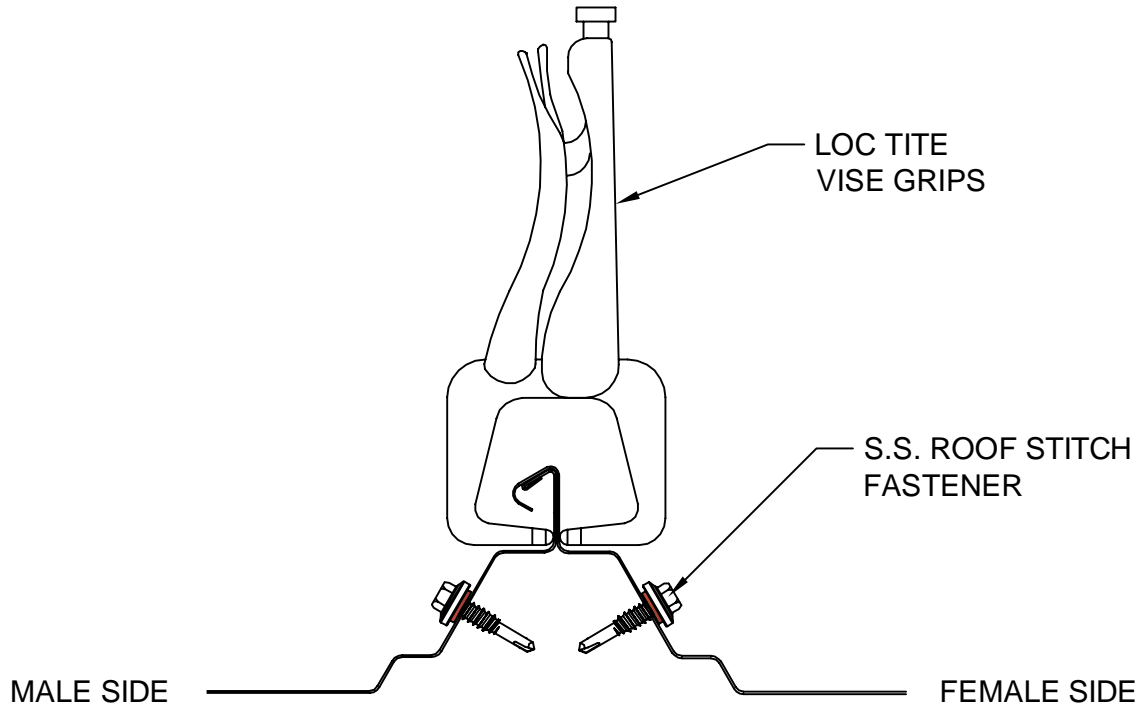
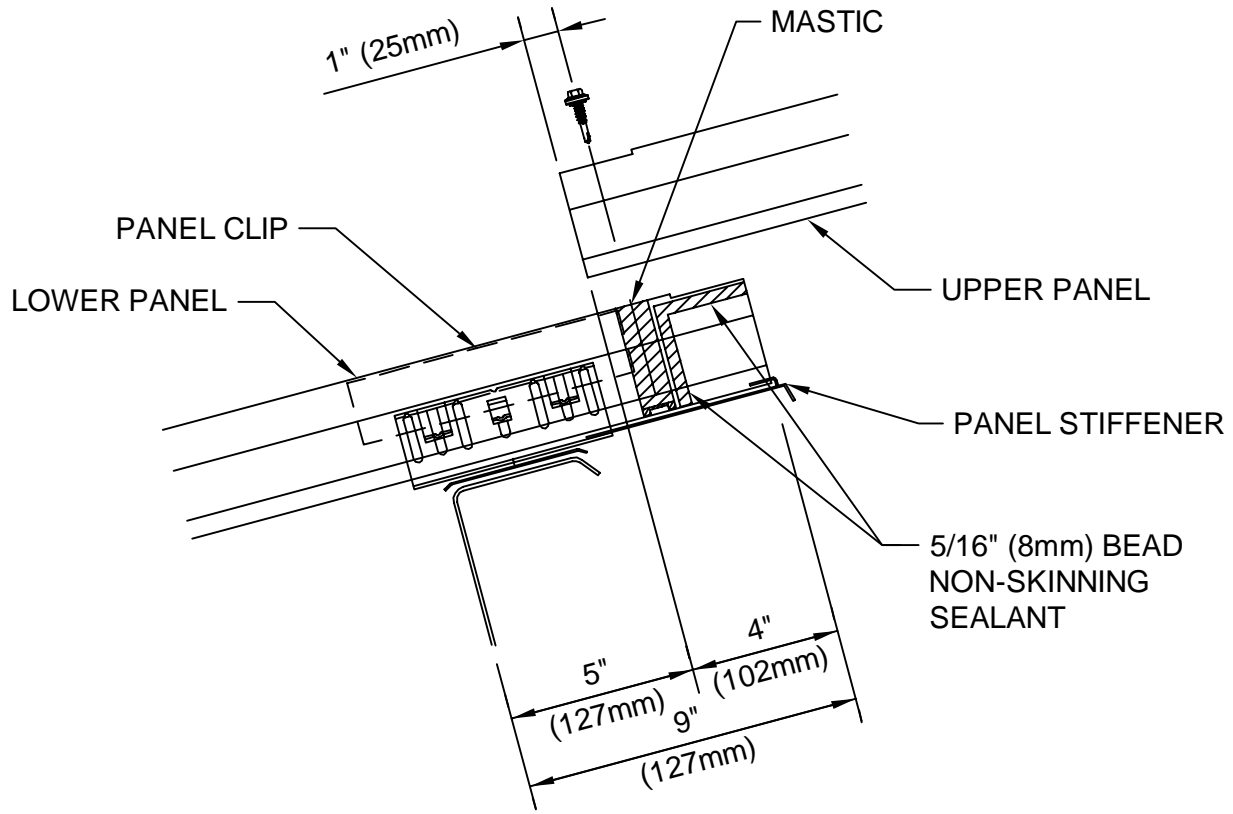


When installing the upper panel it is necessary to raise the male lip of the lower panel to provide clearance for the male rib of the upper panel. Open the first 4" of the lower male rib. Once the upper panel is in place, the lower panel male rib needs to be moved back into place before seaming.

1. After upper panel is in place, install the endlap fasteners. Fasteners should be installed prior to panel seaming.
2. Fasteners should be installed at dimples in the upper panel or in locations shown in dimensions below. A total of seven fasteners, five in the flat and one each in opposite rib shoulders must be installed to provide a weather tight seal.
3. The sequence for the endlap fasteners is as follows:
 - A. Install five endlap fasteners in the flat of the panel first.
 - a. Center fastener first (A).
 - b. Fasteners on either side of center fastener (B).
 - c. Fasteners near major ribs (C).
 - B. Install Shoulder/Rib fasteners D & E, fasteners in shoulders of major ribs using Loc-Tight vise grips where possible.

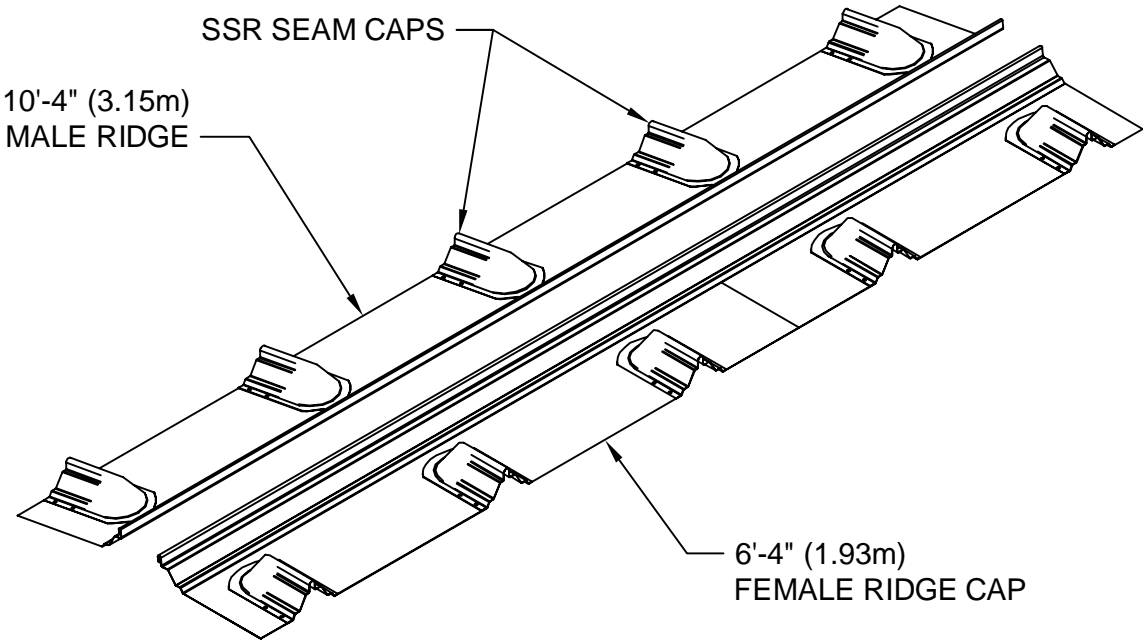


**SYSTEM INSTALLATION
FASTENER INSTALLATION**

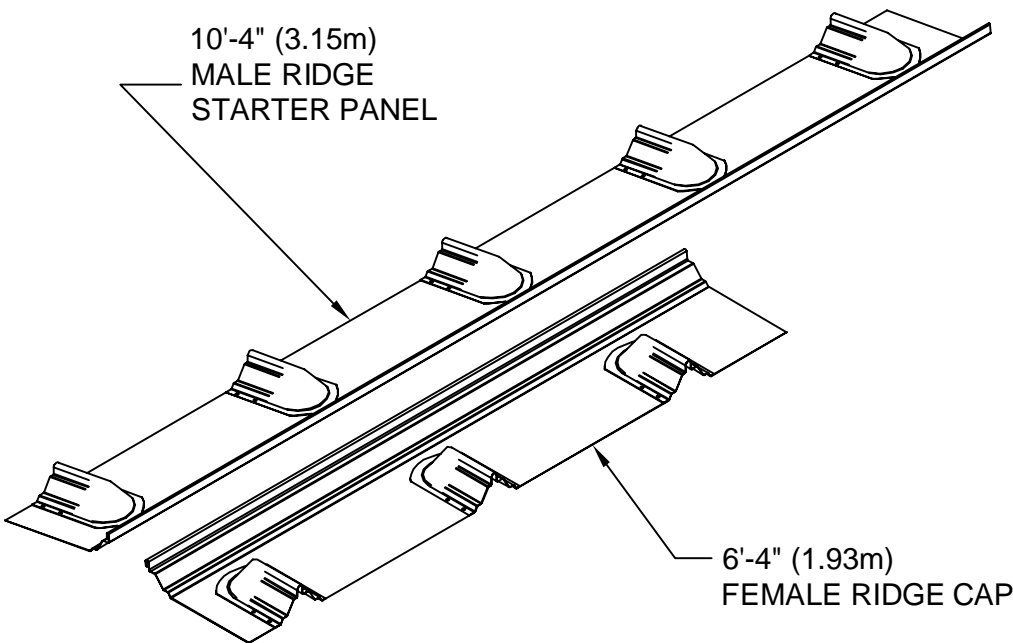


IMPORTANT

RIDGE INSTALLATION

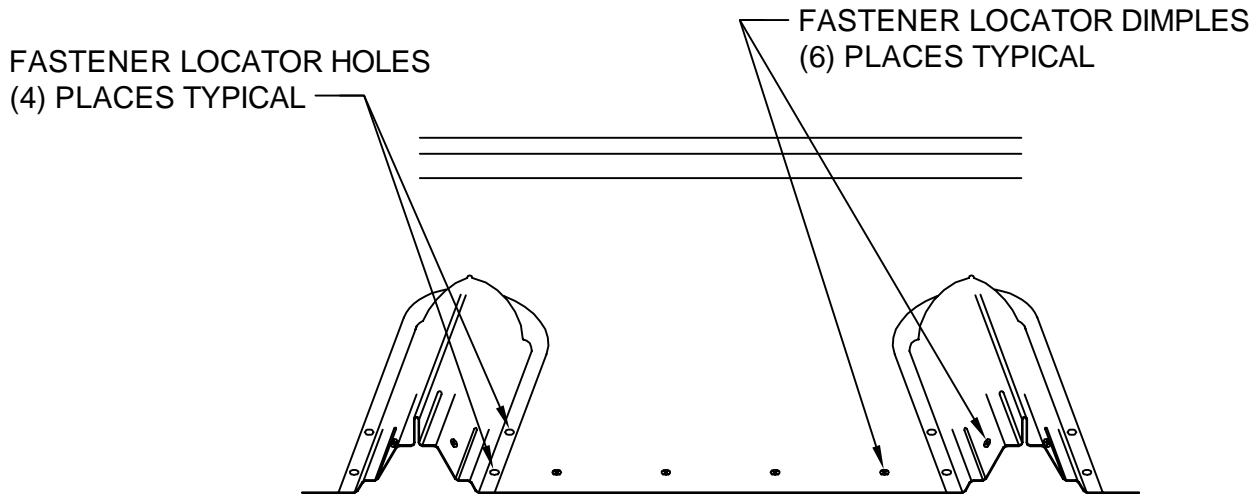


- SSR ridge panels and related components are factory notched and non handed
- Direction of ridge installation is a field choice.
- Male ridge panels are installed first, female panels next, starting at same end of ridge as first male panel.
- Endlaps of female panels are staggered from endlaps of male panels.



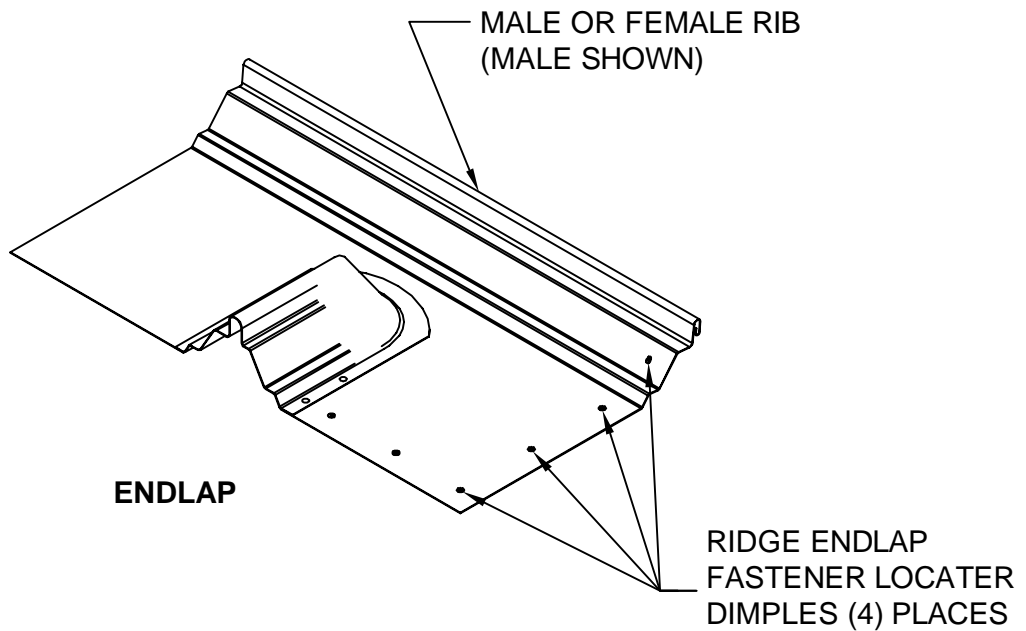
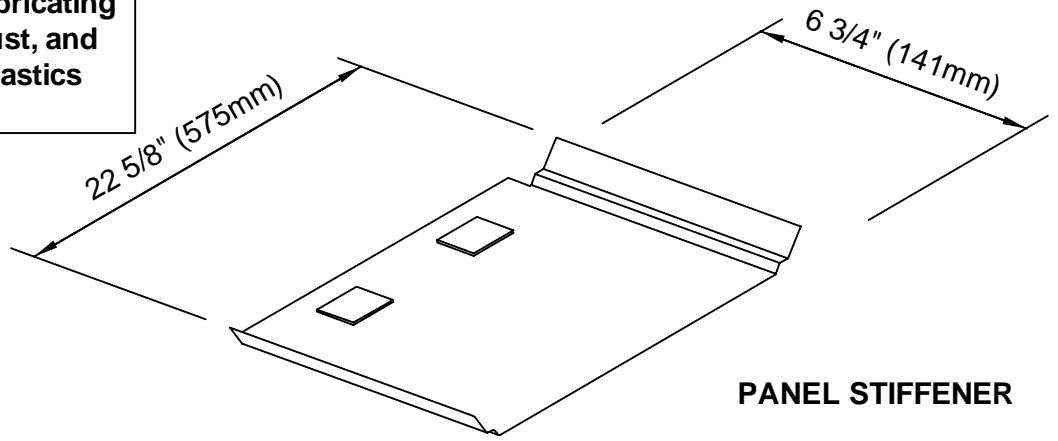
SYSTEM INSTALLATION

RIDGE INSTALLATION

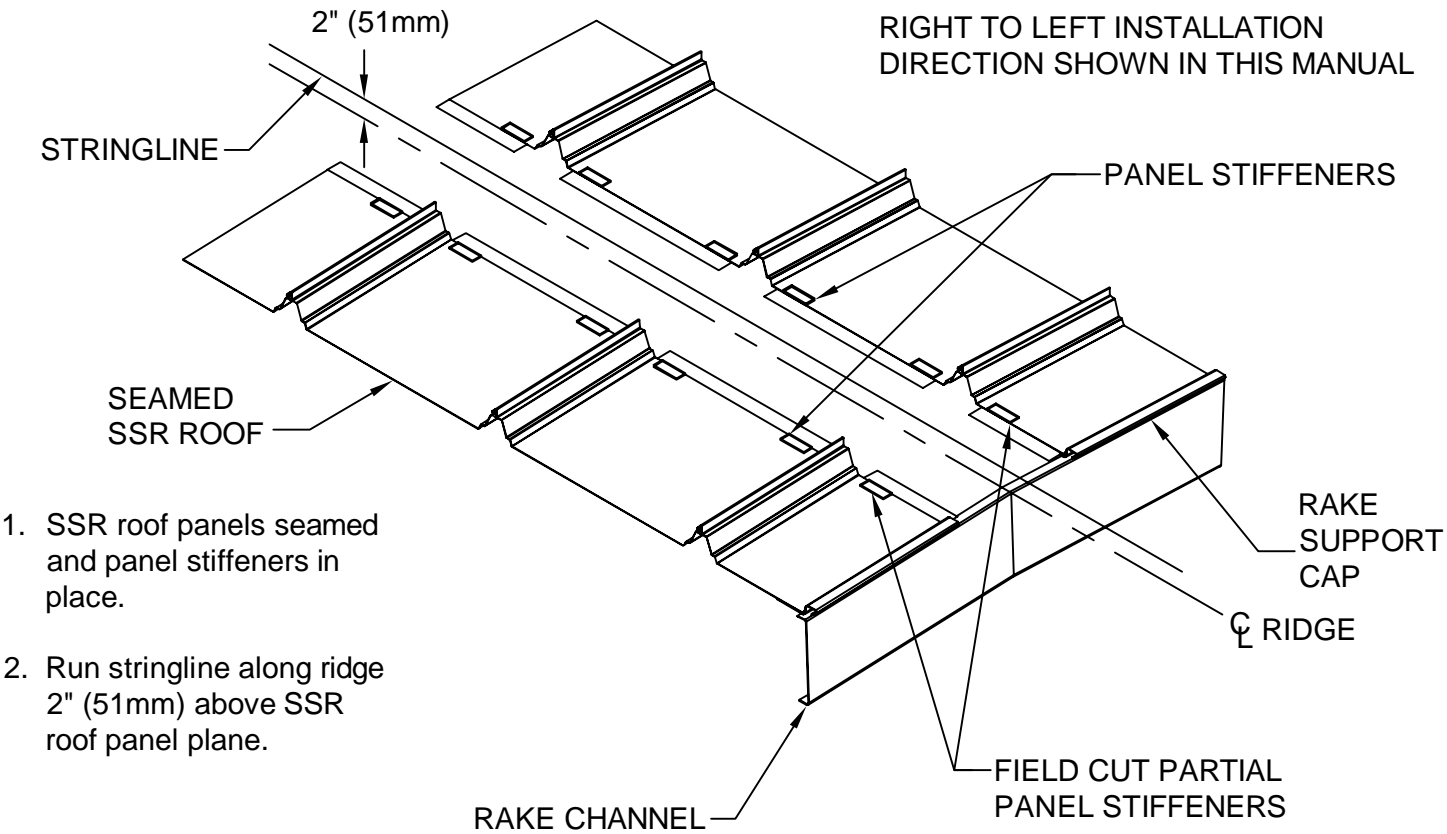


TYPICAL SECTION

Clean all mating surfaces to be weather sealed. Remove fabricating oils, rain, snow, ice, dew, dust, and dirt prior to application of mastics and sealants



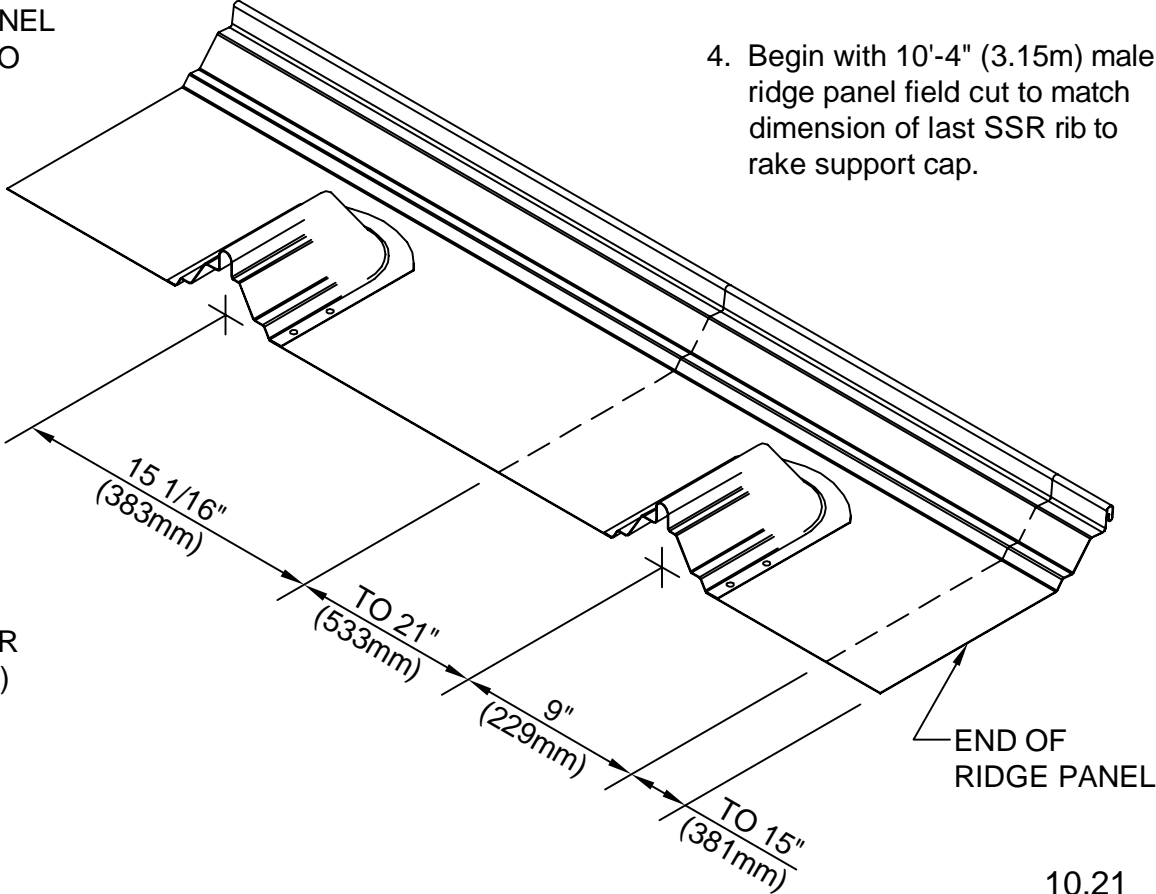
RIDGE INSTALLATION - MALE PANELS



1. SSR roof panels seamed and panel stiffeners in place.
2. Run stringline along ridge 2" (51mm) above SSR roof panel plane.

3. Stop rake support 6" (152mm) from ridge to allow clearance for seamer tool
4. Begin with 10'-4" (3.15m) male ridge panel field cut to match dimension of last SSR rib to rake support cap.

CUT OFF BETWEEN CAPS WHEN STARTING PANEL IS 15 1/16" (383mm) TO 21" (533mm)

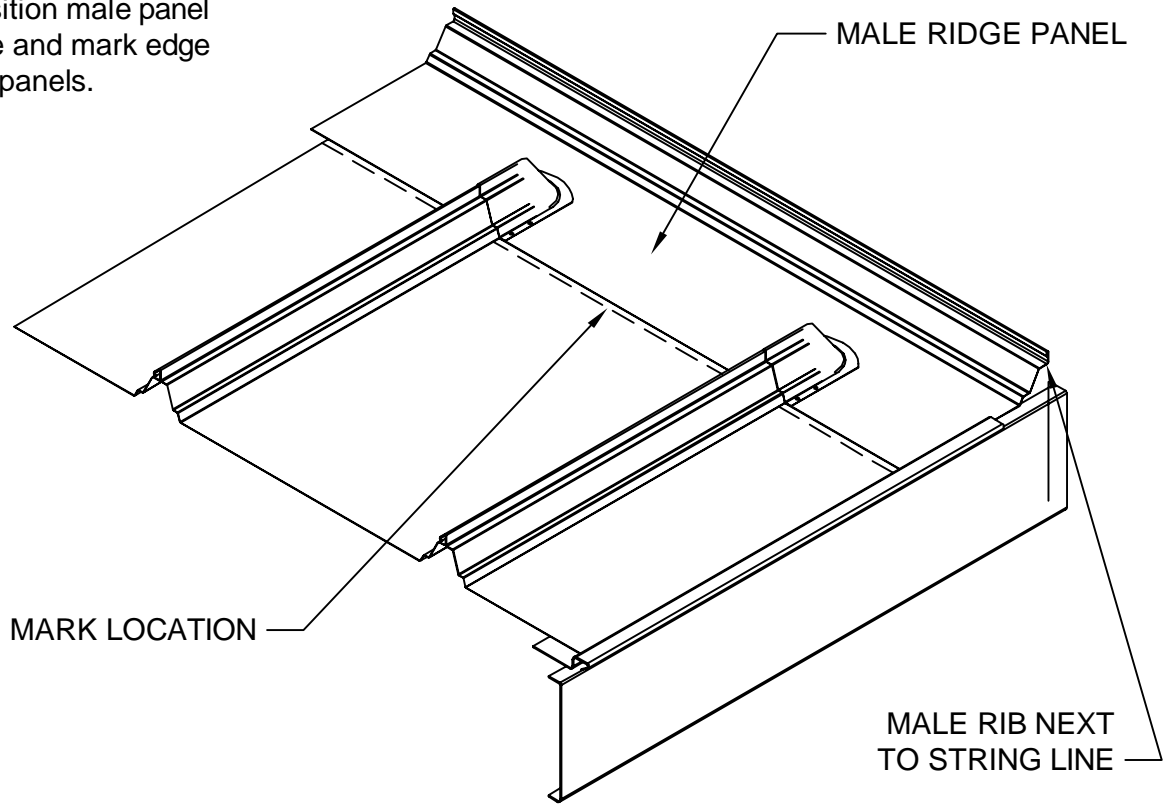


TRIM END OF PANEL WHEN STARTING SSR PANEL IS 15" (381mm) OR LESS

SYSTEM INSTALLATION

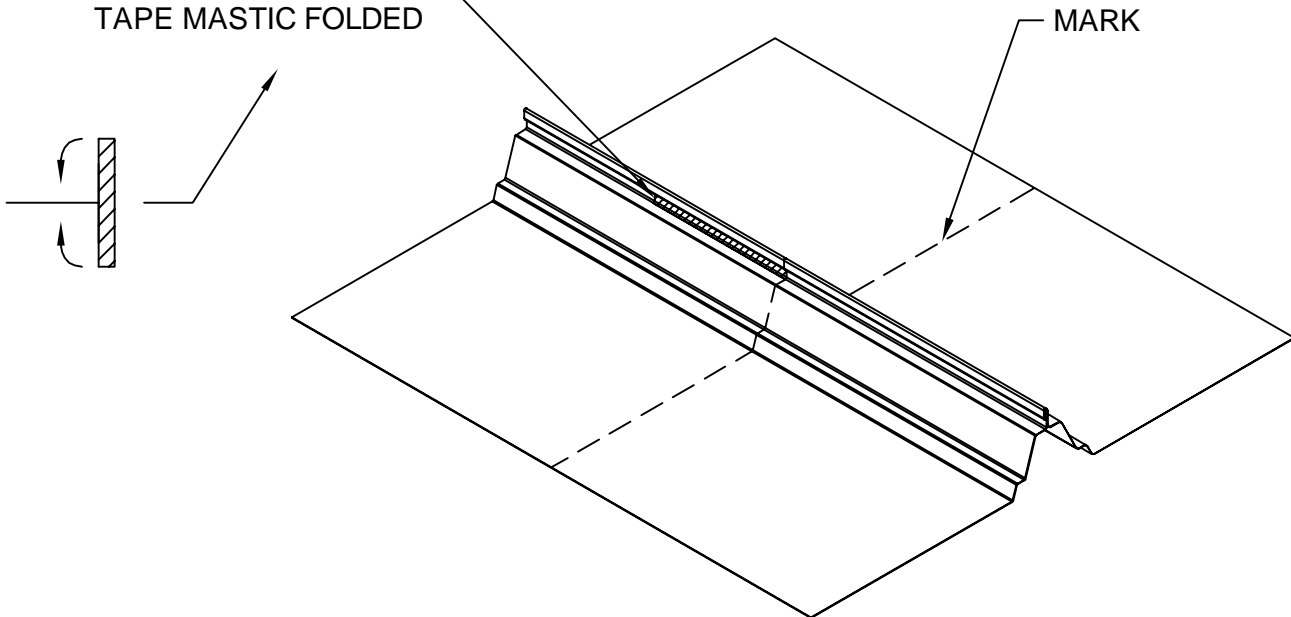
RIDGE INSTALLATION - MALE PANELS

5. Temporarily position male panel next to stringline and mark edge location on roof panels.



NOTE: DO NOT MARK ON GALVALUME SHEETING WITH A PENCIL. USE FELT TIP MARKER AS PENCIL GRAPHITE WILL CAUSE PREMATURE FINISH DAMAGE.

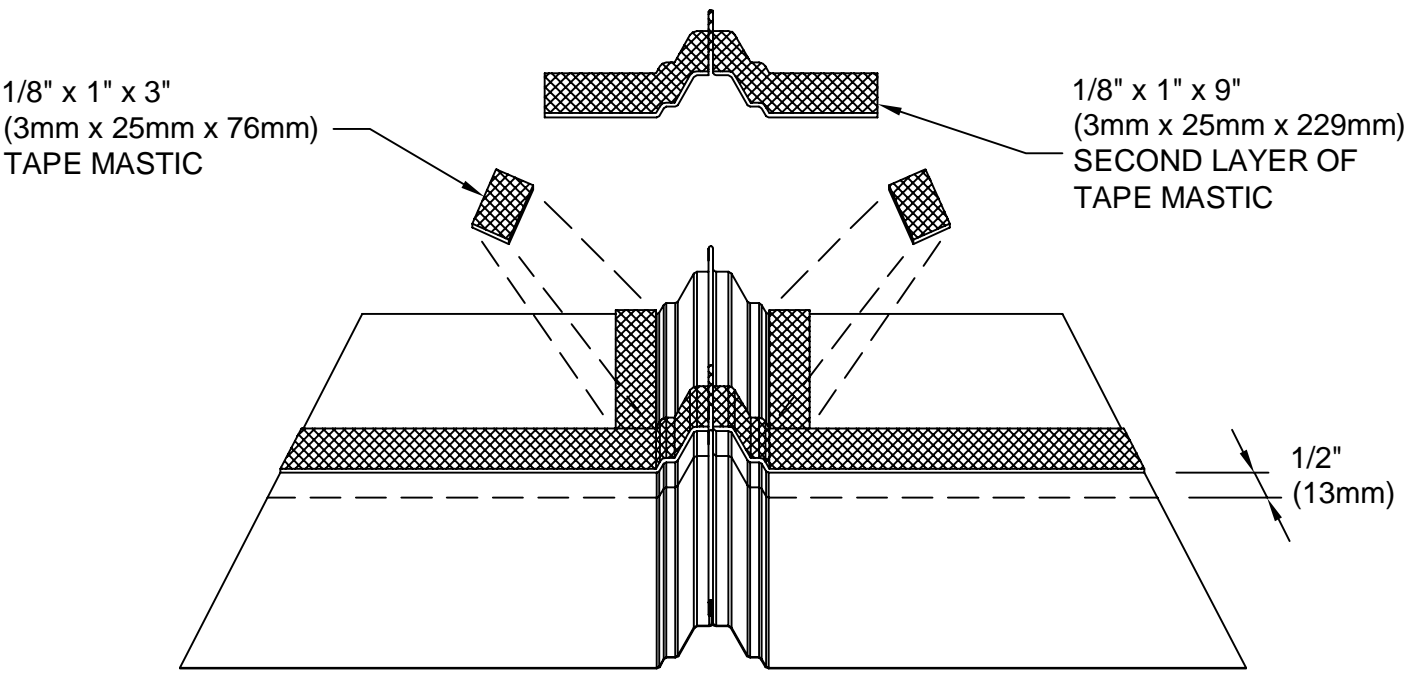
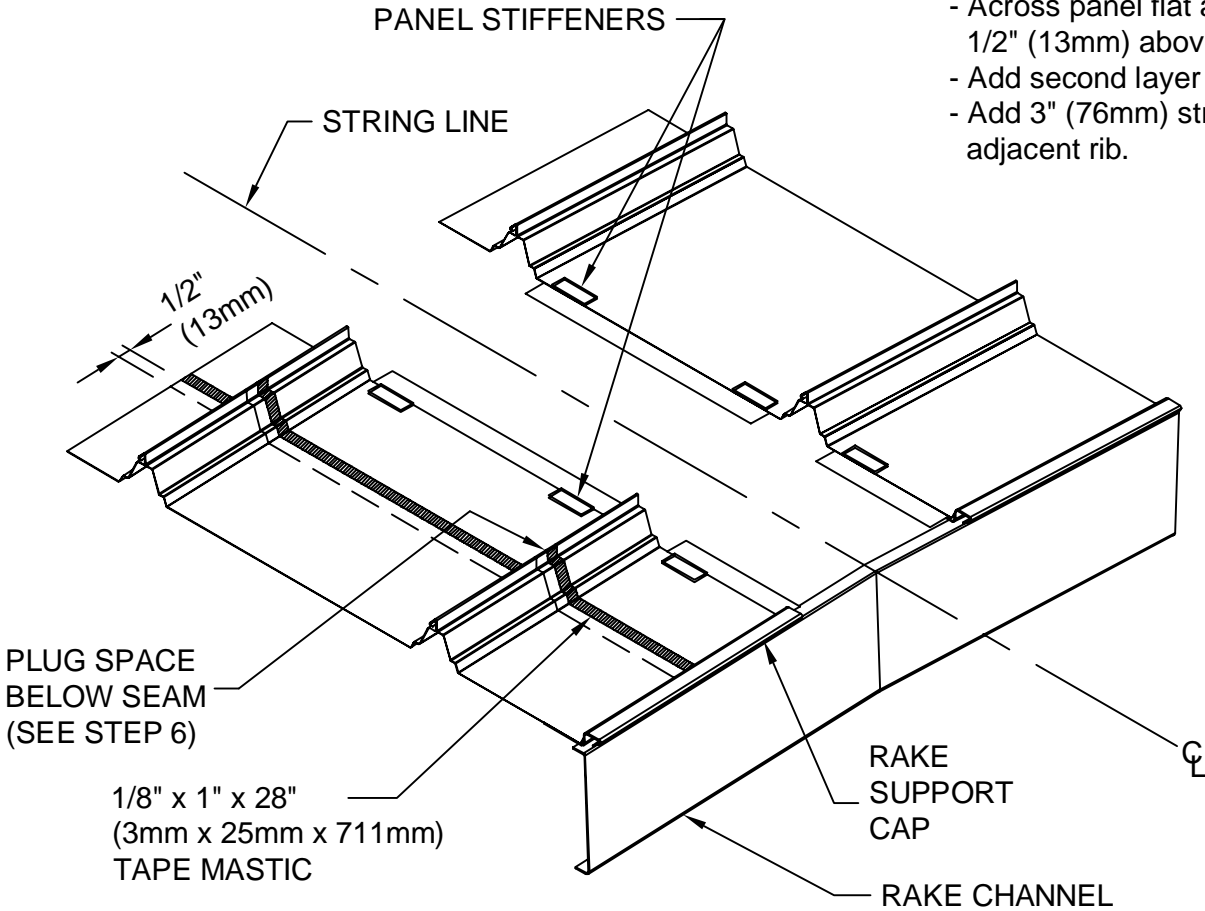
1/8" x 1" x 3"
(3mm x 25mm x 76mm)
TAPE MASTIC FOLDED



6. 1/8" x 1" x 3" (3mm x 25mm x 76mm) tape mastic folded and plugged into open area below seamed joint.

RIDGE INSTALLATION - MALE PANELS - WEATHERSEAL

- 7. Install tape mastic as shown:
 - Across panel flat and over ribs 1/2" (13mm) above mark.
 - Add second layer over ribs only.
 - Add 3" (76mm) strips to flat adjacent rib.



MASTIC INSTALLATION

SYSTEM INSTALLATION

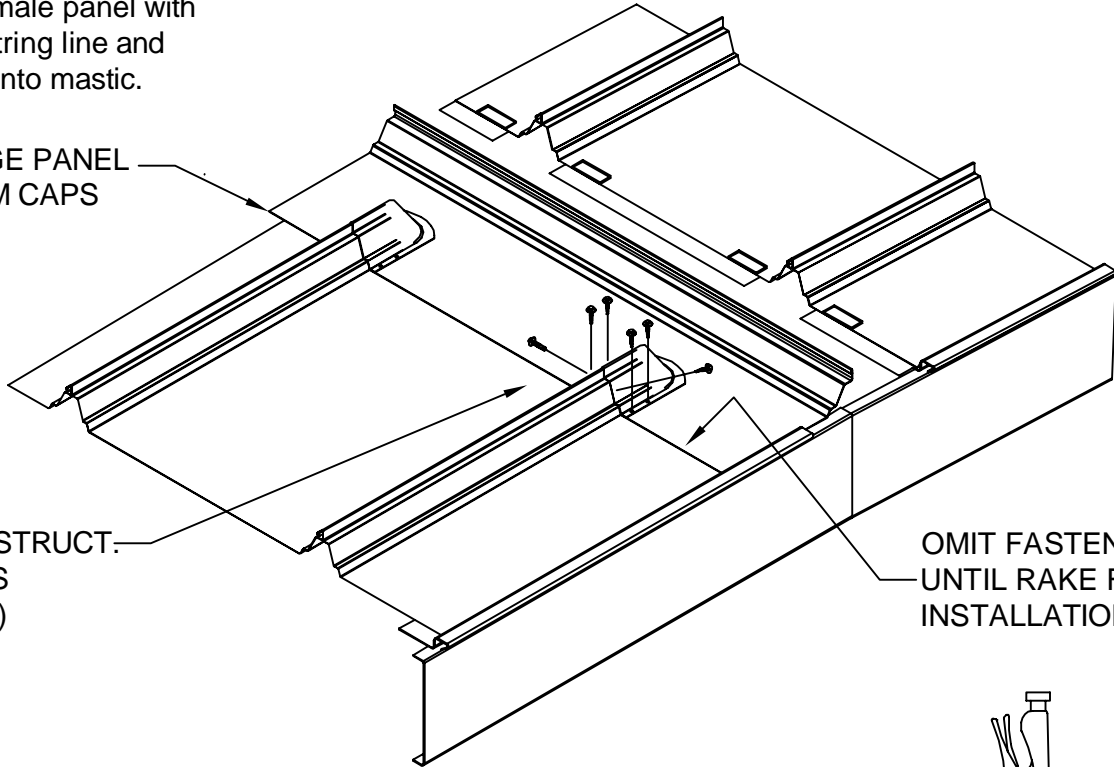
RIDGE INSTALLATION - MALE PANELS - WEATHERSEAL

8. Reposition male panel with rib next to string line and push firmly into mastic.

MALE RIDGE PANEL WITH SEAM CAPS

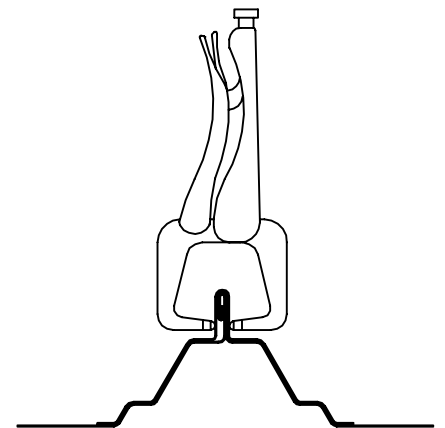
S.S. ROOF STRUCT. FASTENERS (6 PER CAP)

OMIT FASTENERS UNTIL RAKE FASCIA INSTALLATION



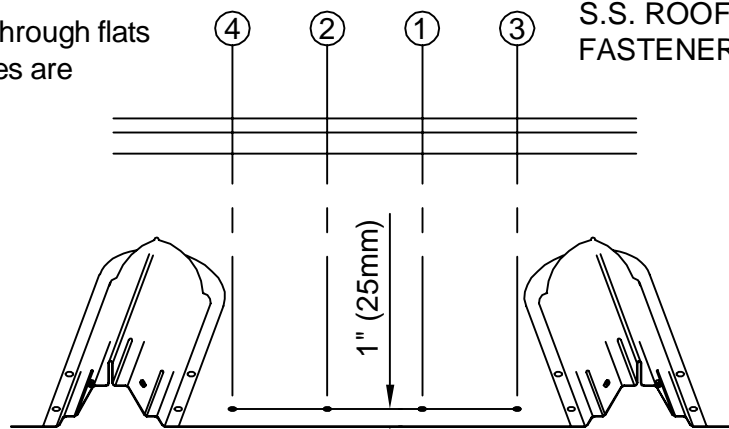
9. While standing on the seam cap, crimp seam cap with hold tite "C" clamp in area over seamed SSR rib.

10. Continue standing on the cap and install (6) S.S. roof struct. fasteners through holes in caps (4 per cap flange) and (2) S.S. roof struct fasteners in the shoulders of seam cap where locator dimples are punched.



11. Install (4) S.S. roof fasteners through flats of panels where locator dimples are punched.

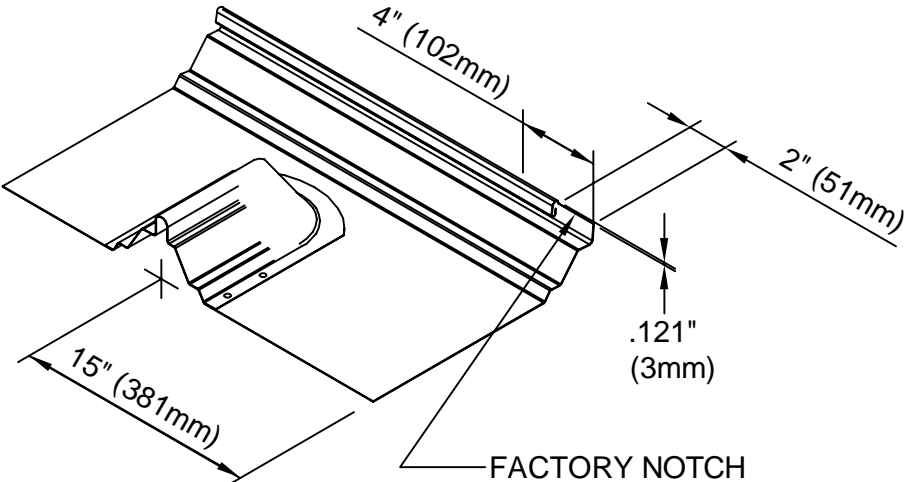
S.S. ROOF STRUCT. FASTENERS



5 EQUAL SPACES OR APPROXIMATELY 3 5/8" (92mm) ON CENTER

FASTENER PATTERN

RIDGE INSTALLATION - MALE PANELS - ENDLAPS



NOTE: The panel has a factory notched lip of the male panel so it will nest tightly with the previously installed male panel.

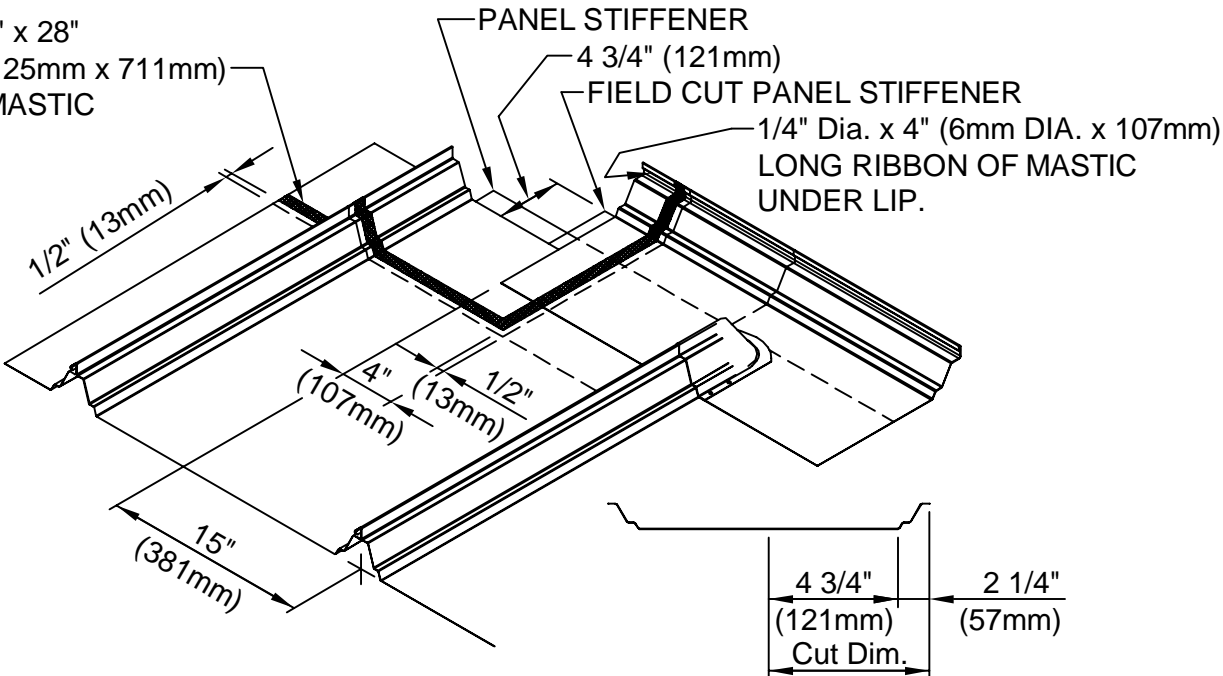
12. Temporarily position male panel next to stringline. Nest endlap with installed male panel. Mark edge and lap location roof panels. (DO NOT USE PENCIL)

13. Install tape mastic as in steps 6 and 7
 - Add mastic to endlap condition.
 - Add 1/4" x 4" (6mm x 107mm) mastic bead under lip of installed male panel lap.

14. Field cut a Ridge Panel Stiffener to 4 3/4" (7") x 14" [121mm (178mm x 356mm)] and locate it at the end of the ridge cap panel. (See stiffener profile below for actual cut dimensions.)

15. Reposition male panel next to stringline. Nest endlap condition and clamp endlap tightly together. Push panel firmly into mastic.

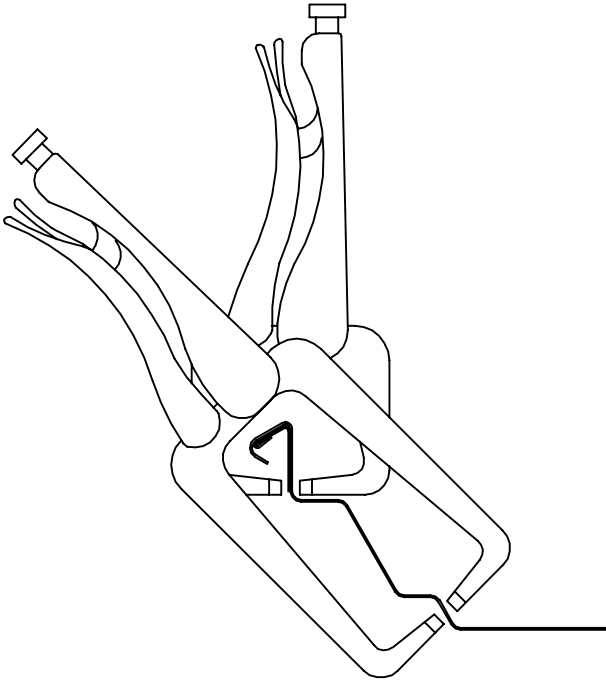
1/8" x 1" x 28"
 (3mm x 25mm x 711mm)
 TAPE MASTIC



PANEL STIFFENER PROFILE AT RIDGE PANEL SPLICE

SYSTEM INSTALLATION

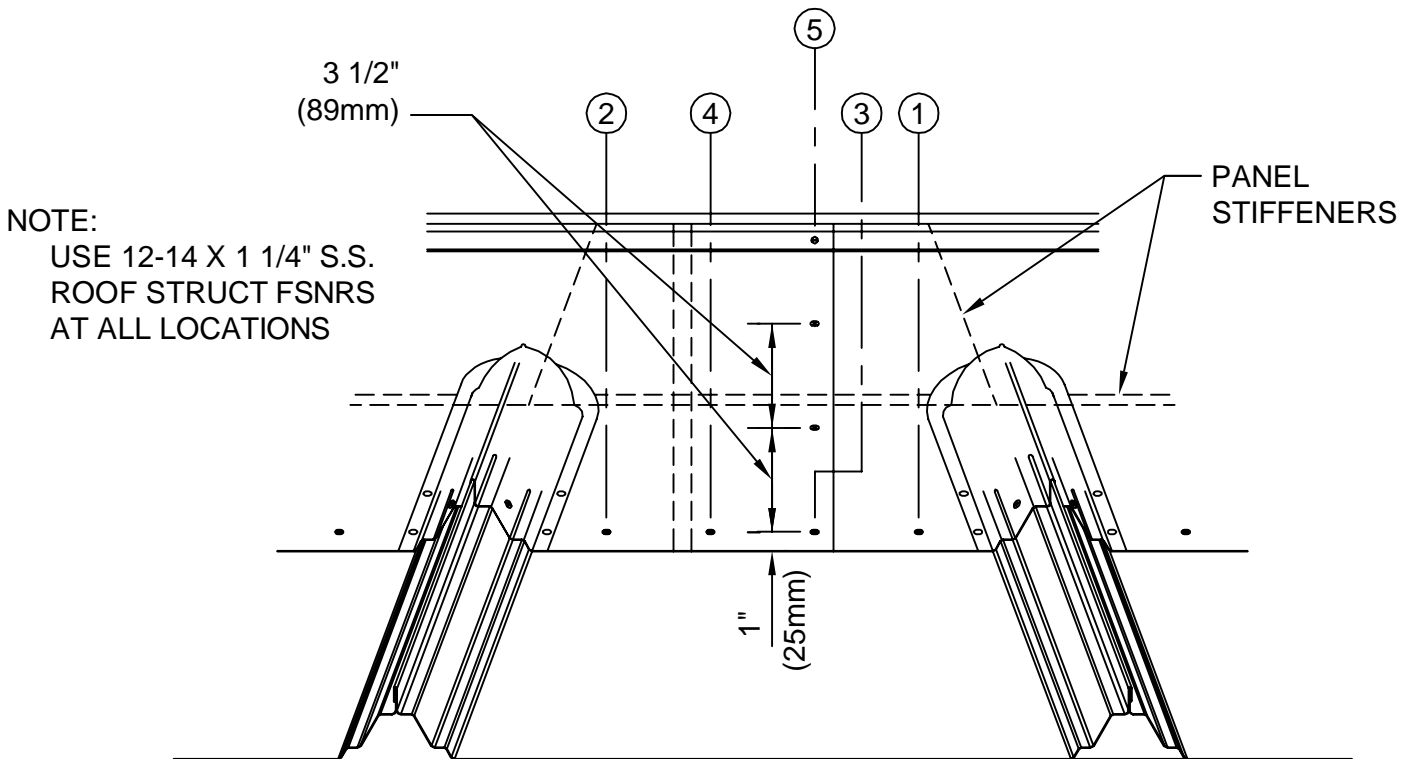
RIDGE INSTALLATION - MALE PANELS - ENDLAPS



16. Install S.S. roof struct fasteners as in steps 10 and 11.
 - Add fasteners to endlap condition
 - Do not install fastener at lap adjacent to rib until the ridge has been seamed.
17. Continue male ridge panel installation by following previous steps 12 through 16. Last male ridge panel is field cut to length similar to step 4.

Begin female ridge panel installation after (2) male ridge panels are in place.

CLAMP ENDLAP

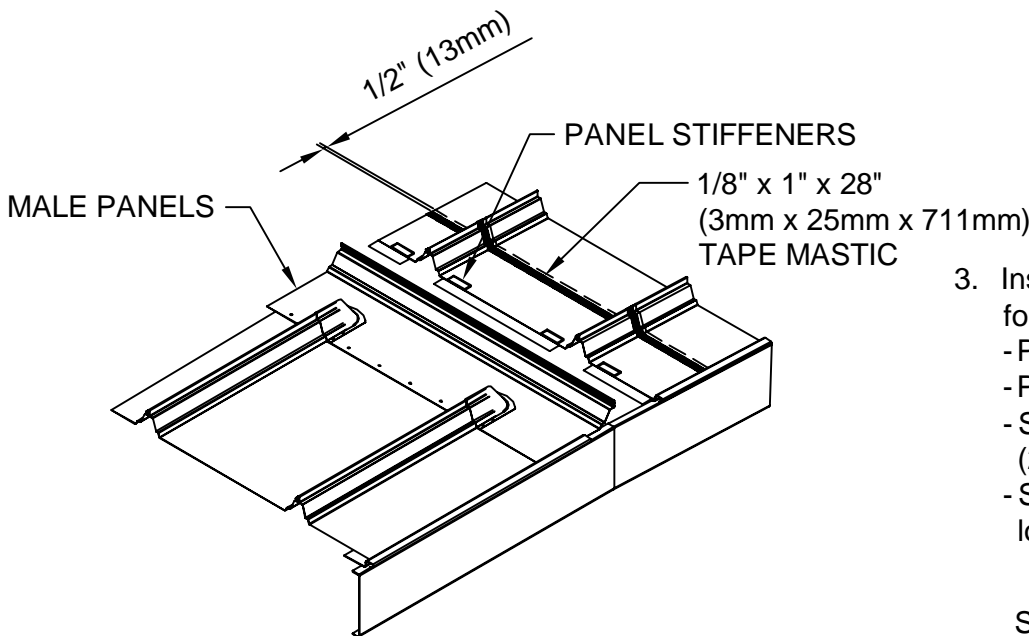
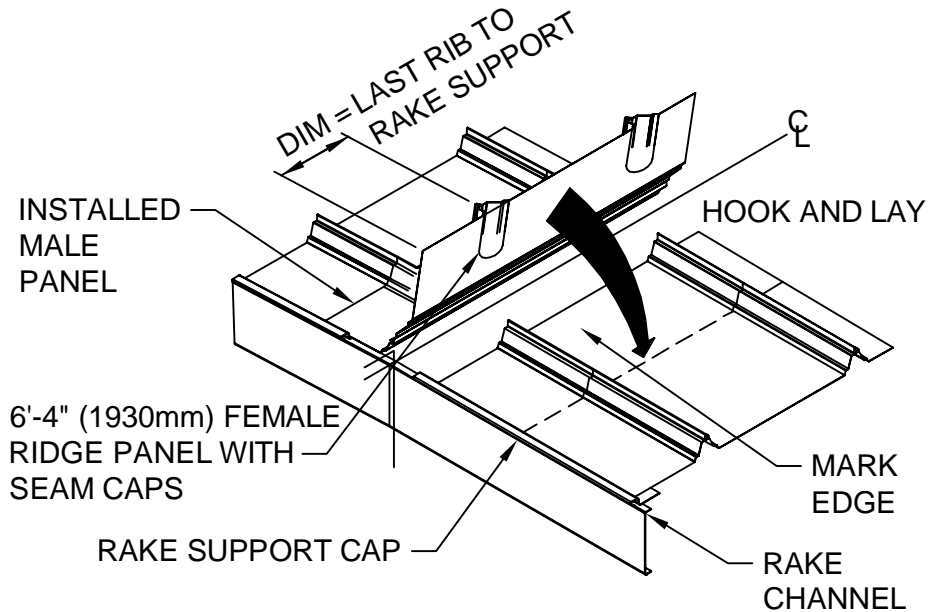


(5) EQUAL SPACES
[APPROX. 3 5/8" (92mm)]
ON CENTER

FASTENER PATTERN - ENDLAP

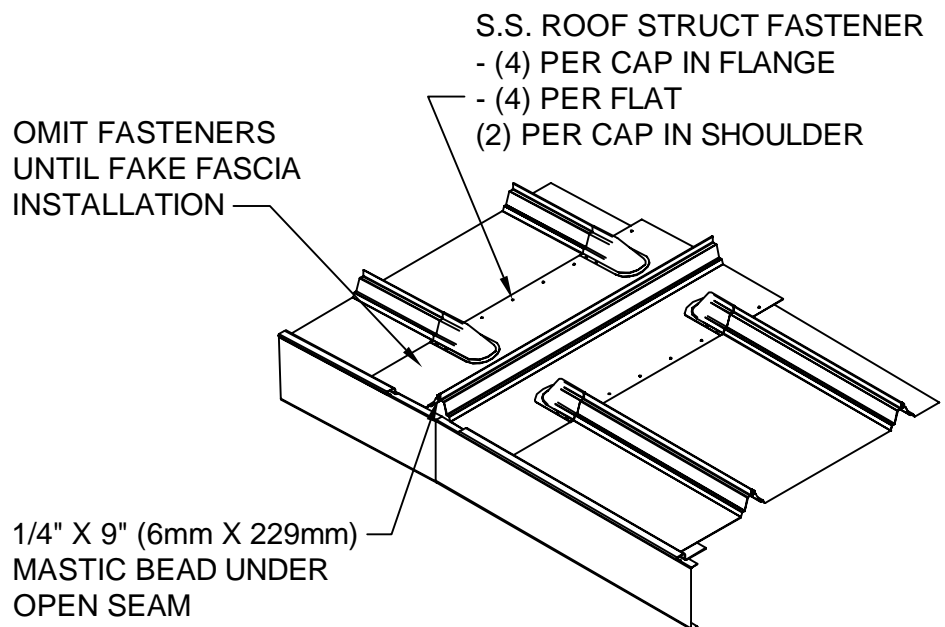
RIDGE INSTALLATION - FEMALE PANELS

1. Begin with 6'-4" (1930mm) female ridge panel. Field cut to proper length. The 6'-4" (1930mm) female panel causes male and female endlaps to be staggered. 10'-4" (3150mm) female panels are used for the remainder of the ridge.
2. Temporarily hook female panel onto male panel, lay in position and mark edge location on roof panels.



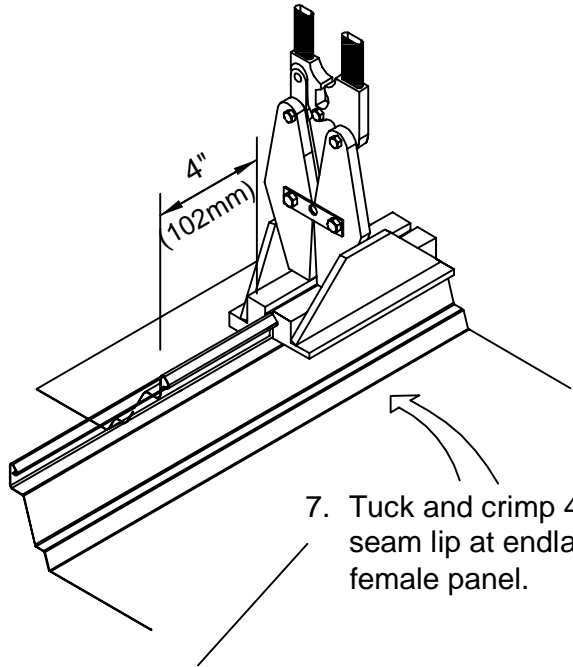
3. Install tape mastic the same as for male panels, steps 6 and 7:
 - Plug below roof seam
 - Panel flat and ribs
 - Second layer on ribs 9" (229mm) long
 - Strips adjacent to rib 3" (76mm) long

4. Rehook and lay female panel in place. Push firmly into mastic.
5. Install S.S. roof struct fasteners the same as for male panels Steps 10 and 11.
6. Place tape mastic bead 1/4" dia. x 9" (6mm dia. x 229mm) long under lip of open seam at ends of all ridge panel runs.
 - Ridge at rake fascia
 - Ridge at roof height change
 - Ridge vents or accessories.

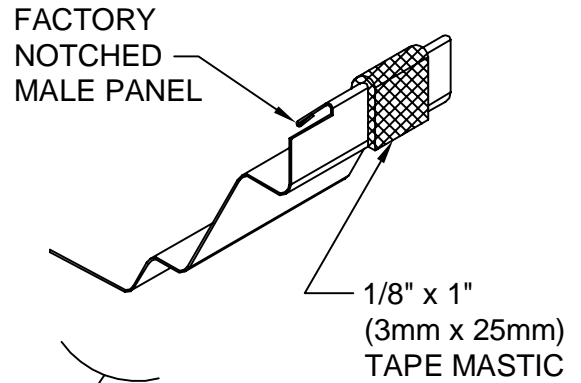


SYSTEM INSTALLATION

RIDGE INSTALLATION - FEMALE PANELS - ENDLAP

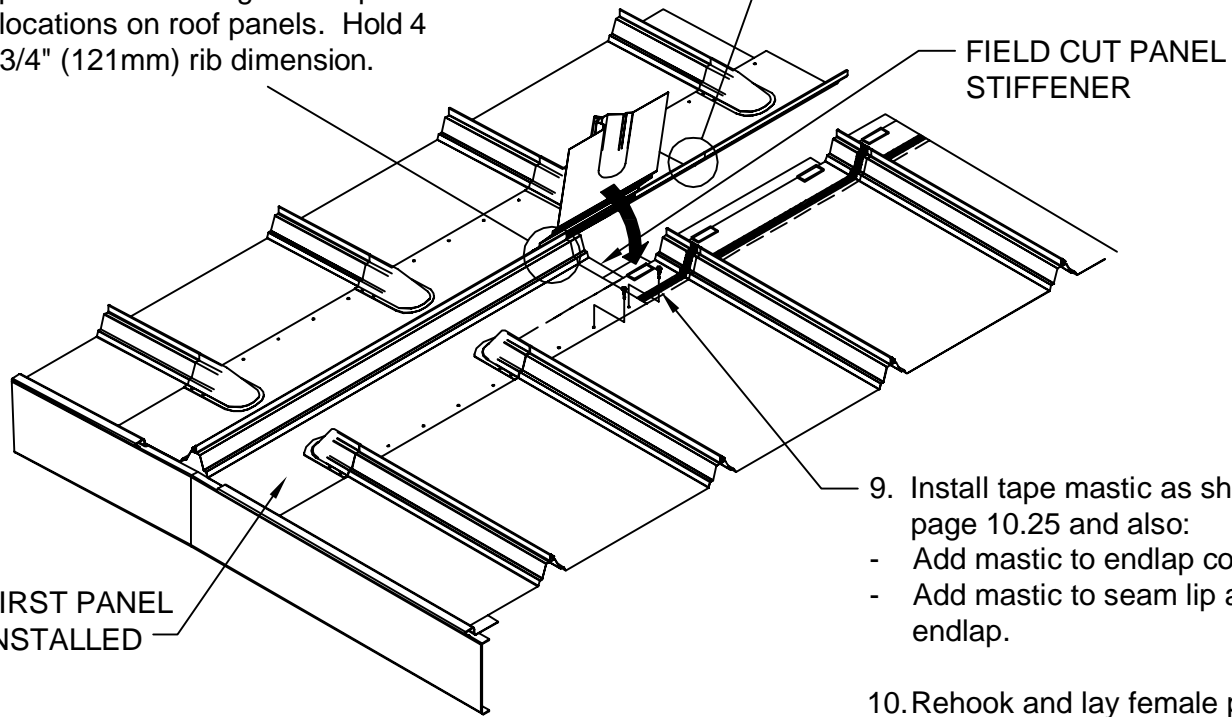


7. Tuck and crimp 4" (102mm) of seam lip at endlap on installed female panel.



MALE ENDLAP

8. Temporarily hook and lay next [10'-4" (3150mm)] female panel in position. Mark edge and lap locations on roof panels. Hold 4 3/4" (121mm) rib dimension.

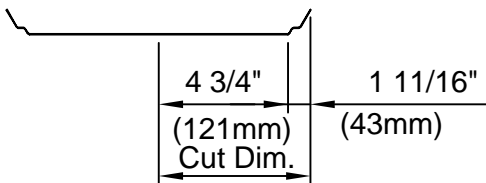


9. Install tape mastic as shown on page 10.25 and also:

- Add mastic to endlap condition
- Add mastic to seam lip at male endlap.

10. Rehook and lay female panel in place. Nest endlap condition and clamp endlap tightly together. Push panel firmly into mastic.

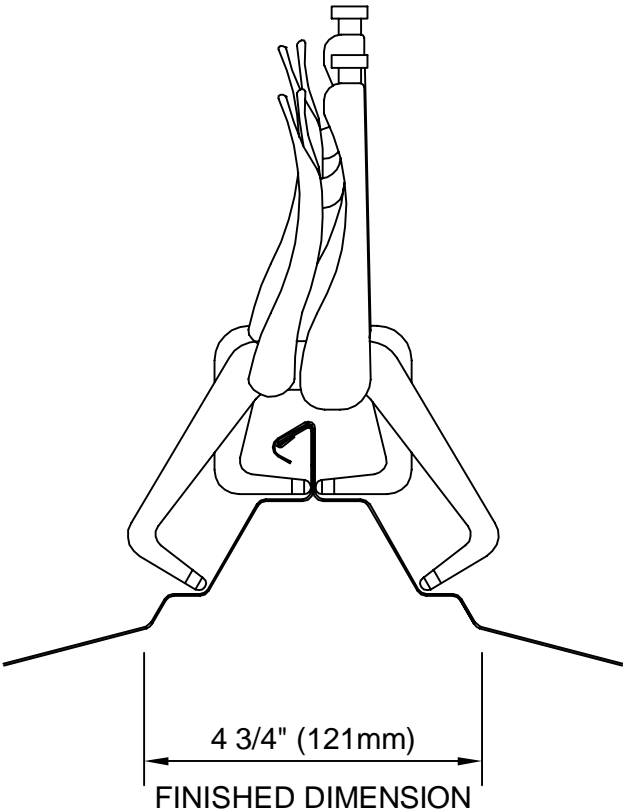
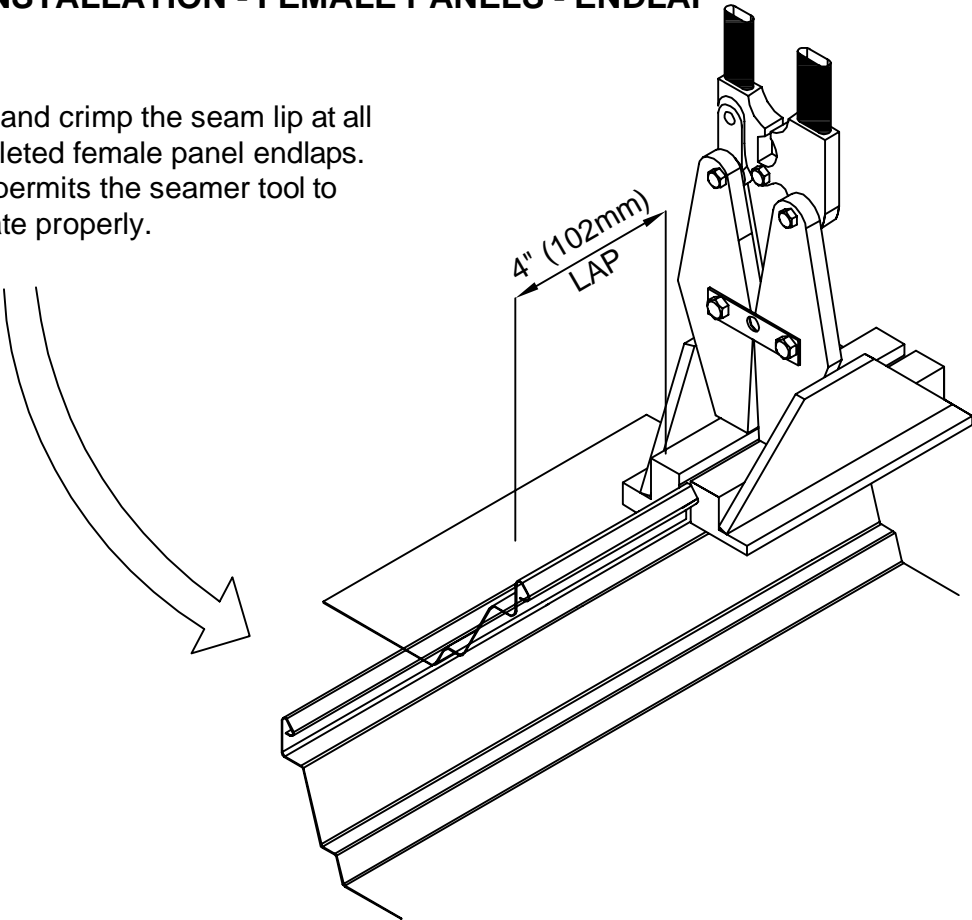
11. Field cut a Panel Stiffener. Cut the stiffener to 4 3/4" (7") x 14" [121mm x (178mm) x 356mm] and locate it at the end of the ridge cap panel. (See stiffener profile to left for actual cut dimensions.)



PANEL STIFFENER PROFILE AT RIDGE PANEL SPLICE

RIDGE INSTALLATION - FEMALE PANELS - ENDLAP

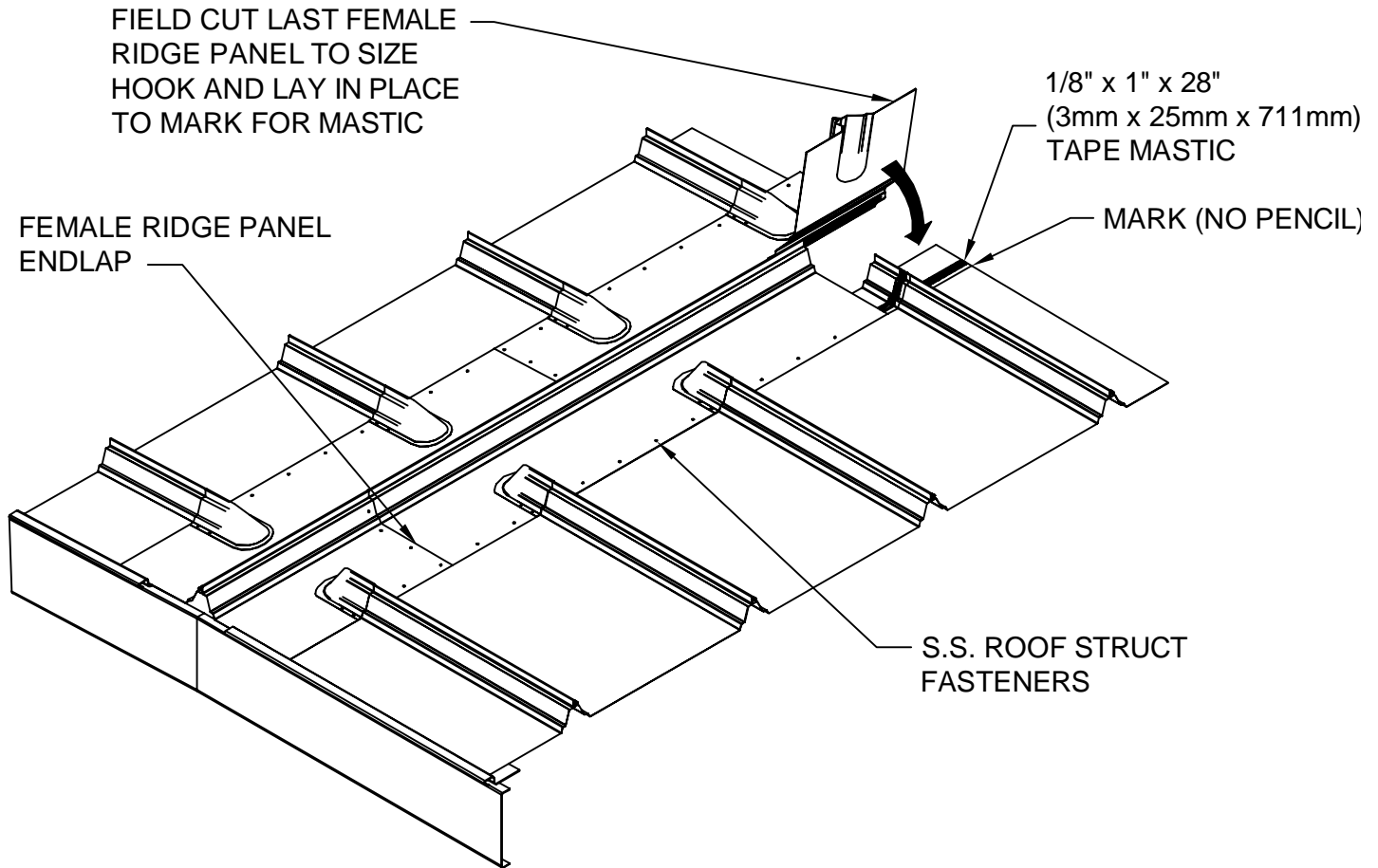
- 12. Tuck and crimp the seam lip at all completed female panel endlaps. This permits the seamer tool to operate properly.



ENDLAP CLAMP DETAIL AT STANDARD RIDGE

SYSTEM INSTALLATION

RIDGE INSTALLATION - FEMALE PANELS



12. Install S.S. roof struct fasteners as on page 10.24 and: Add fasteners to endlap condition after seam caps are fastened.
13. Proceed with female ridge panel installation by following previous steps 7 thru 12.

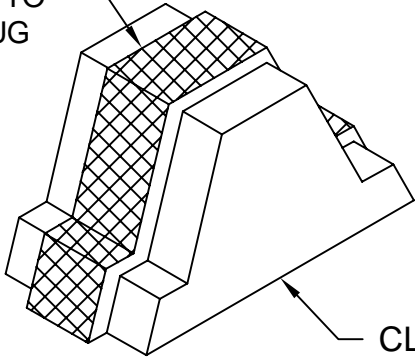
SEAMING THE RIDGE

1. Use previously described SSR roof panel seaming procedures when seaming the SSR ridge.
2. The following must be completed before seaming the ridge:
 - 1/4" x 9" (6mm x 229mm) mastic bead under open seam at ends of all ridge panel runs.
(Step 6 - female panel installation)
 - Crimp seam up at all female panel endlaps (Step 11 - female panel installation)
 - Ridge seam properly engaged full length

EAVE FASCIA INSTALLATION

Refer to **STANDARD ERECTION DETAILS** for eave attachments.

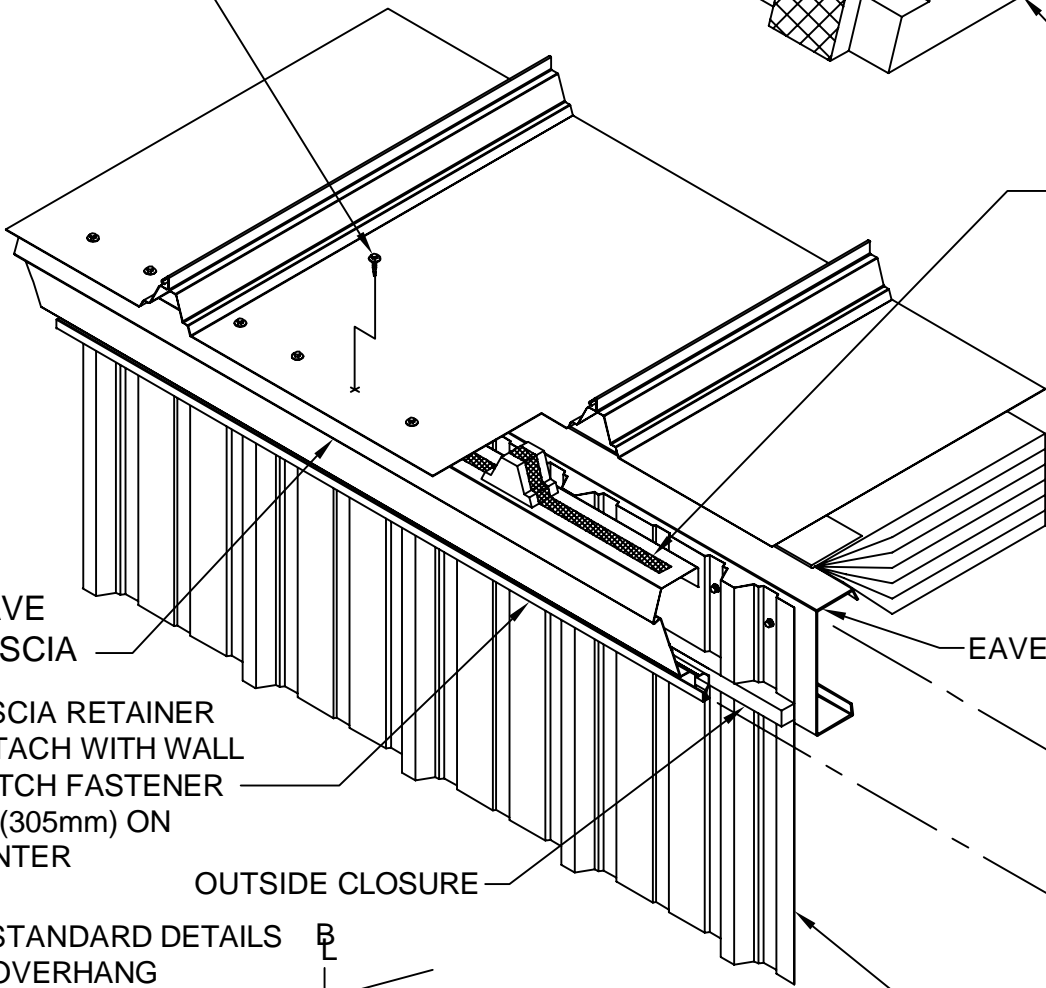
APPLY 1/8" x 1" (3mm x 25mm) TAPE MASTIC TO CLOSURE PLUG



CLOSURE PLUG

S.S. ROOF STITCH FASTENRS (5 PER PANEL)

1/8" x 1" (3mm x 25mm) TAPE MASTIC



EAVE FASCIA

EAVE STRUT

FASCIA RETAINER ATTACH WITH WALL STITCH FASTENER 12" (305mm) ON CENTER

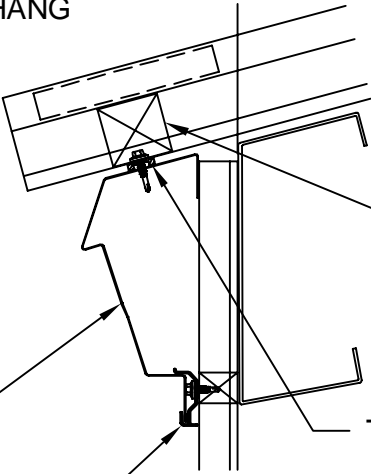
Sidewall fascia retainer must butt into endwall fascia retainer.

Set at 7 3/4" (197mm) below eave when endwall condition does not exist.

OUTSIDE CLOSURE

WALL PANEL

SEE STANDARD DETAILS FOR OVERHANG DIMENSION



CLOSURE PLUG

1. Run chalk line or string line at the wall to set fascia retainer

2. Lap eave fascia at splice 3" (76mm) and attach with (3) 1/8" (3mm) blind rivets.

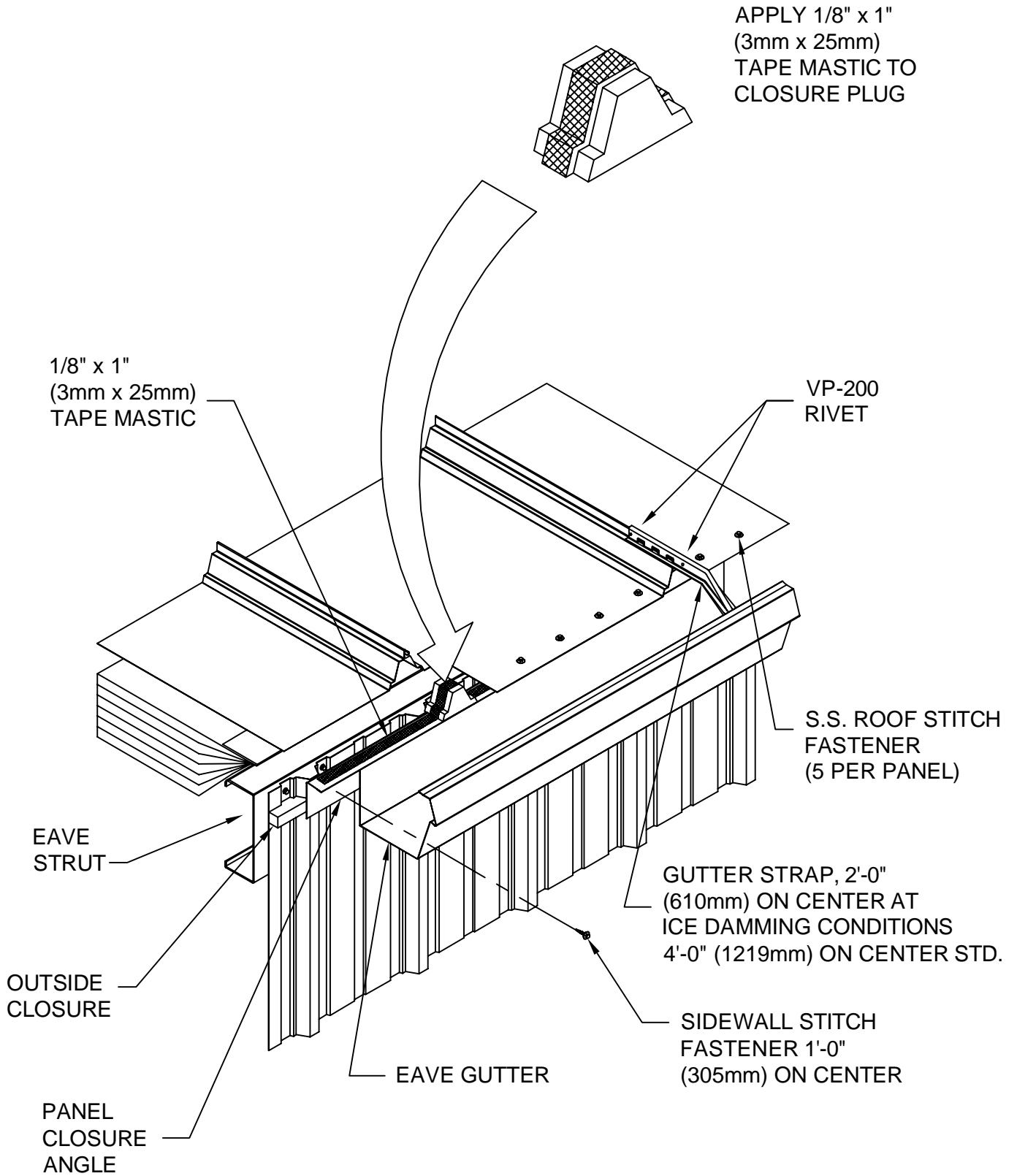
EAVE FASCIA

TAPE MASTIC

FASCIA RETAINER

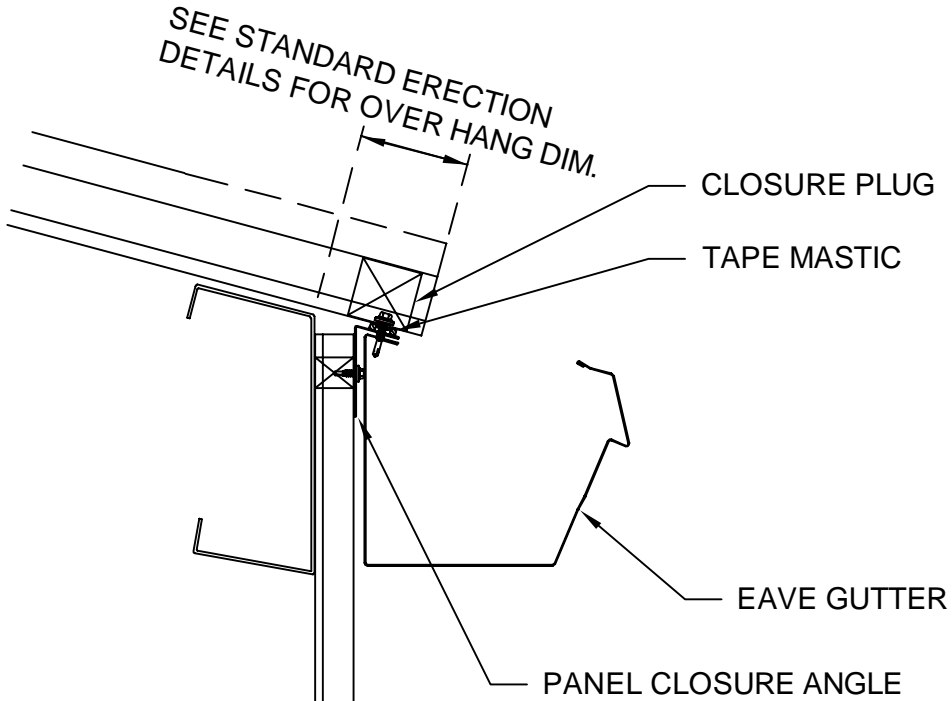
FASCIA CONDITIONS

EAVE GUTTER INSTALLATION



**Refer to STANDARD
ERECTION DETAILS
for eave attachments.**

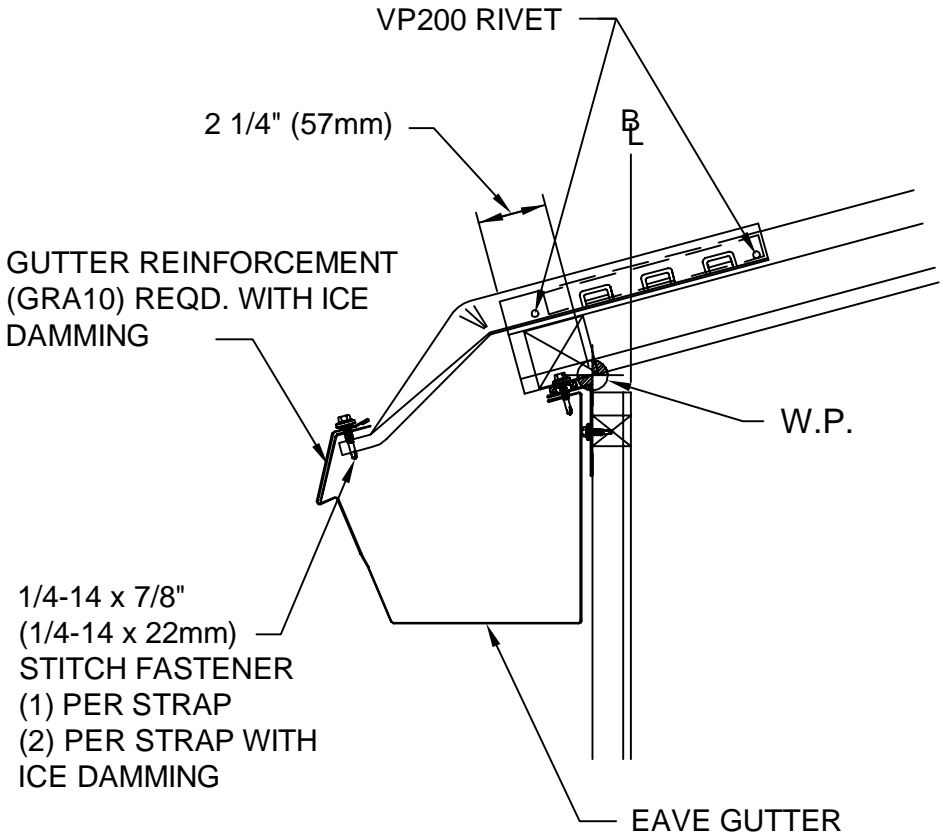
EAVE GUTTER INSTALLATION



SECTION AT EAVE

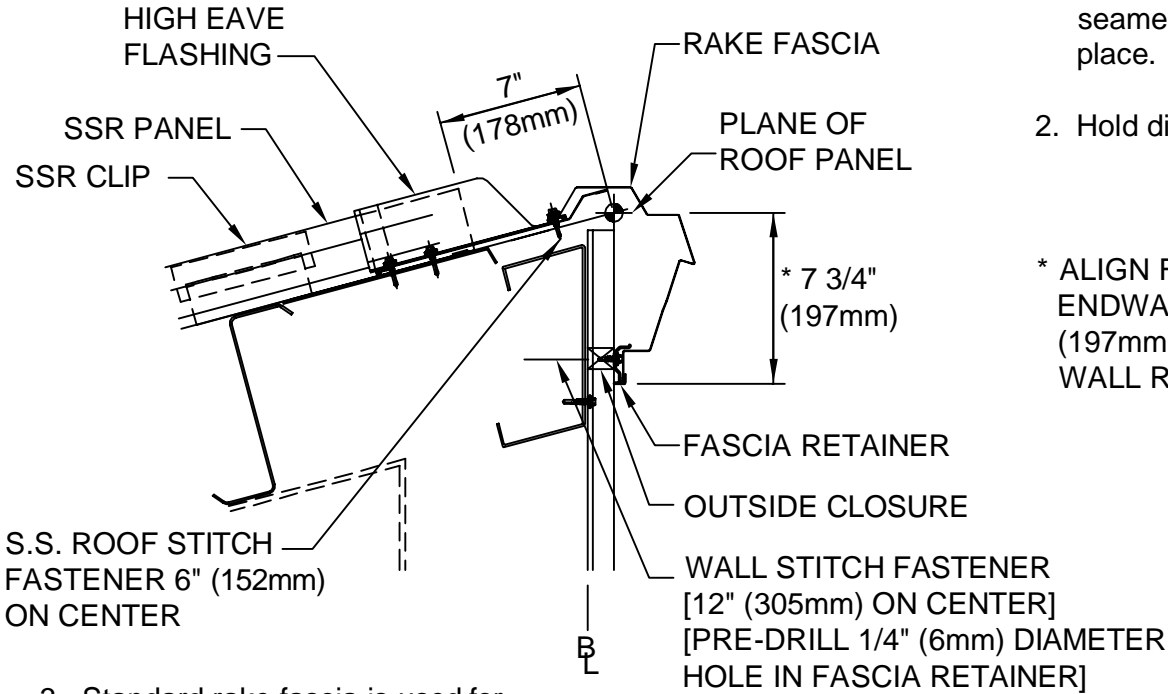
NOTE:
FOR ADDITIONAL GUTTER ASSEMBLY
INFORMATION, SEE VP BASIC ERECTION
GUIDE.

1. Panel closure angle, outside closure, closure block, and tape mastic must be in place before eave gutter can be installed.
2. Install gutter to SSR panels and to straps as shown.
3. Align outside edge of gutter by sliding straps in or out.
4. Secure straps in final location with (2) VP200 rivets thru strap and rib.



FASCIA CONDITIONS

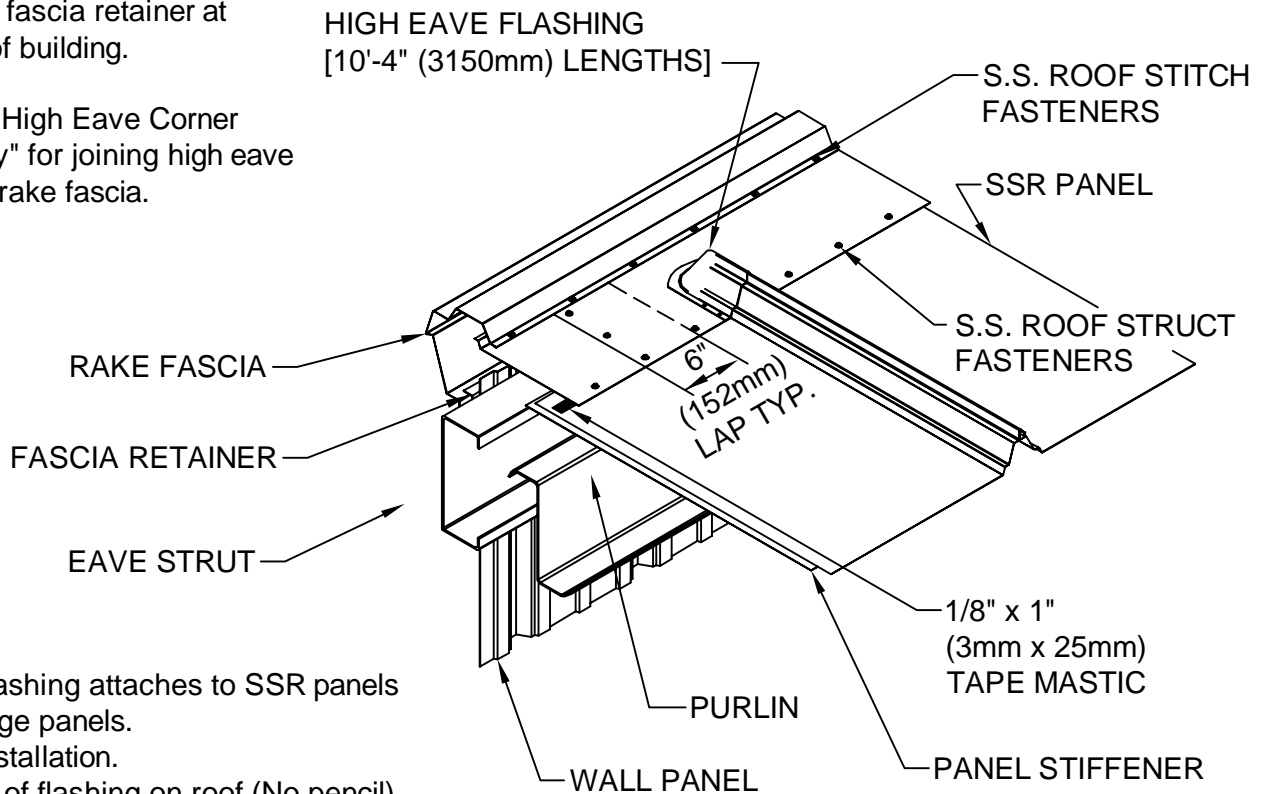
HIGH EAVE INSTALLATION - SINGLE SLOPE BUILDING



1. SSR roof panels must be seamed and panel stiffeners in place.
2. Hold dimensions shown.

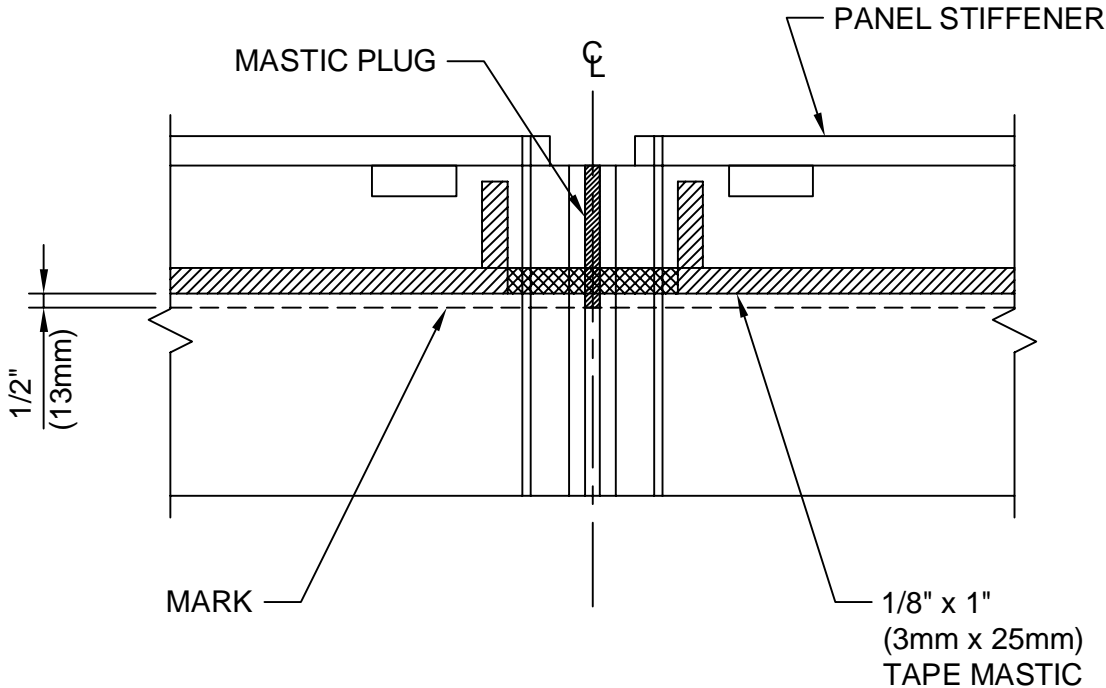
* ALIGN FASCIA RETAINER WITH ENDWALL RETAINER; use 7 3/4" (197mm) DIM ONLY IF NO END WALL RETAINER IS USED.

3. Standard rake fascia is used for high eave fascia.
4. High eave fascia retainer aligns with rake fascia retainer at corners of building.
5. Refer to "High Eave Corner Assembly" for joining high eave fascia to rake fascia.

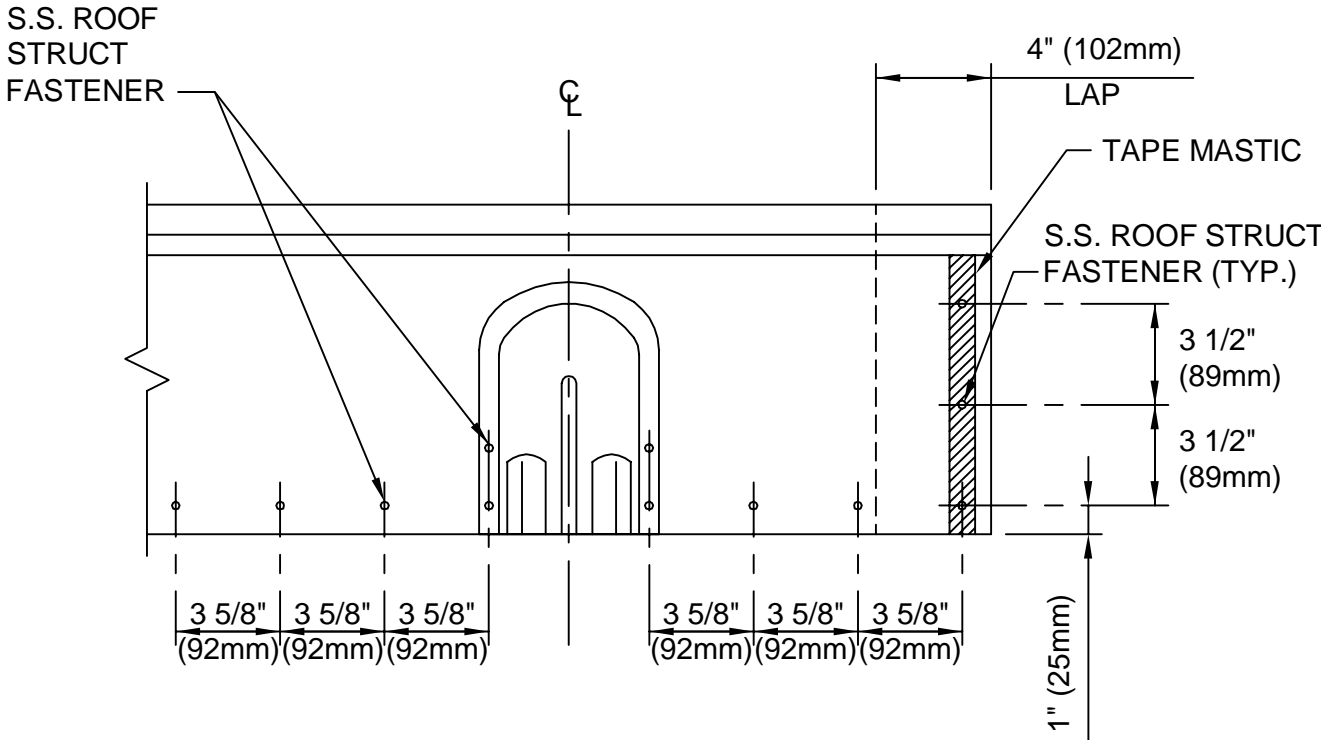


- NOTE:
 High eave flashing attaches to SSR panels similar to ridge panels. See ridge installation.
- Mark edge of flashing on roof (No pencil).
 - Install tape mastic 1/2" (13mm) upslope of mark.
 - Reposition flashing. Push into mastic.
 - Install fasteners

HIGH EAVE INSTALLATION - SINGLE SLOPE BUILDING



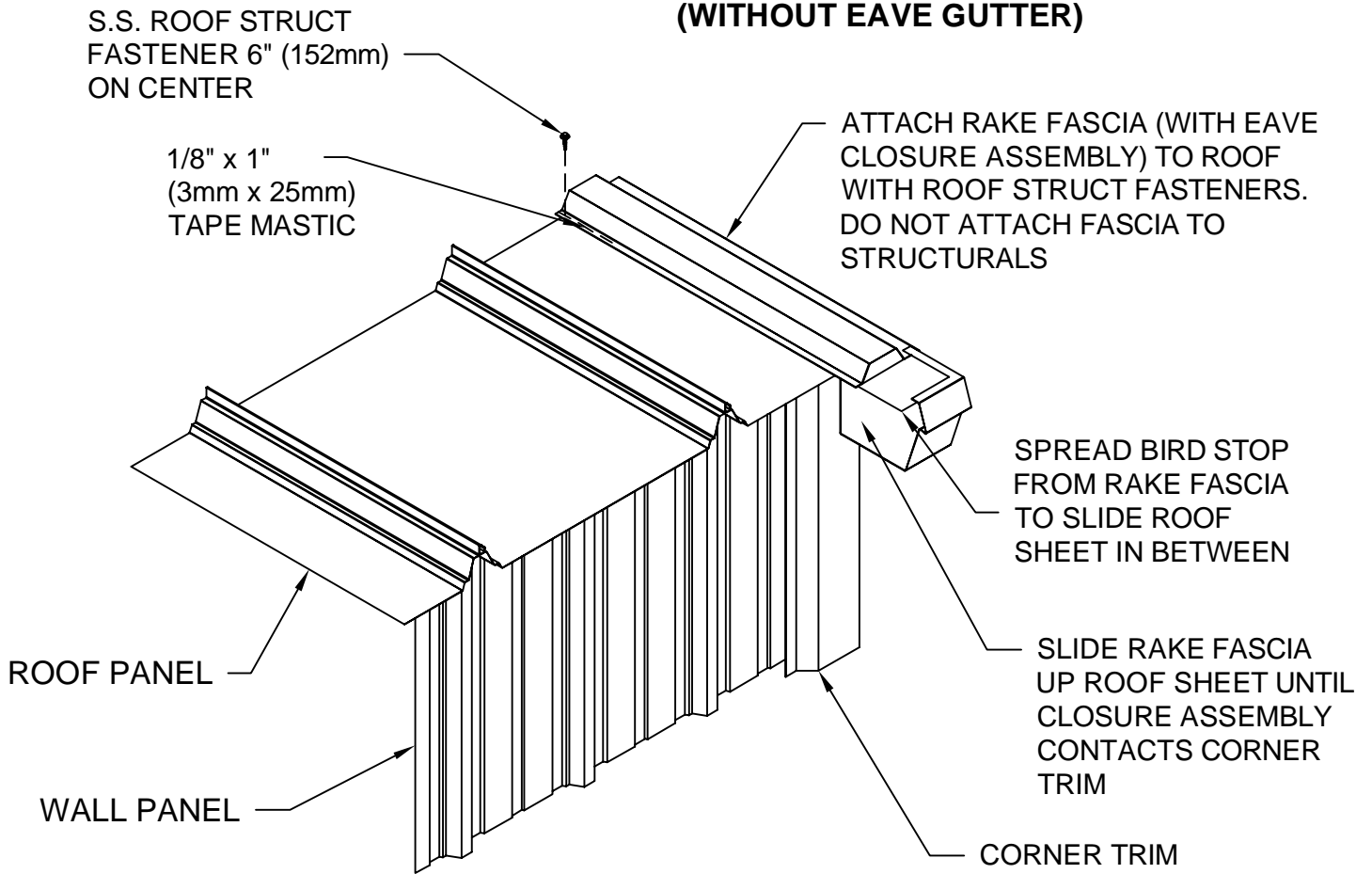
TAPE MASTIC PATTERN
SEE RIDGE INSTALLATION



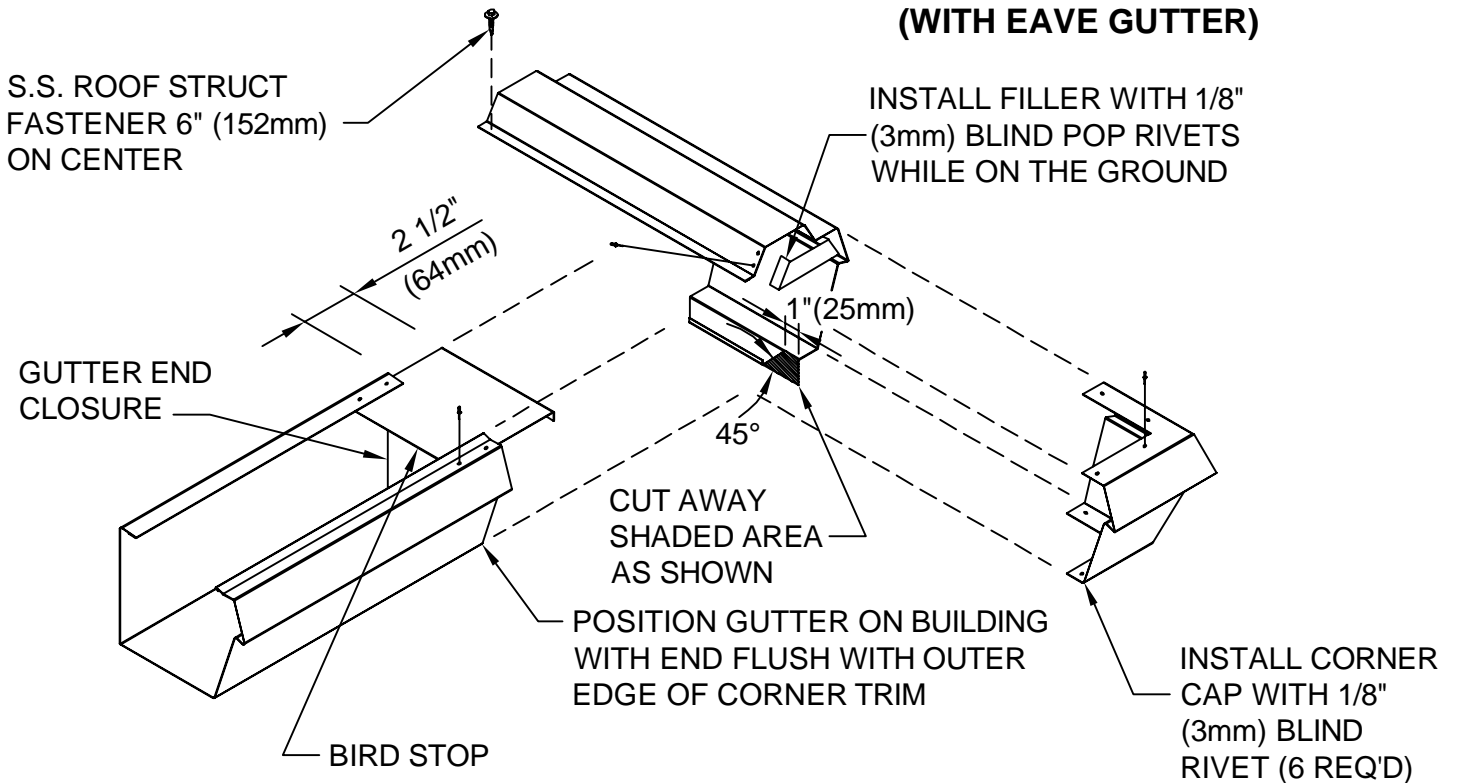
FASTENER PATTERN
SEE RIDGE INSTALLATION

FASCIA CONDITIONS

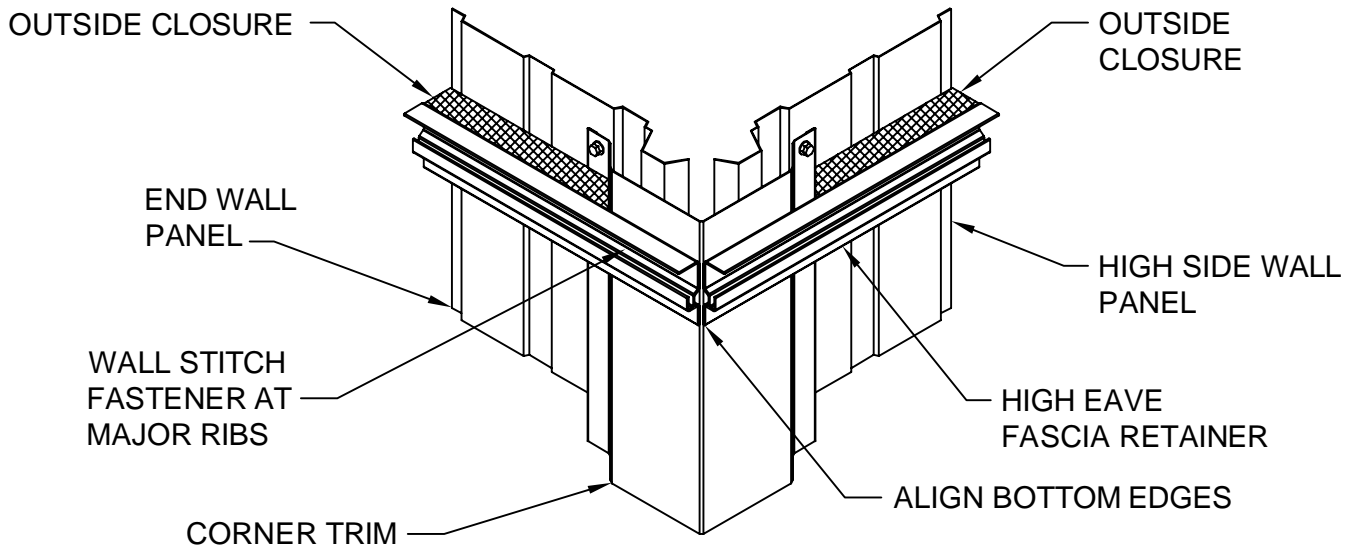
RAKE FASCIA EAVE CLOSURE ASSEMBLY (WITHOUT EAVE GUTTER)



RAKE FASCIA EAVE CLOSURE ASSEMBLY (WITH EAVE GUTTER)

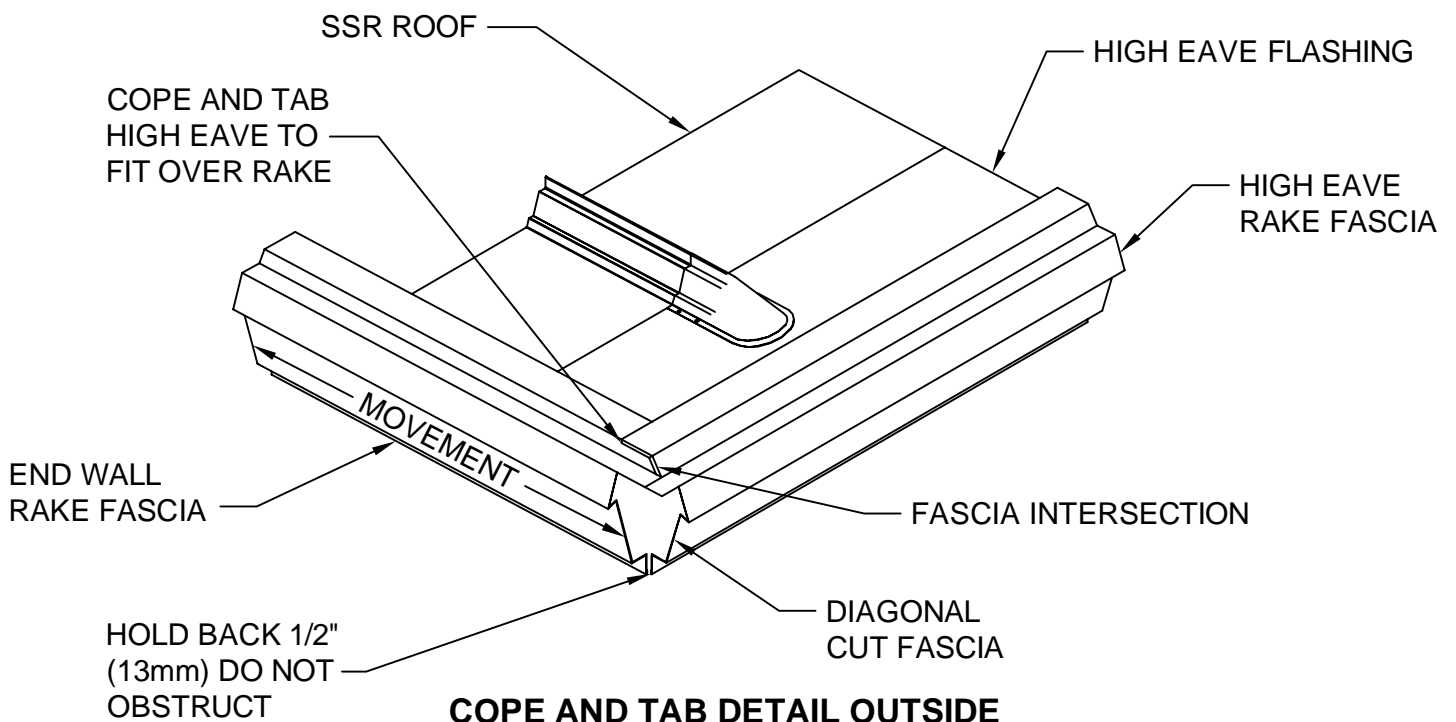


HIGH EAVE - CLOSURE ASSEMBLY



FASCIA RETAINER DETAIL

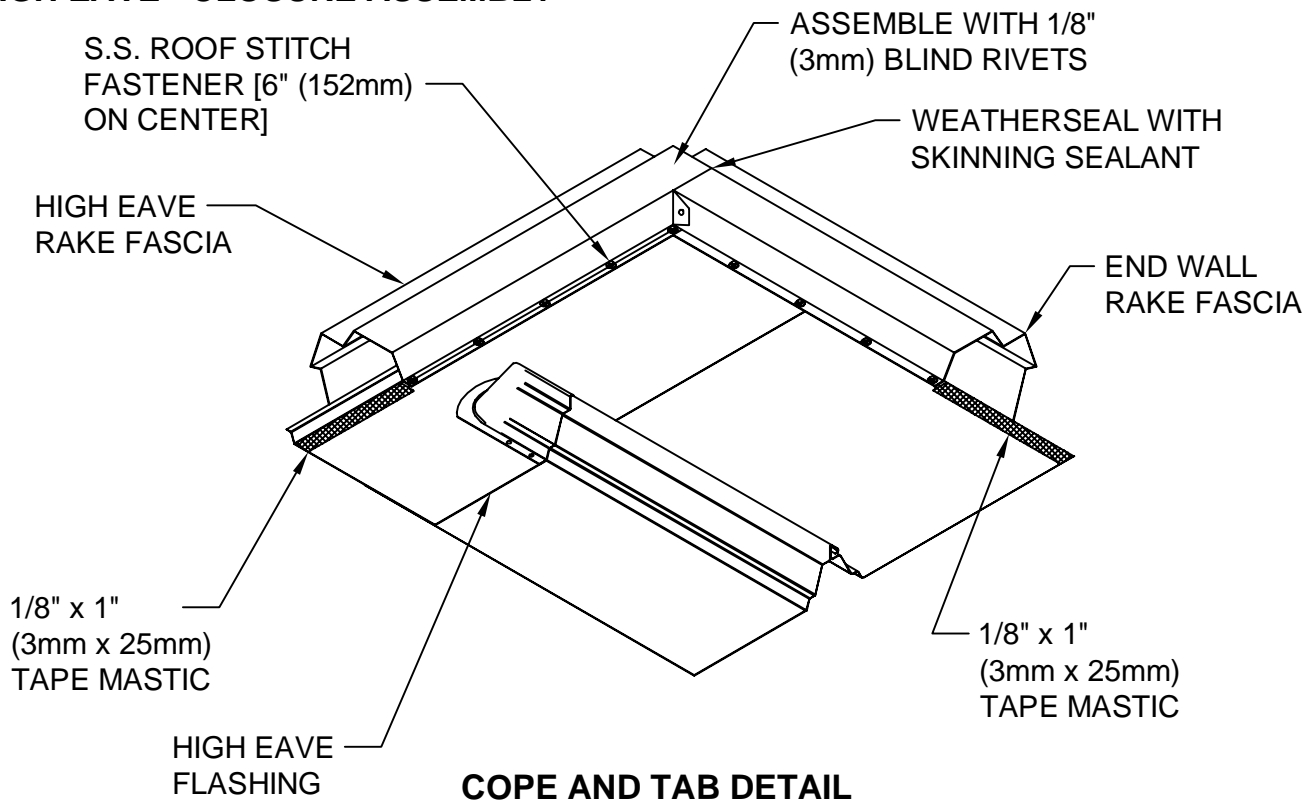
1. Installed position of end wall fascia retainer locates the position of high eave fascia retainer.
2. Align bottom edge, high eave with end wall, on fascia retainers.
3. Do not obstruct thermal movement of end wall rake fascia.
4. Cut to length, cope and tab rake fascias so that high eave laps over end wall. See detail.



COPE AND TAB DETAIL OUTSIDE

FASCIA CONDITIONS

HIGH EAVE - CLOSURE ASSEMBLY

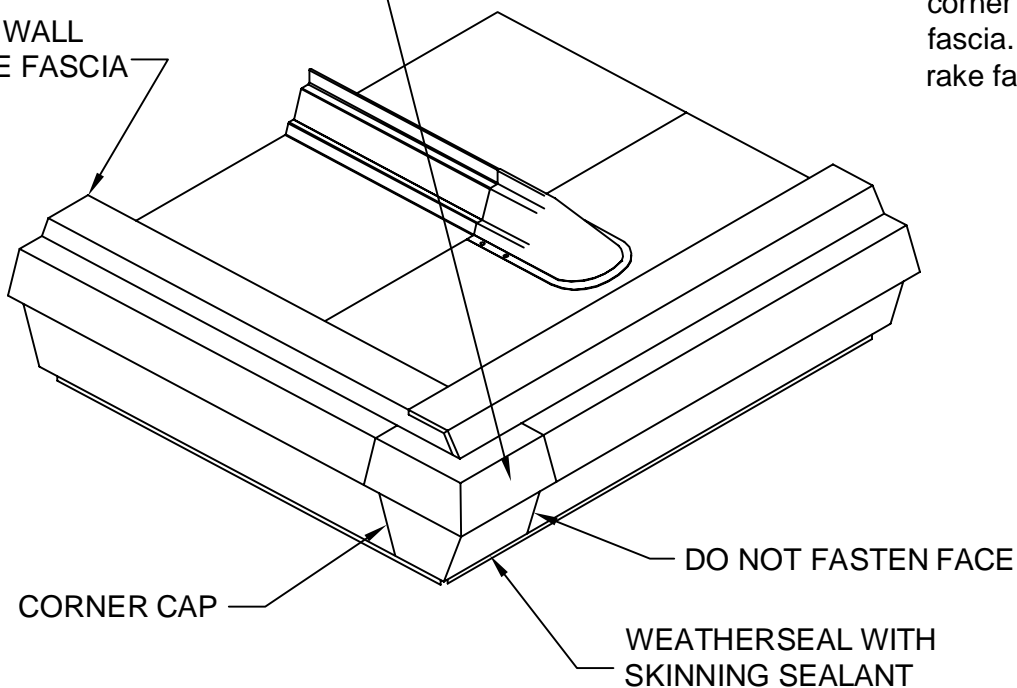


COPE AND TAB DETAIL INSIDE

5. Assemble with (8) 1/8" (3mm) blind rivets and weatherseal with skinning sealant.
6. Attach corner cap with (6) 1/8" (3mm) blind rivets and weatherseal with skinning sealant.
7. Do not attach lower face of corner cap to high eave rake fascia. It moves with end wall rake fascia.

ATTACH CORNER CAP TO RAKE FASCIA AS INDICATED USE 1/8" (3mm) BLIND RIVETS

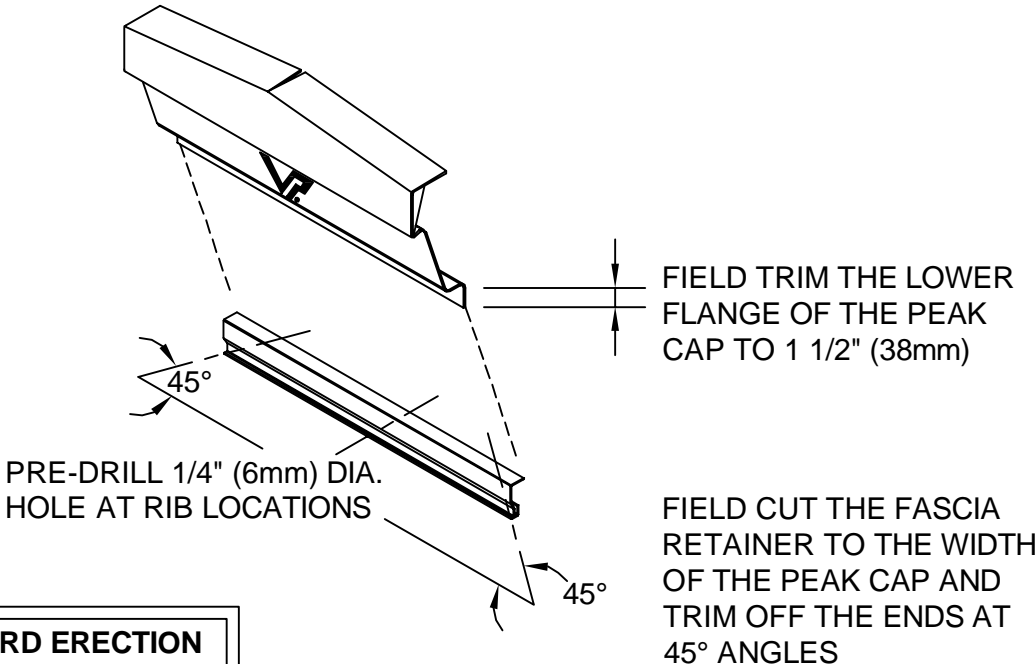
END WALL RAKE FASCIA



CORNER CAP DETAIL

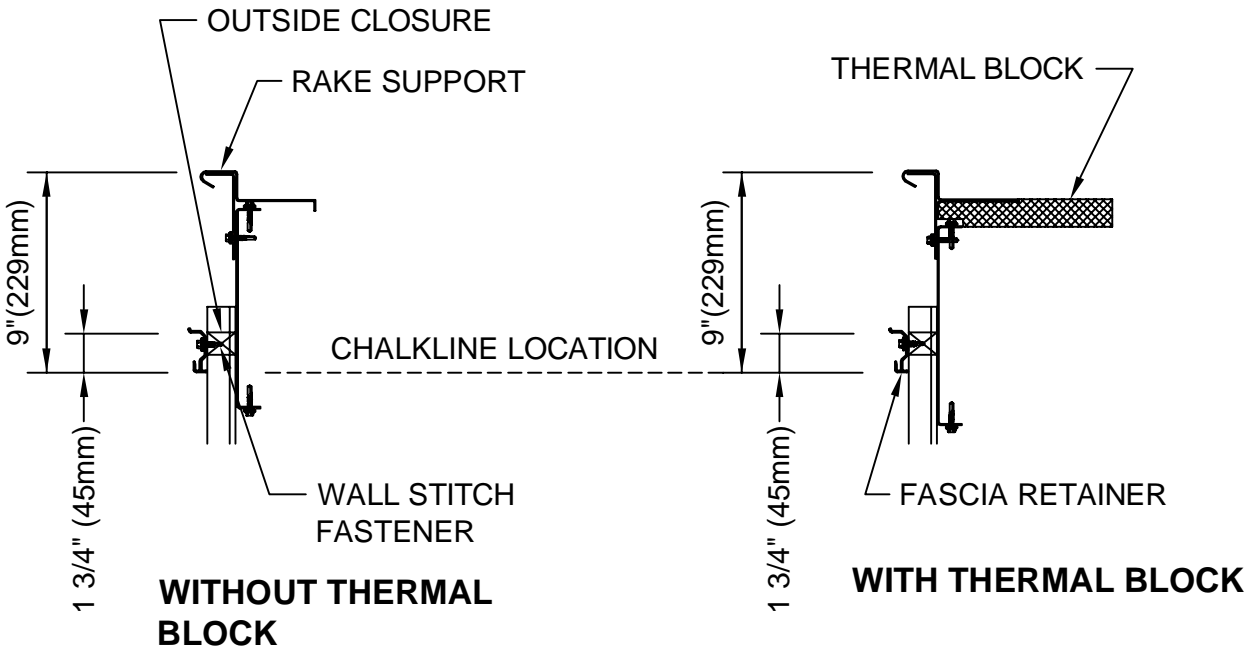
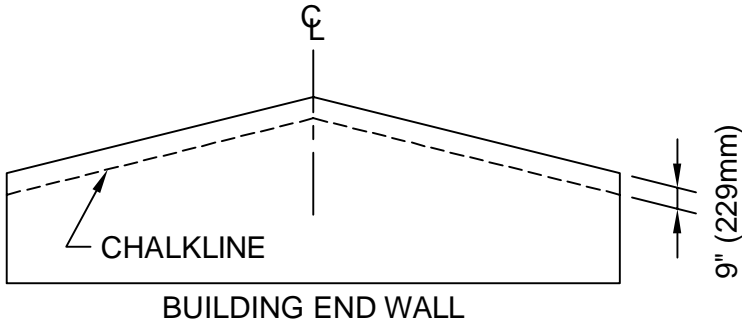
FASCIA RETAINER INSTALLATION

BEGIN FASCIA RETAINER INSTALLATION AT THE PEAK OF THE BUILDING



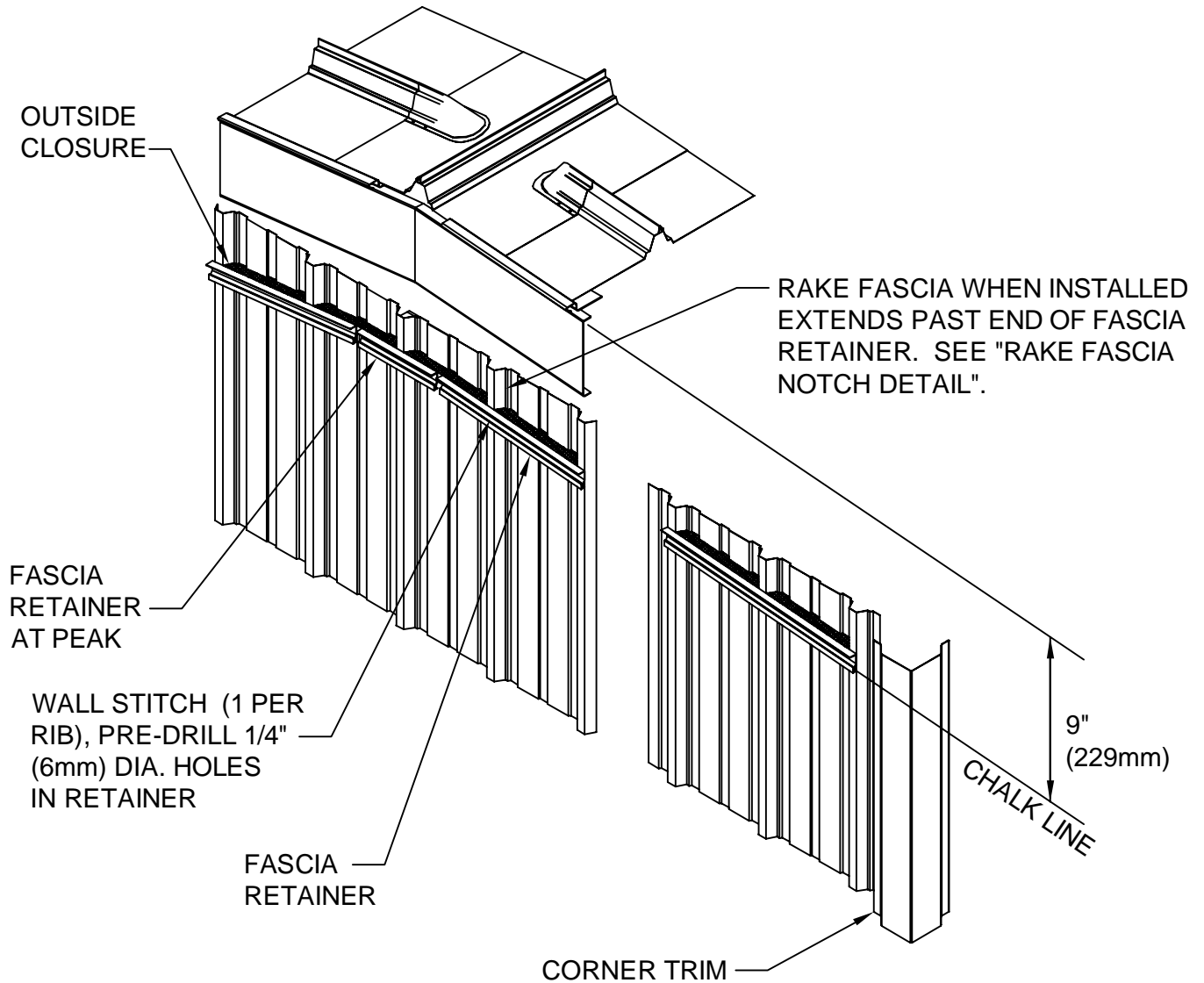
Refer to **STANDARD ERECTION DETAILS** for rake fascia retainer placement.

SNAP A CHALKLINE FOR PLACEMENT OF OUTSIDE CLOSURES AND THE RAKE FASCIA RETAINER 9" (229mm) DOWN FROM THE TOP OF THE RAKE SUPPORT.



FASCIA CONDITIONS

RAKE FASCIA AND RETAINER INSTALLATION

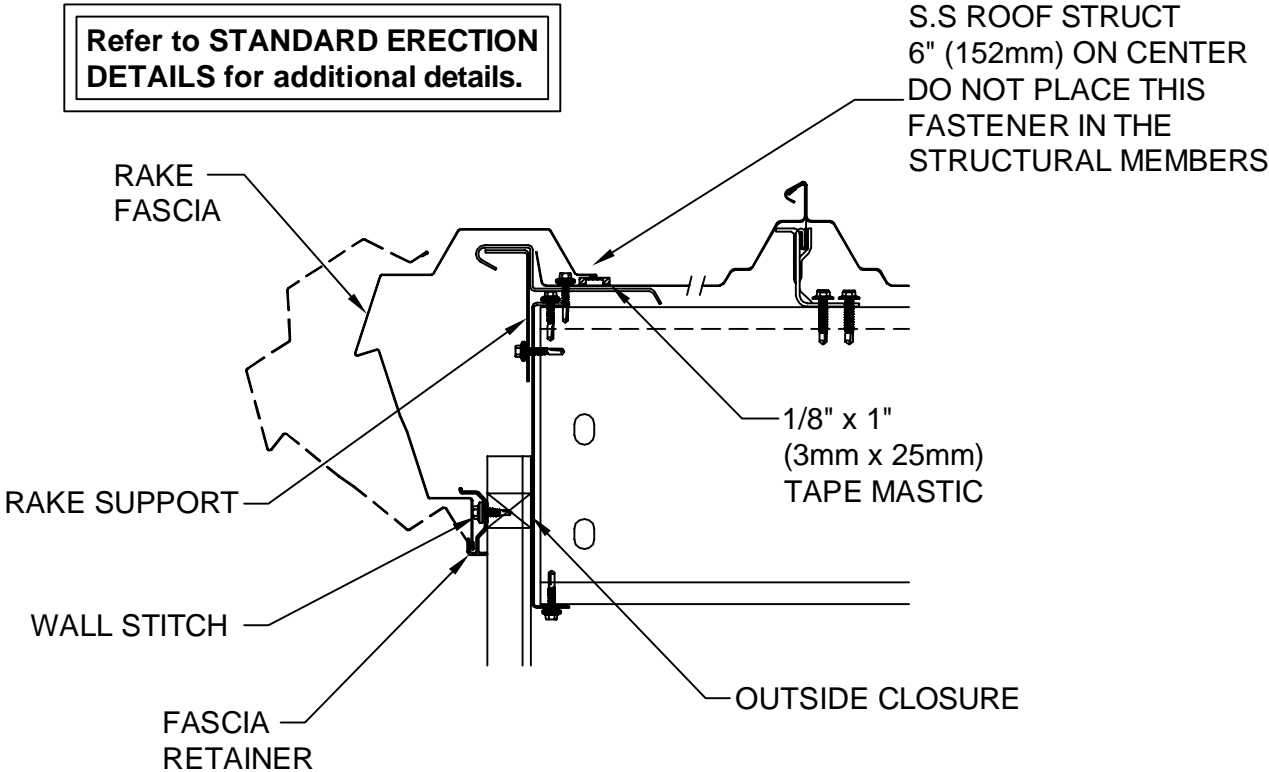


SET RETAINER

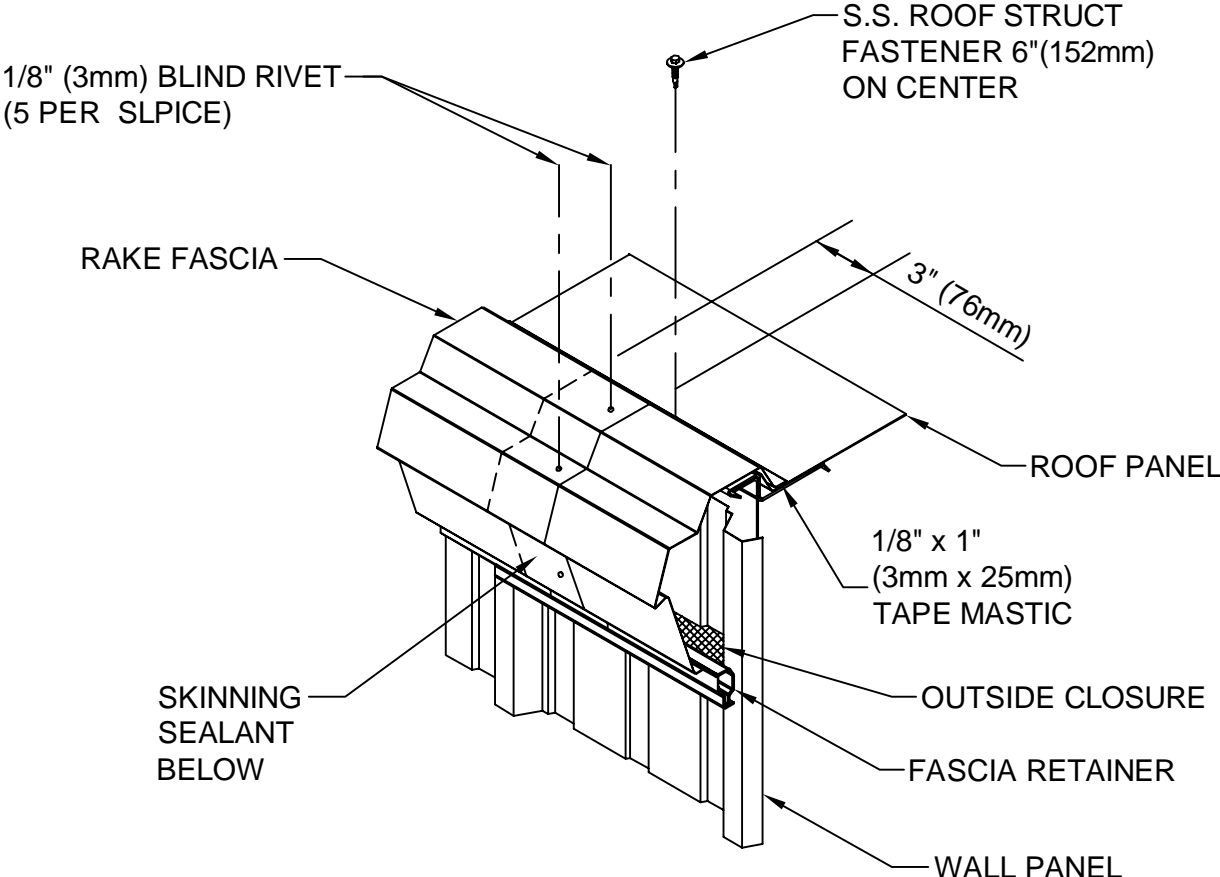
NOTE:
CORNER TRIM IS IN PLACE
BEFORE INSTALLATION OF
FASCIA RETAINER

1. Install short piece of retainer:
 - Apply adhesive to back of outside closure and set top 1 3/4" (45mm) above chalk line.
 - Set bottom of retainer at chalk line. Attach to wall with wall stitch fastener through pre-drilled hole.
2. Install remaining lengths of retainer:
 - Pre-drill 1/4" (6mm) dia. holes at rib locations.
 - Set closures and retainer lengths as in step 1.
 - Butt end joints.
3. When retainer is securely fastened, insert the lower flange of rake fascia into the lower lip of the retainer. Rotate it up into position.
4. Mark the edge of the fascia on the roof panel for placement of tape mastic. Apply the mastic.
5. Reposition fascia. Install fasteners. Do not attach fascia to structural members.
6. At endlaps, overlap fascia 3" (76mm) and secure with 1/8" (3mm) blind rivets. Weatherseal with skinning sealant.

RAKE FASCIA AND RETAINER INSTALLATION



INSTALL FASCIA



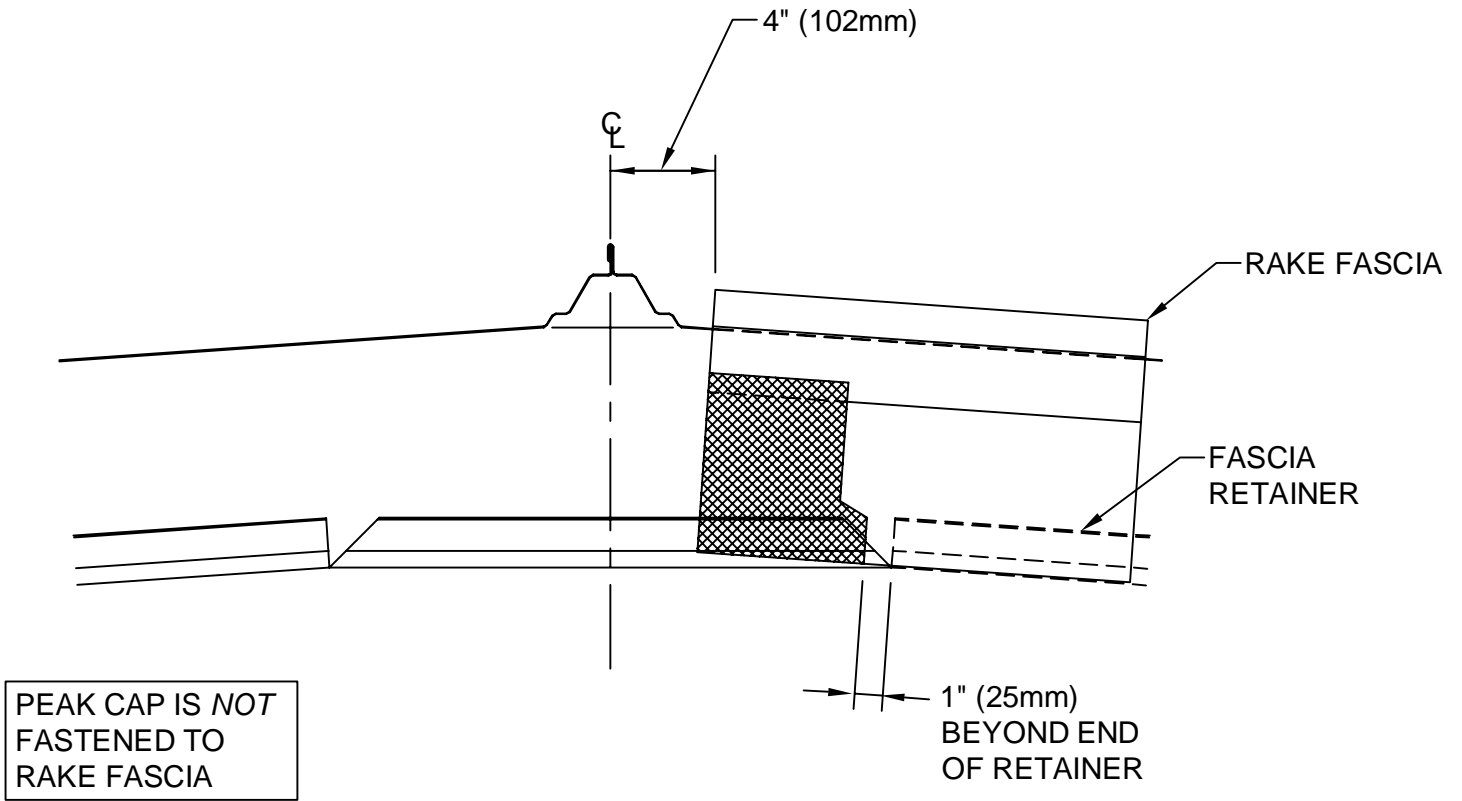
FASCIA SPLICE

FASCIA CONDITIONS

PEAK CAP AND RAKE TO RIDGE TRANSITION

RAKE FASCIA NOTCH

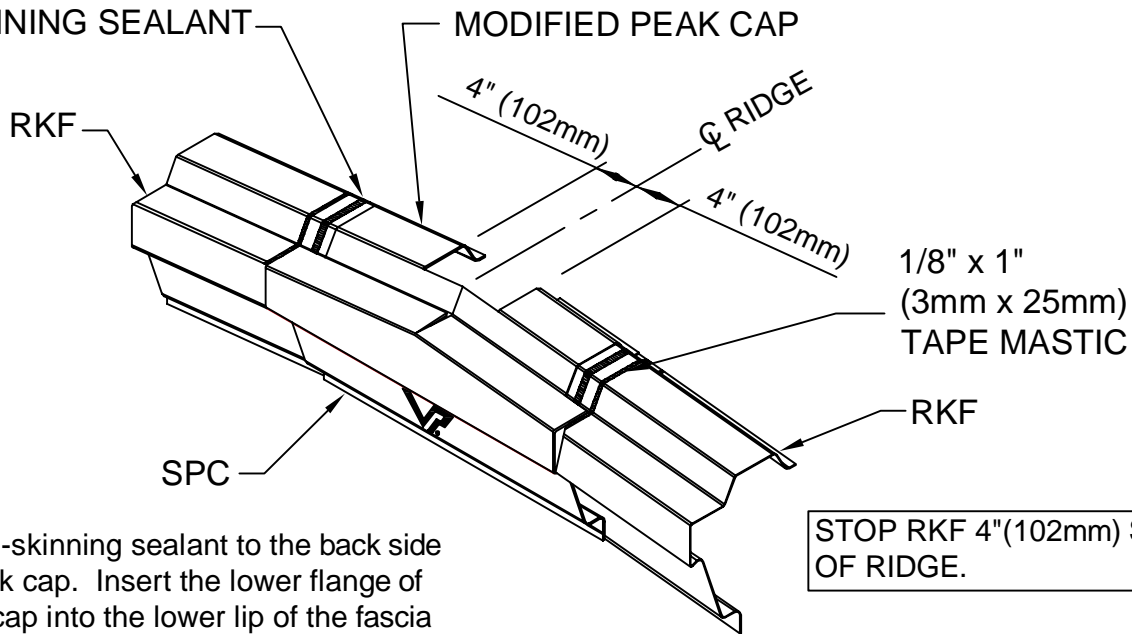
RAKE FASCIA IS NOT FASTENED TO RAKE SUPPORT



1. Field notch rake fascia: remove shaded portion to remove excess material from peak cap area.

PEAK CAP AND RAKE TO RIDGE TRANSITION

3/8" (10mm) DIA. BEAD
NON-SKINNING SEALANT



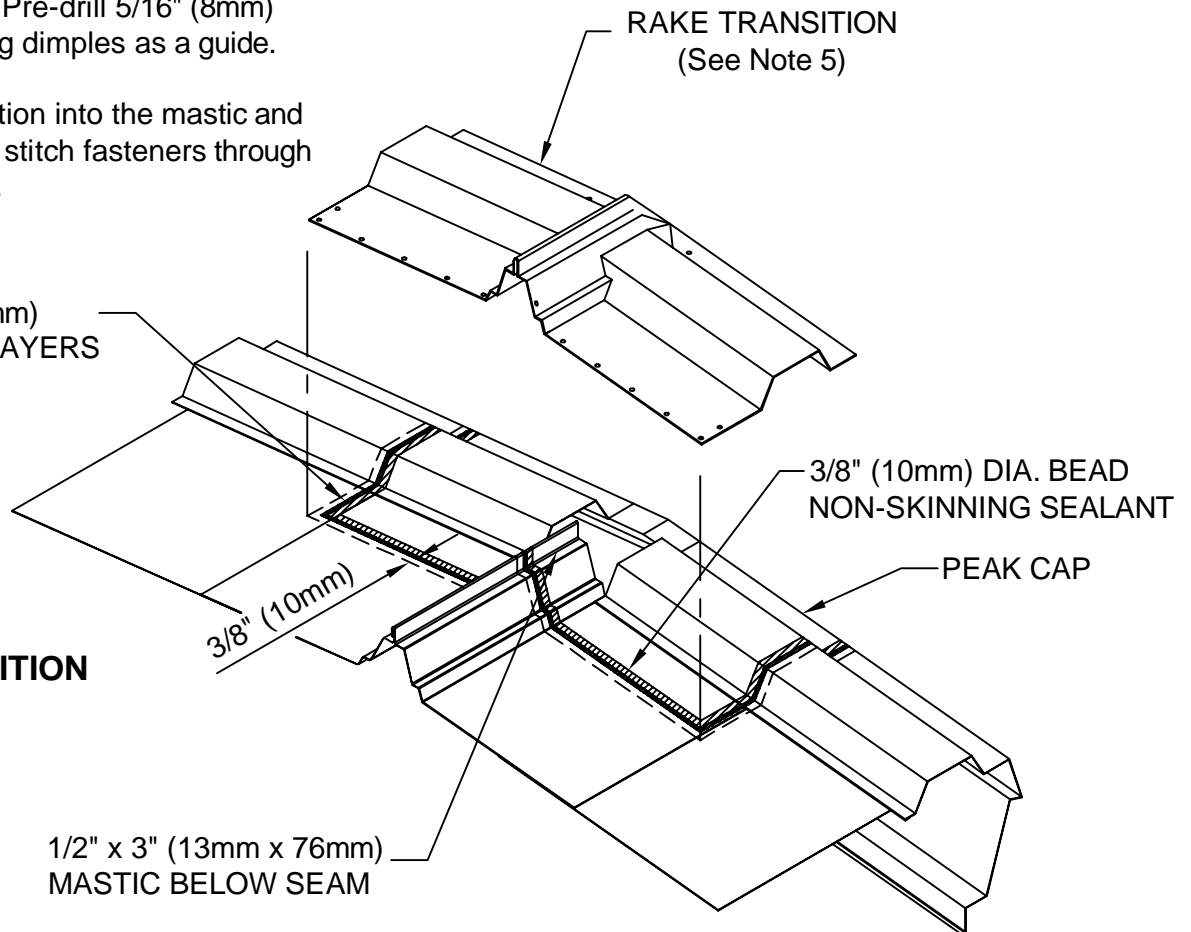
STOP RKF 4" (102mm) SHORT OF RIDGE.

SET PEAK CAP

NOTE:
DO NOT ATTACH RKF TO SPC DIRECTLY. RKF MUST BE ALLOWED TO EXPAND UNDER SPC.

3. Apply non-skinning sealant to the back side of the peak cap. Insert the lower flange of the peak cap into the lower lip of the fascia retainer. Rotate peak cap over rake fascia and press on to roof panel.
4. Set the rake transition in place and mark for placement on tape mastic. Set mastic 3/8" (10mm) in from line. Use a double layer of mastic over the rib. Pre-drill 5/16" (8mm) holes for fascia using dimples as a guide.
5. Push the rake transition into the mastic and install (18) S.S. roof stitch fasteners through the pre-drilled holes.

1/8" x 1" (3mm x 25mm)
TAPE MASTIC, (2) LAYERS
OVER SSR RIB



SET TRANSITION

1/2" x 3" (13mm x 76mm)
MASTIC BELOW SEAM

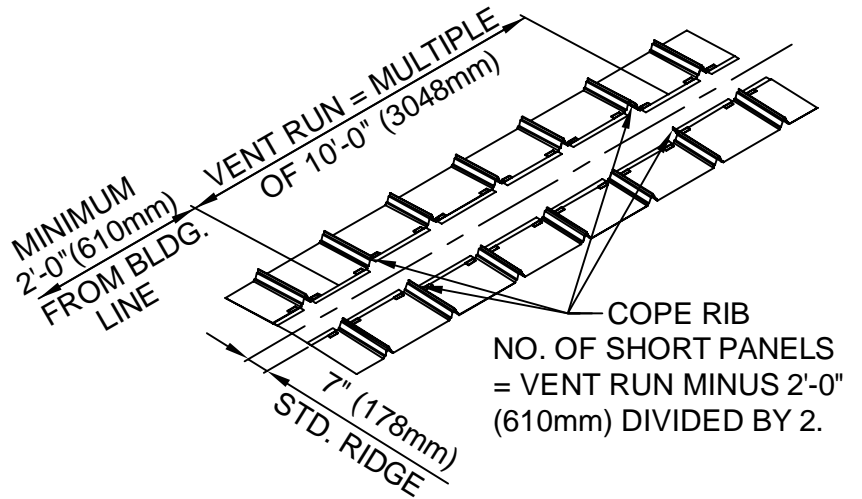
ROOF ACCESSORIES

10 FT. RIDGE VENTILATOR 9" & 12" (229mm & 305mm) THROAT

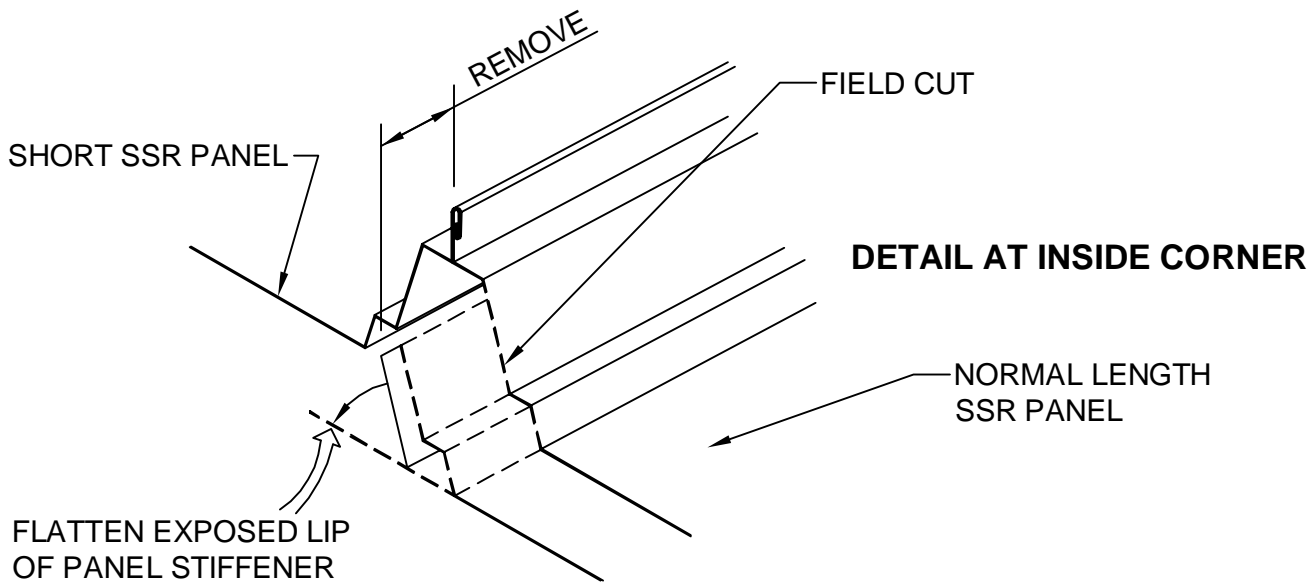
1. Establish vent run locations. Erection drawings identify SSR panel lengths used at vent run locations. Seam the required SSR Panels.

Vent runs always begin and end at the centerline of a "Normal" length SSR panel. Shorter panels are used between these to provide clearance for vents and flashings.

2. Cut to length. Install and seam SSR ridge panels at both ends of vent runs.
3. Cope SSR rib halves on long panels to length of short panel. Flatten panel stiffener lip (Typical 4 corners).

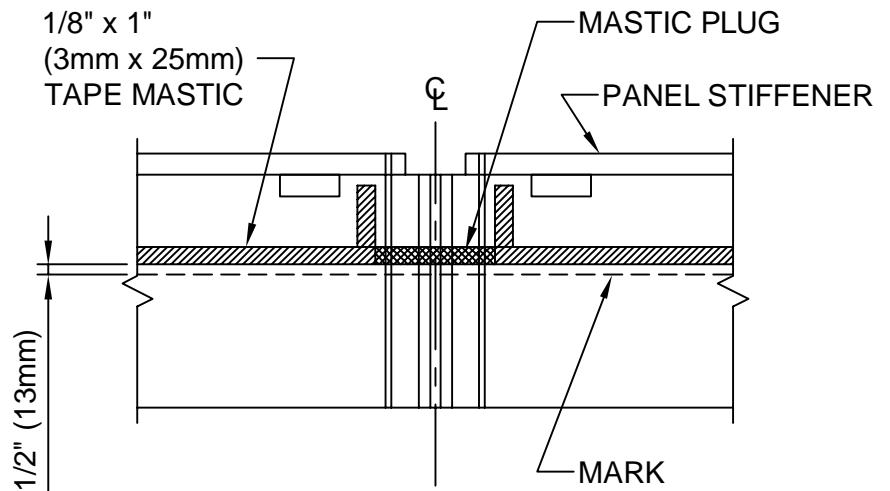


SSR PANEL LAYOUT AT VENT



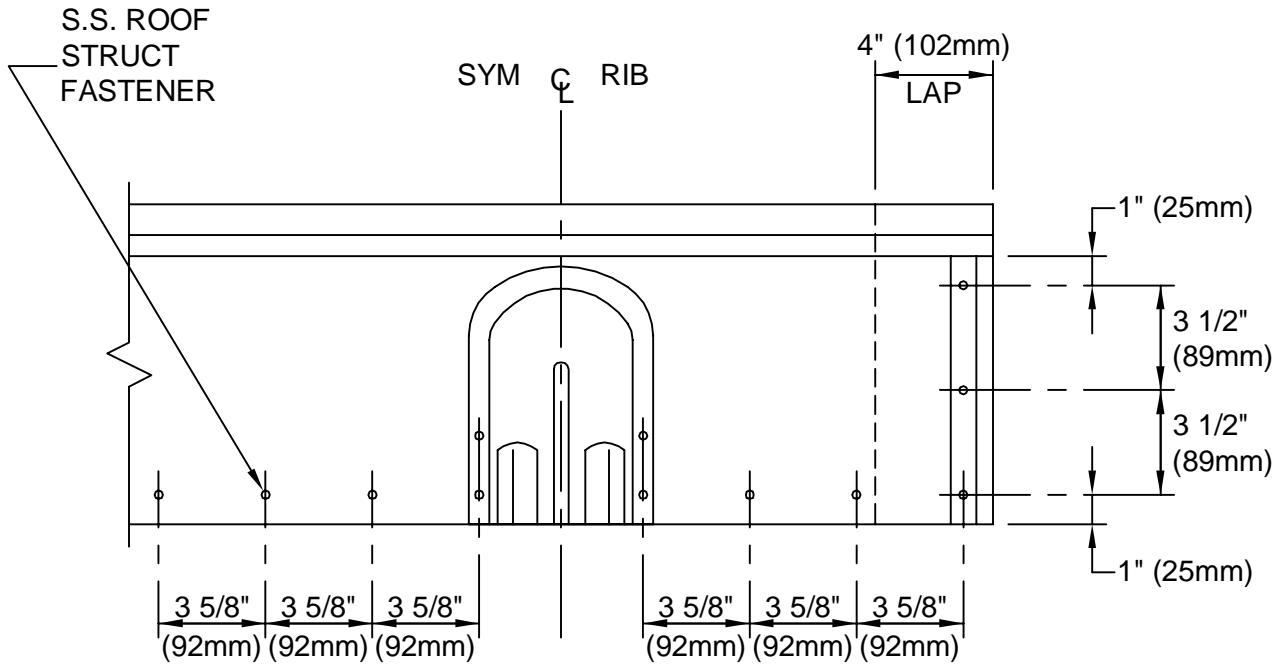
DETAIL AT INSIDE CORNER

4. Set new string line along each vent run from center to center of installed roof seams.

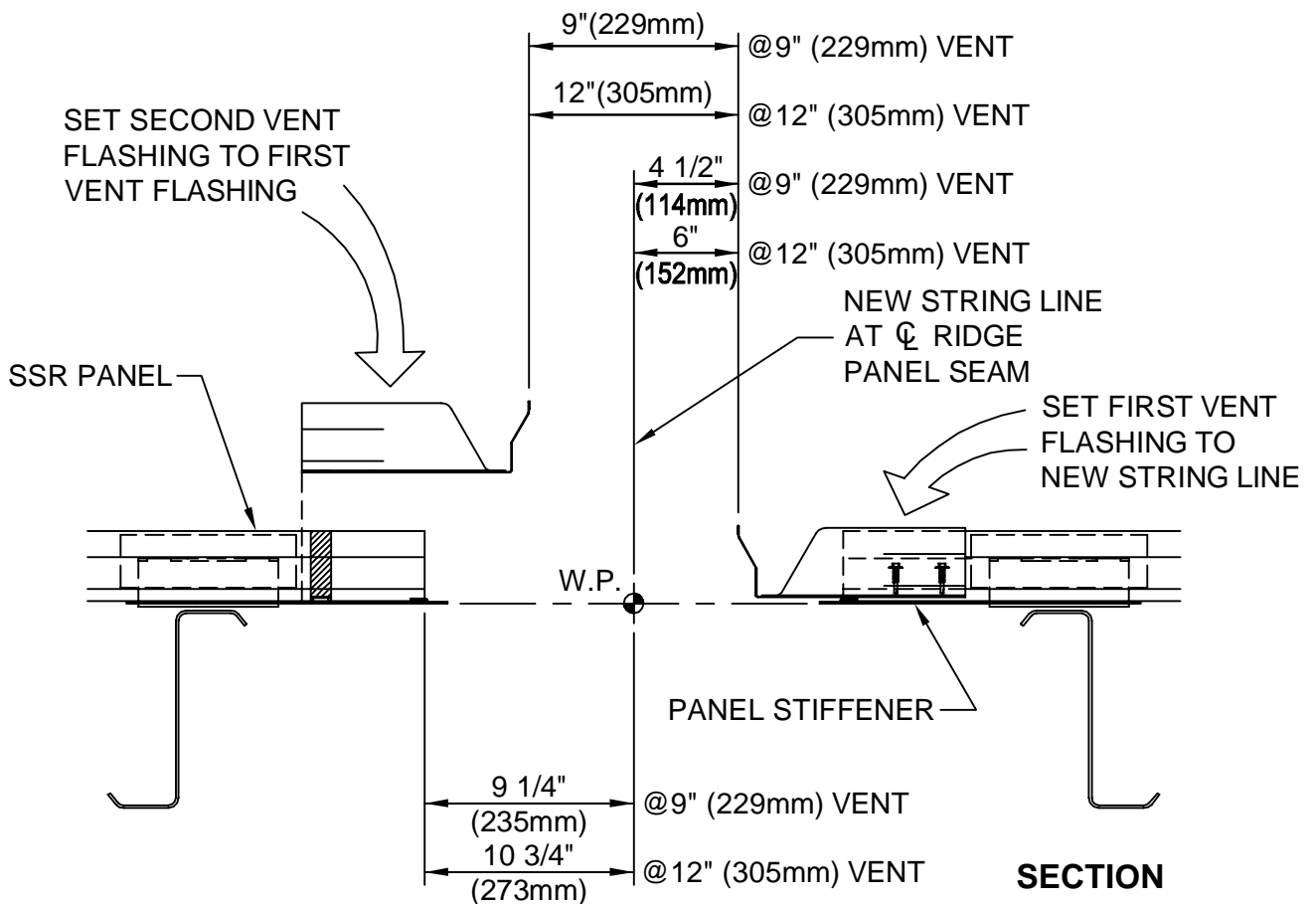


MASTIC PATTERN
SEE RIDGE INSTALLATION

10' RIDGE VENTILATOR 9" & 12" (229mm & 305mm) THROAT (cont'd)

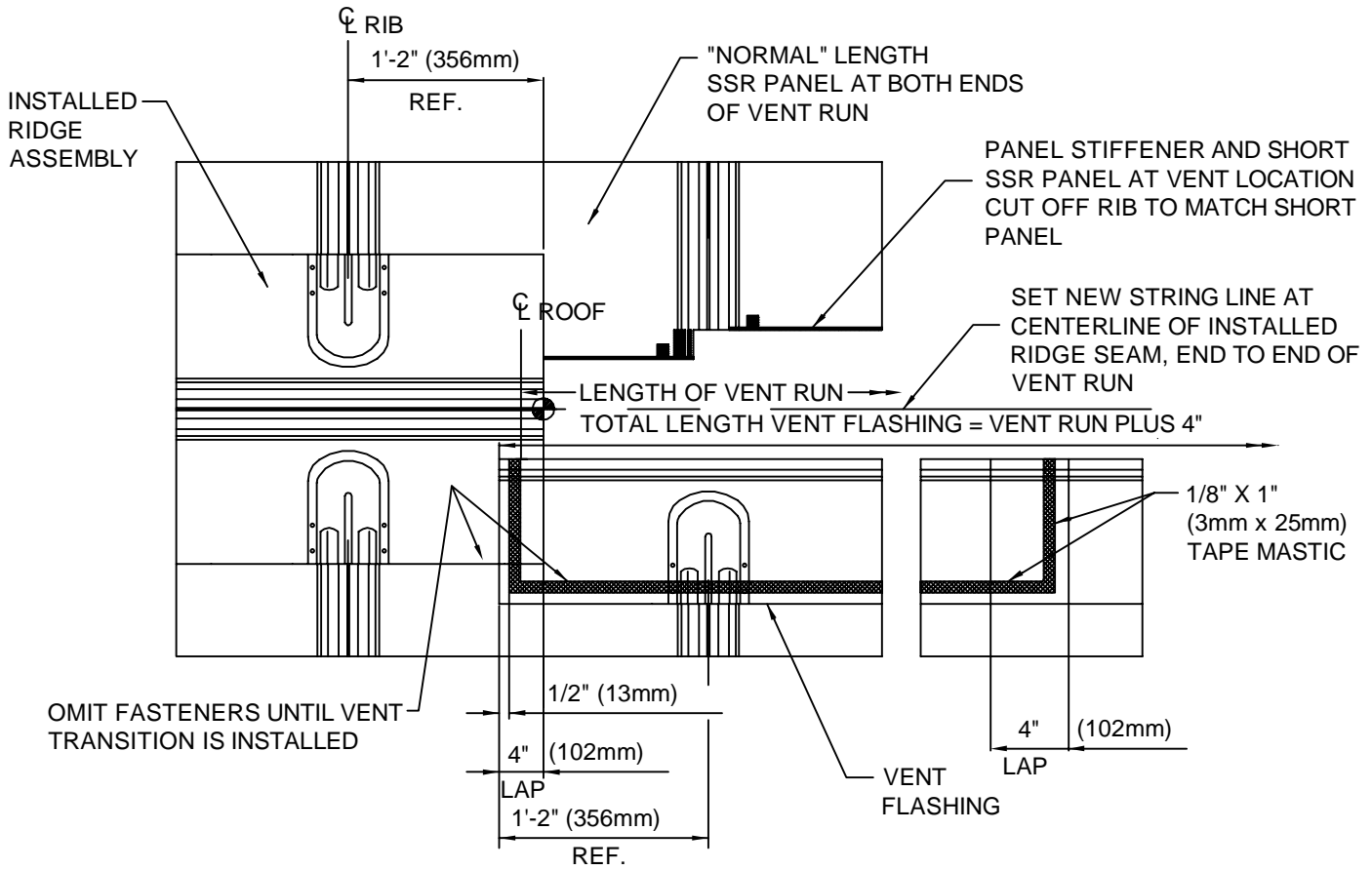


FASTENER PATTERN
SEE RIDGE INSTALLATION



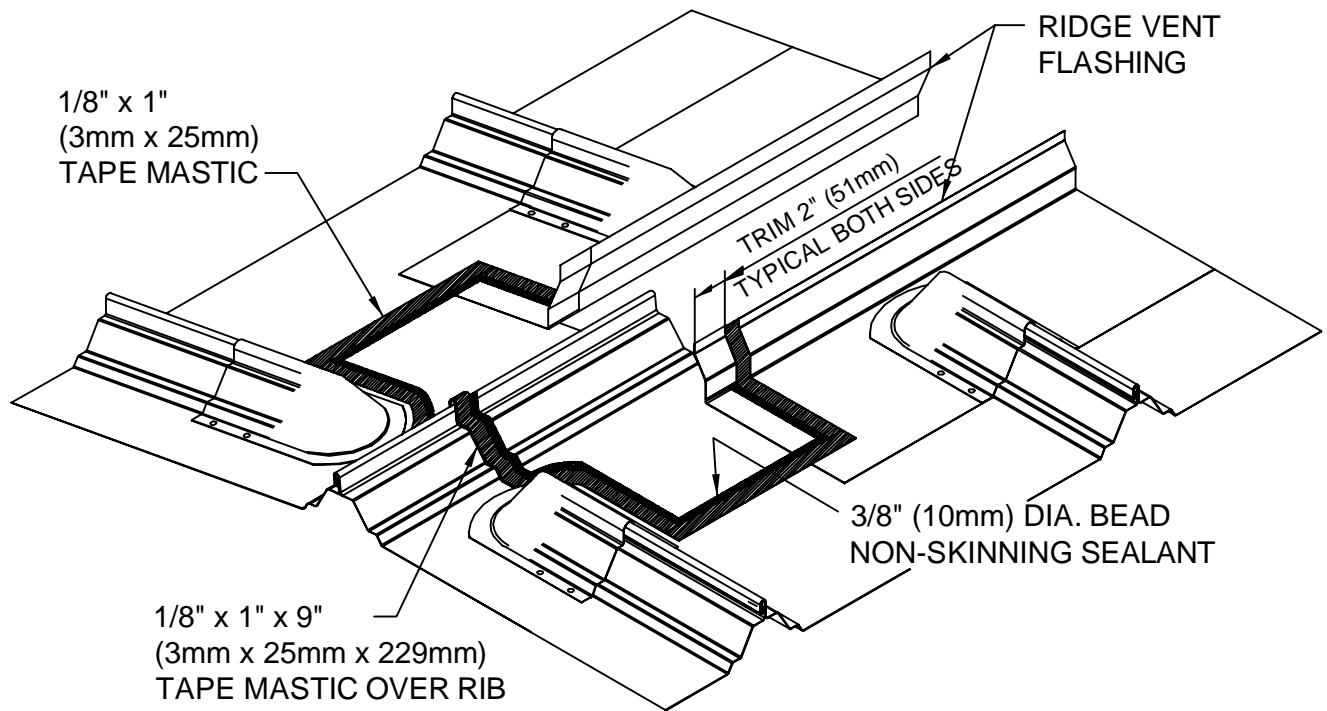
ROOF ACCESSORIES

10 FT. (3.05m) RIDGE VENTILATOR



10 FT. (3.05m) RIDGE VENTILATOR

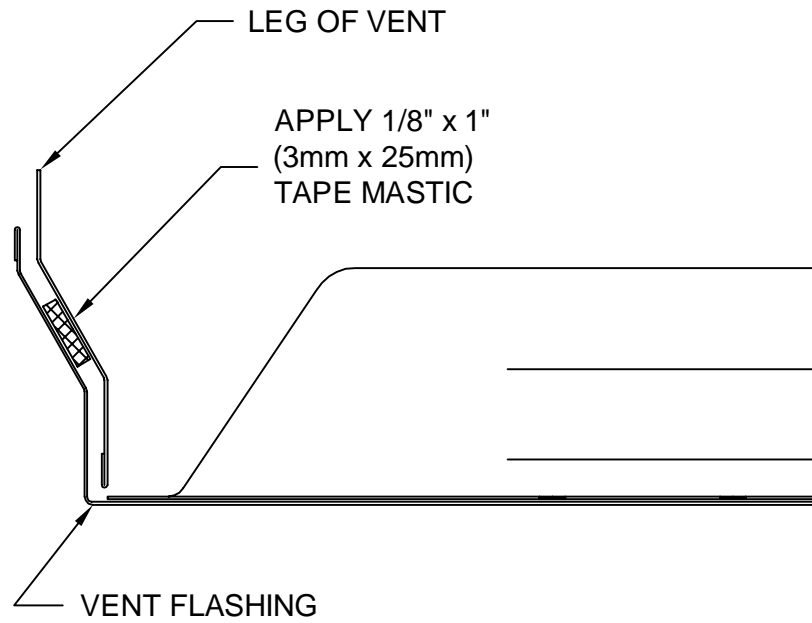
6. LOCATE AND INSTALL VENT TRANSITIONS AT ENDS OF VENT RUNS.
7. LOCATE TRANSITIONS AS SHOWN. MARK PERIMETER AND APPLY MASTIC AND SEALANT. FASTEN WITH S.S. ROOF STRUCT FASTENERS THROUGH HOLES PROVIDED.



WEATHERPROOFING VENT TRANSITION

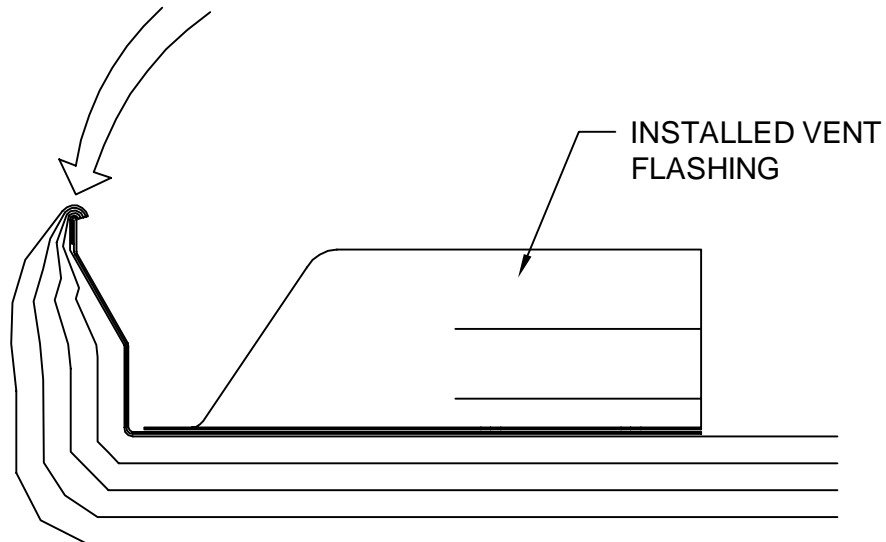
ROOF ACCESSORIES

10 FT. (3.05m) RIDGE VENTILATOR



SECTION

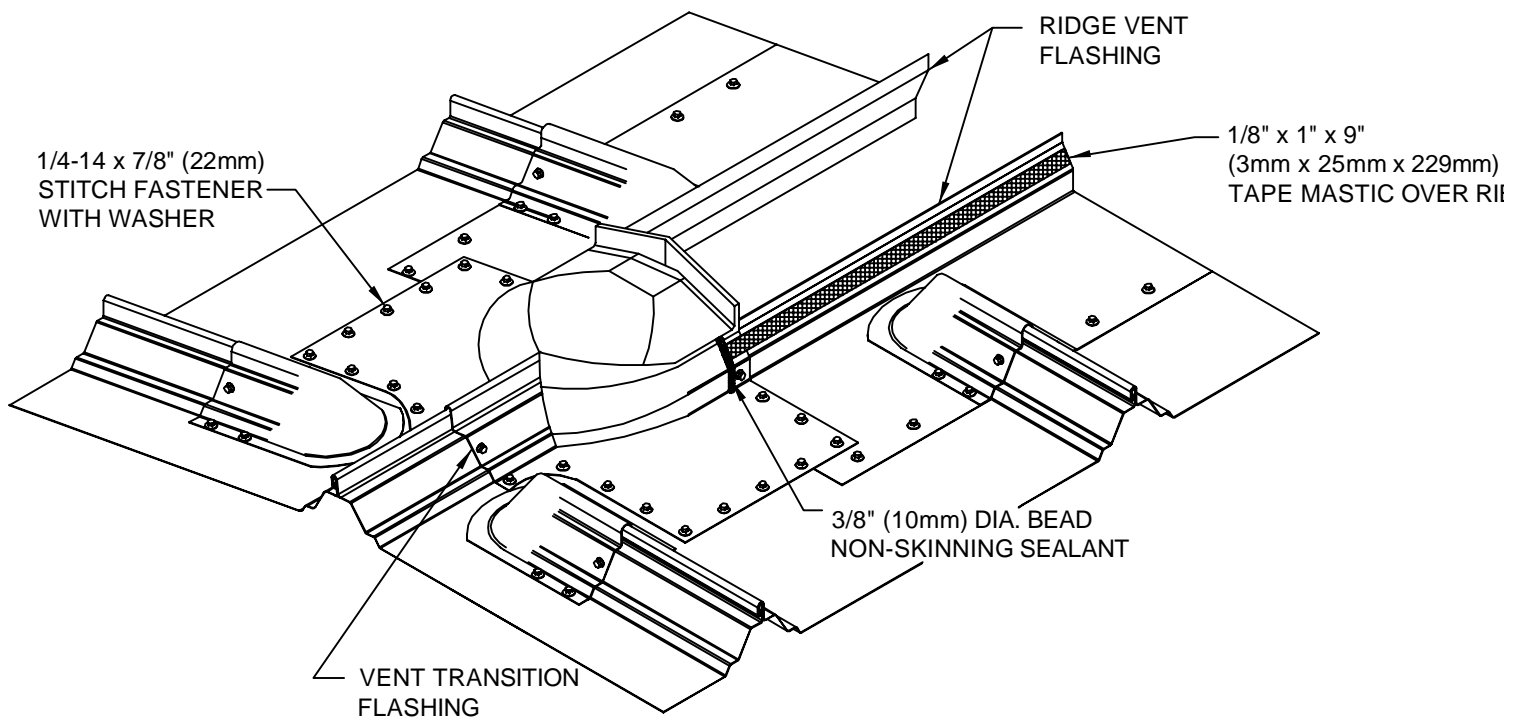
FORM 3" (76mm) FACING TAB.
TAPE OR GLUE TO UPPER EDGE
ONLY ON VENT FLASHING



DO NOT ALLOW INSULATION TO
OBSTRUCT VENT OPENING

INSULATION

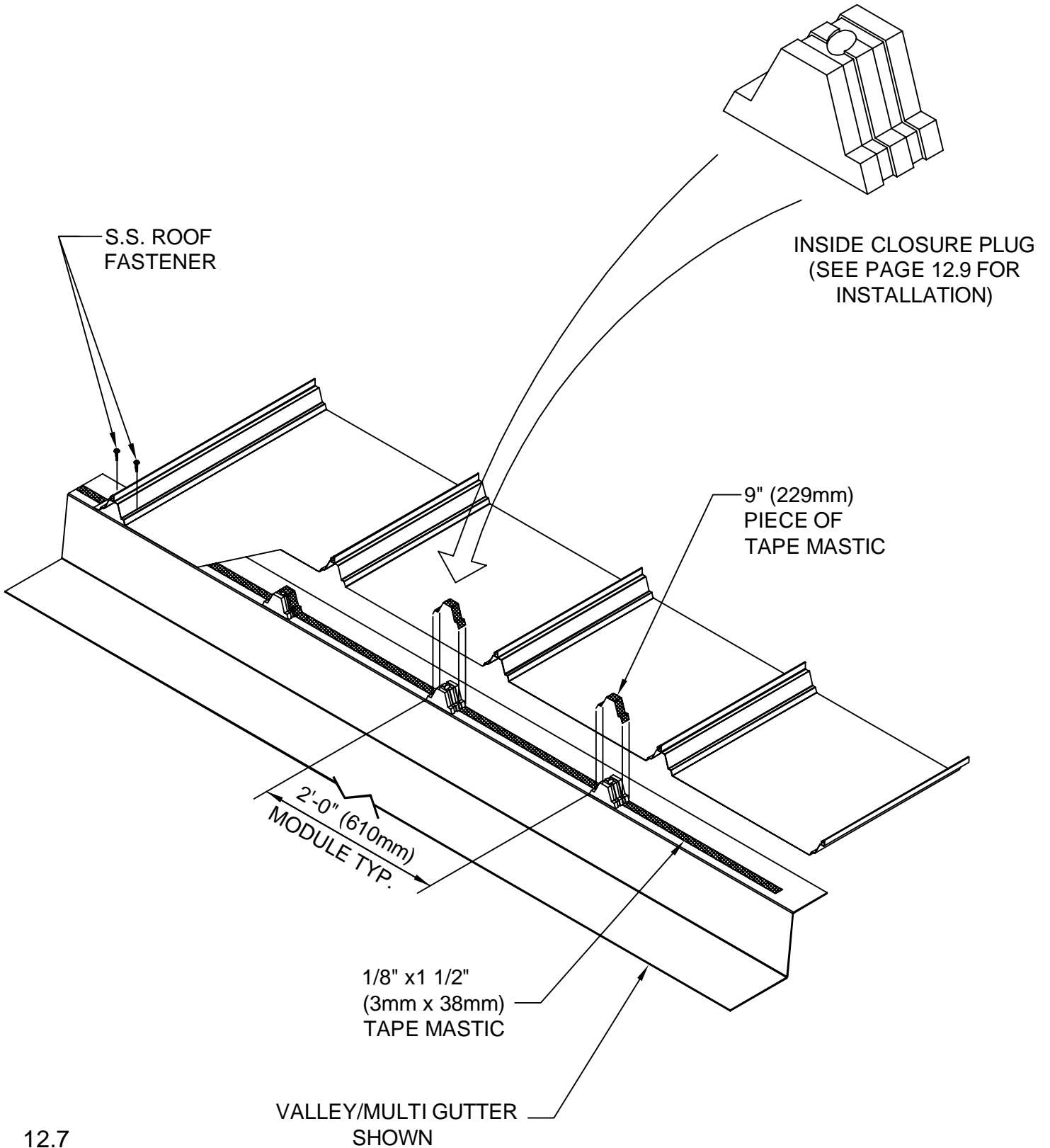
10 FT. (3.05m) RIDGE VENTILATOR



ROOF ACCESSORIES

MOLDED HARD RUBBER INSIDE CLOSURE

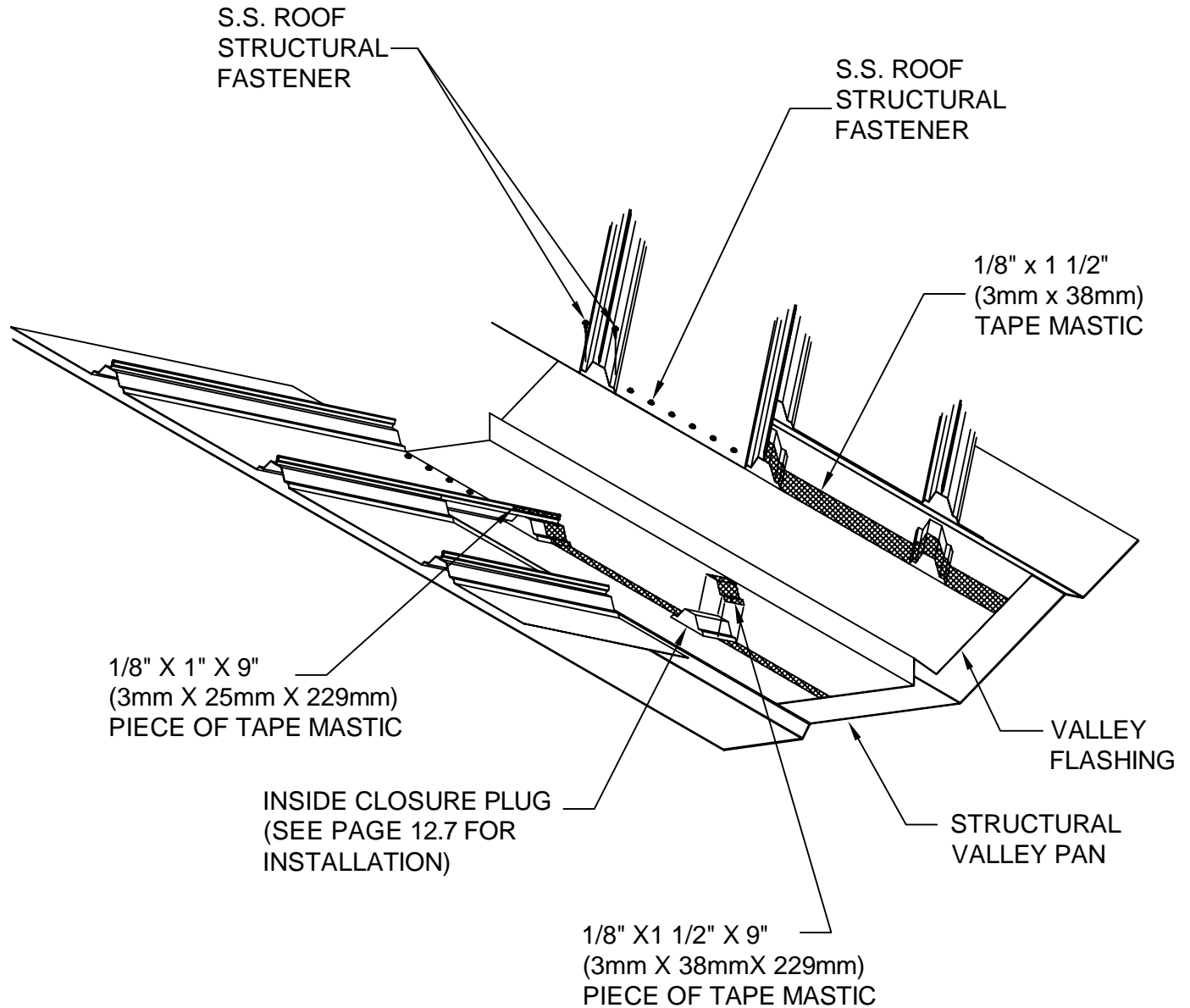
Install fasteners in flat of panel per instructions for each condition. (Example: Valley Gutter, Multi-Gutter, Etc.)



EXTRUDED HARD RUBBER INSIDE CLOSURE

Install fasteners in flat of panel per standard erection details.

Refer to **STANDARD ERECTION DETAILS** for additional valley details.



Extruded closures are provided to fit specific conditions. Length and angle of cut will vary. Use erection drawing detail to determine part numbers.

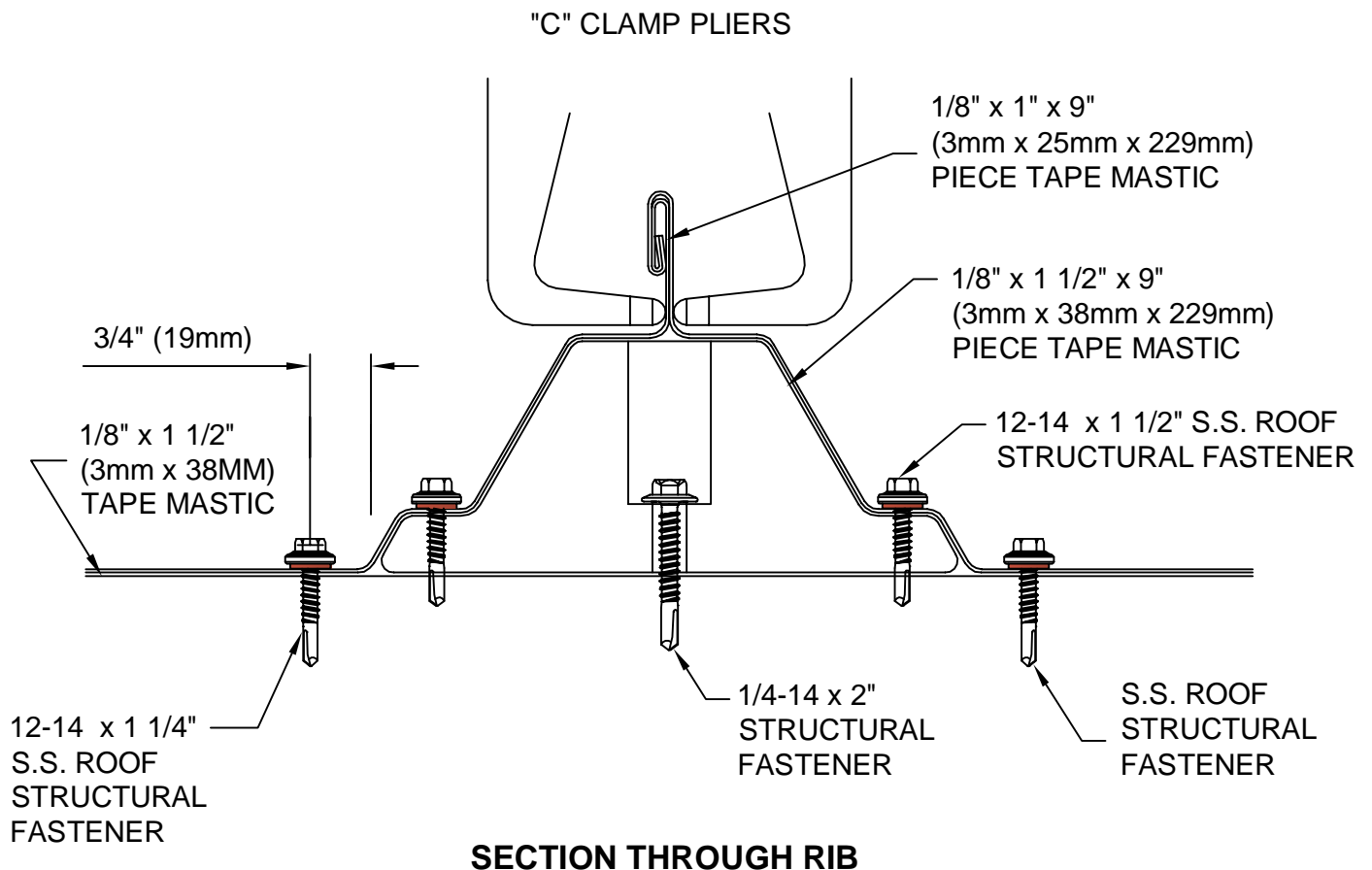
ROOF ACCESSORIES

MOLDED HARD RUBBER INSIDE CLOSURE

INSTRUCTIONS

1. Apply 1/8" x 1 1/2" (3mm x 38mm) tape mastic 1/2" (13mm) up slope from eave edge of SSR panels.
2. Place molded closure plugs at panel edge on 2'-0" (610mm) module to align with SSR rib.
3. Install one row of 1/8" x 1 1/2" (3mm x 38mm) mastic, field cut to approx. 9" (229mm) long, over closure plug.
4. Wrap closure plug with one row of 1/8" x 1 1/2" (3mm x 38mm) mastic when plug is installed, as the panels are laid in place.
5. Install one 1/4 - 14 x 2" structural fastener (55309). This is an optional fastener for pre-locating the molded closure.
6. Install a 1/8" x 1" x 9" (3mm x 25mm x 229mm) piece of mastic on vertical leg of male seam before hooking the female seam of next panel.
7. Use the "C" clamp pliers to tighten seam; force panel into mastic, very gently drive S.S. roof structural fastener into lower ribs of closure plug.
8. After panel is seamed, install S.S. roof structural fastener 3/4" (19mm) from rib on each side.

Clamp seam and force panel into mastic, very gently drive fastener into shoulder.



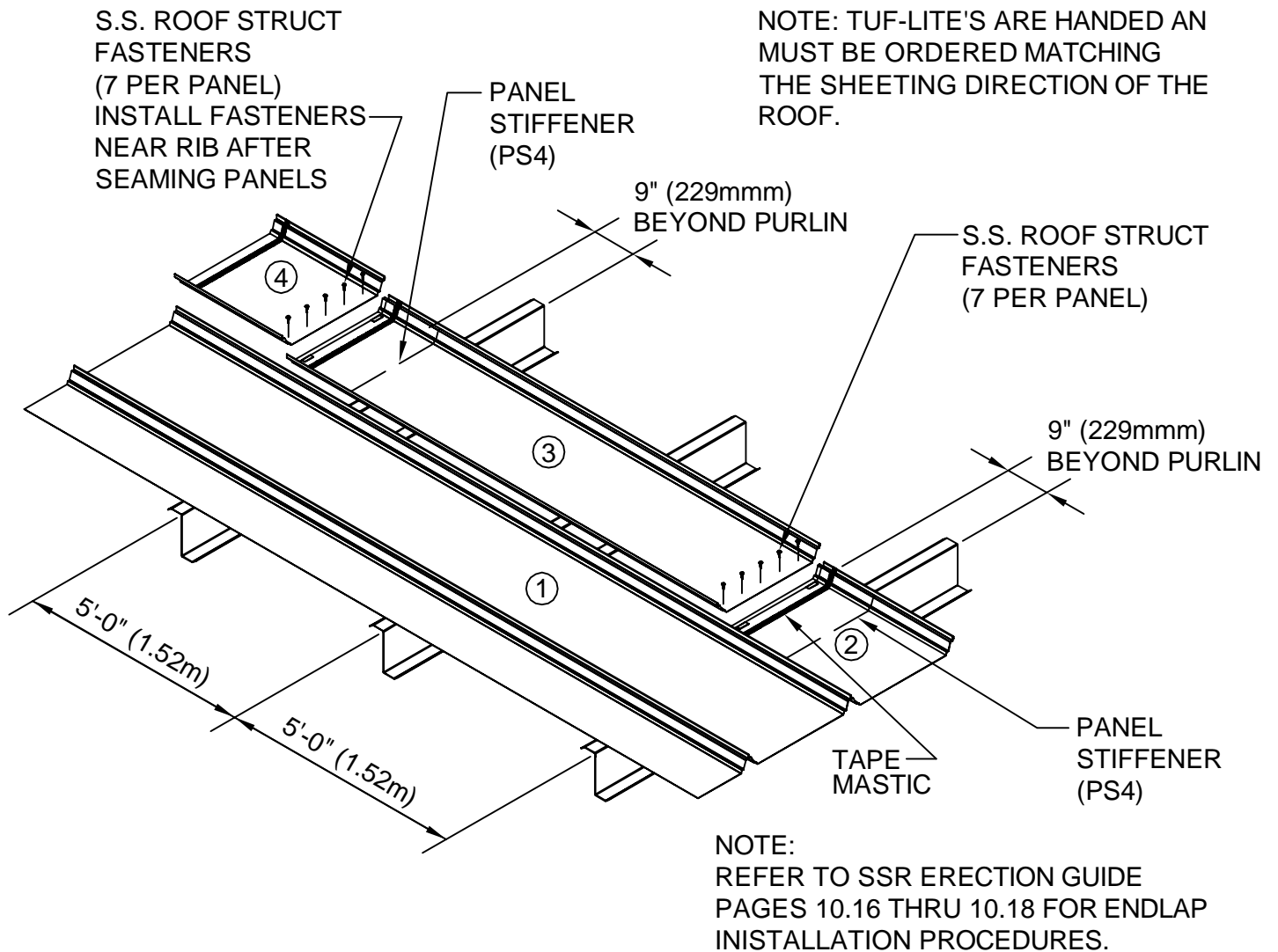
SSR TUF-LITES

With or without condensation pans.

SSR Tuf-lites with or without condensation pans are installed in sequence shown. Review the following before proceeding.

- Endlap installation (previous section)
- Insulation preparation.

1. Complete the panel run adjacent to SSR Tuf-lite including SSR clips and preparation of insulation.
2. Set lower panel in place. Install panel stiffeners, mastic, sealants, SSR clips, and prepare insulation.
3. Set Tuf-lite in place. Fasten lower endlap. Install panel stiffeners, mastic, sealants, SSR clips, and prepare upper SSR panel.
4. Fasten endlap of upper panel to Tuf-lite. Install SSR clip. Proceed with remainder of roof.



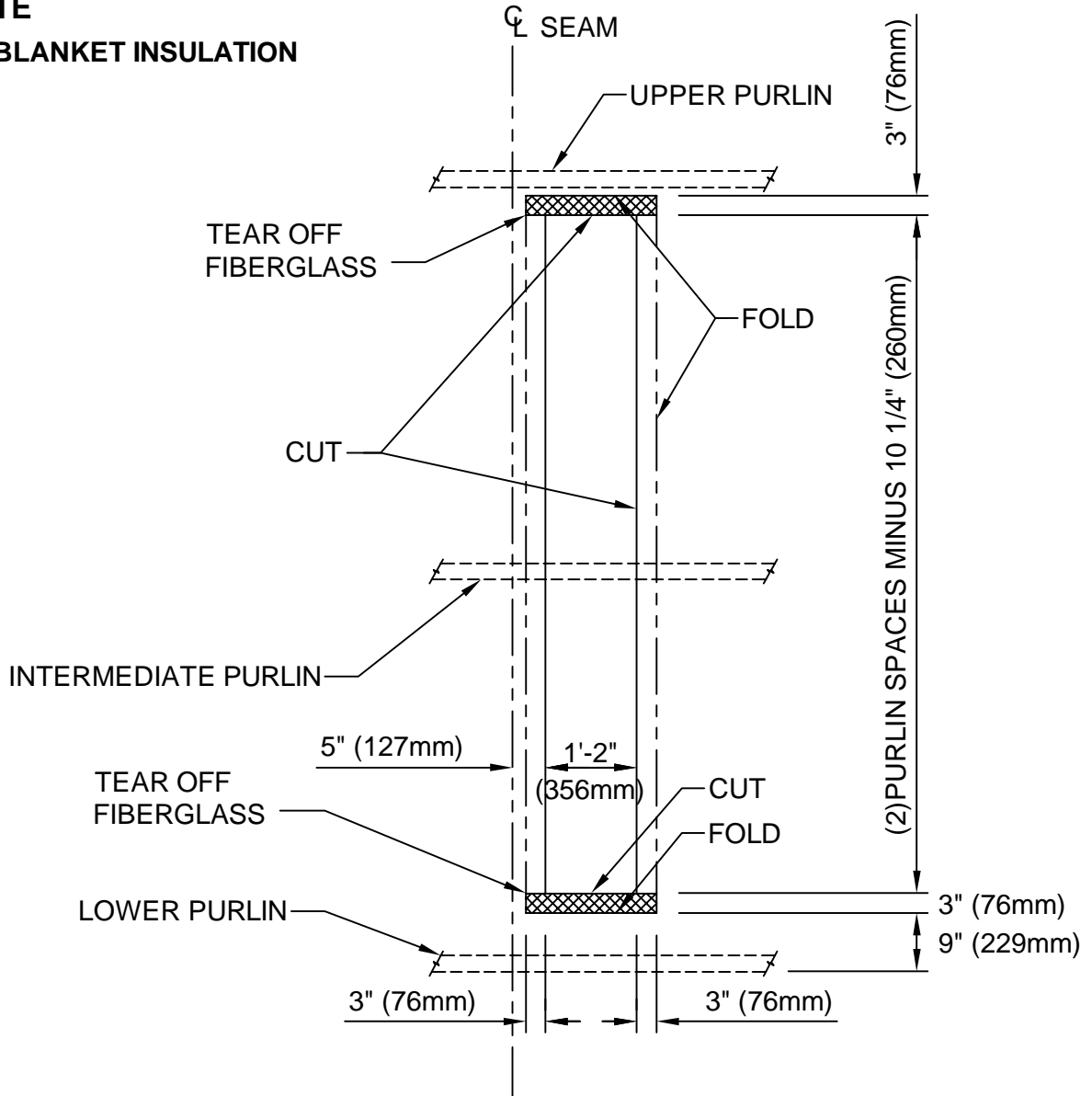
IMPORTANT NOTE:

TUF-LITES SHALL BE INSTALLED AS ROOF IS paneled AND PROTECTIVE MEASURES TAKEN TO INSURE AGAINST MATERIALS OR PERSONNEL FALLING THROUGH TUF-LITE

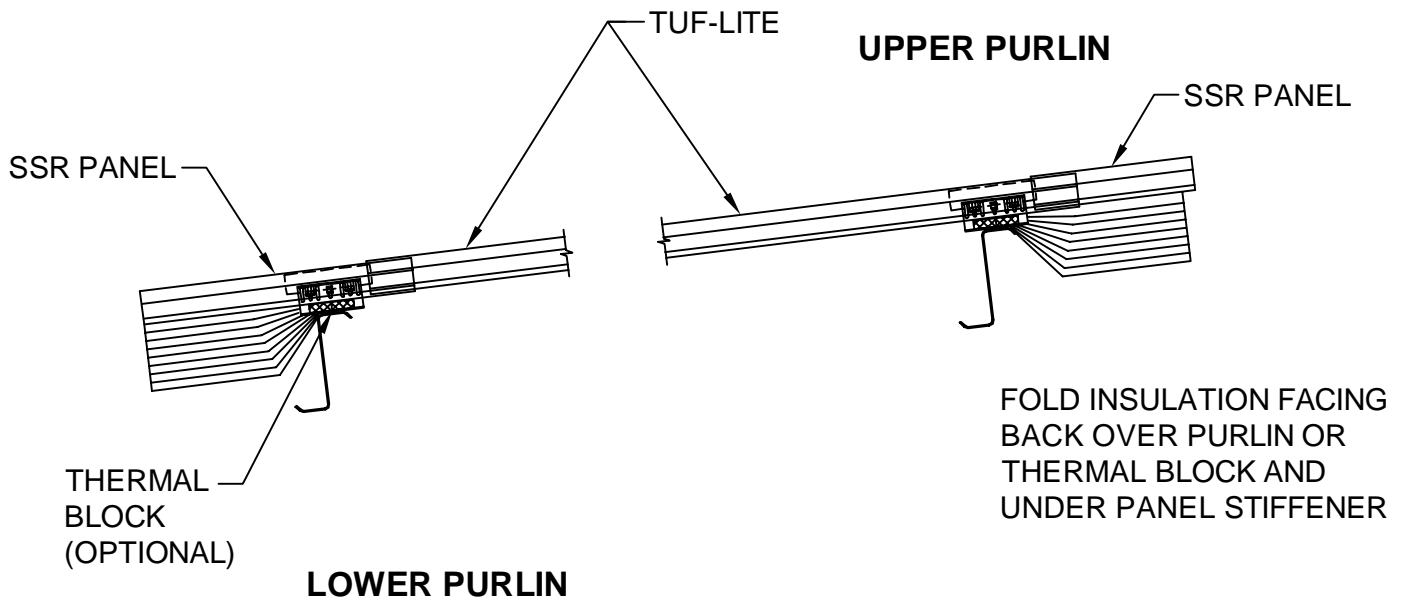
ROOF ACCESSORIES

SSR TUF-LITE

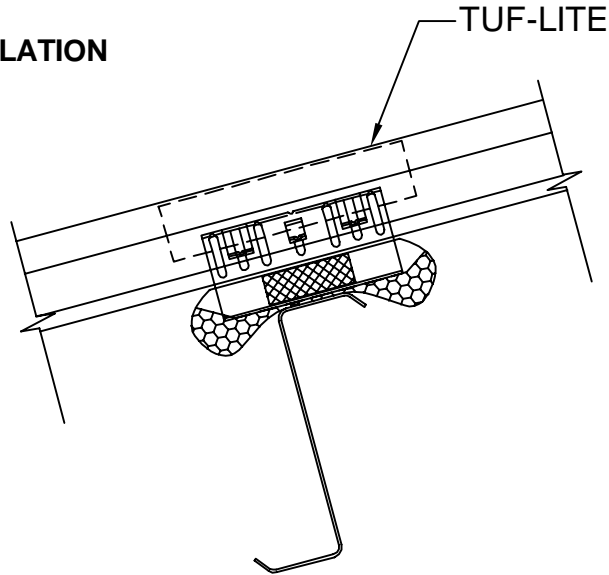
PREPARING BLANKET INSULATION



INSULATION CUTTING DIAGRAM

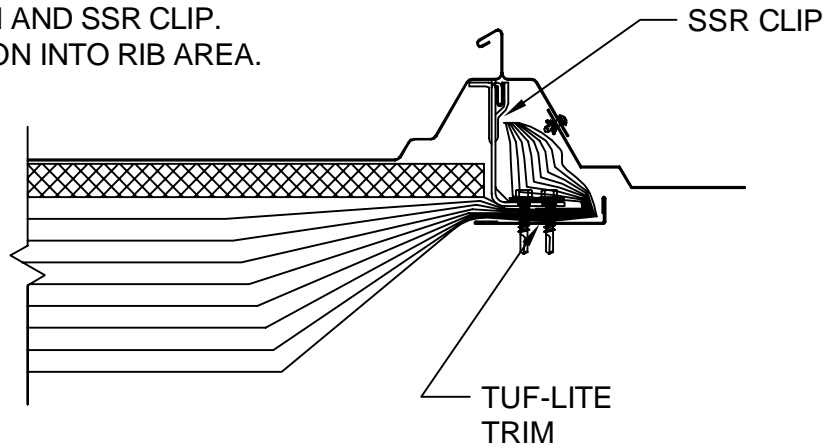


**SSR TUF-LITE
PREPARING BLANKET INSULATION**

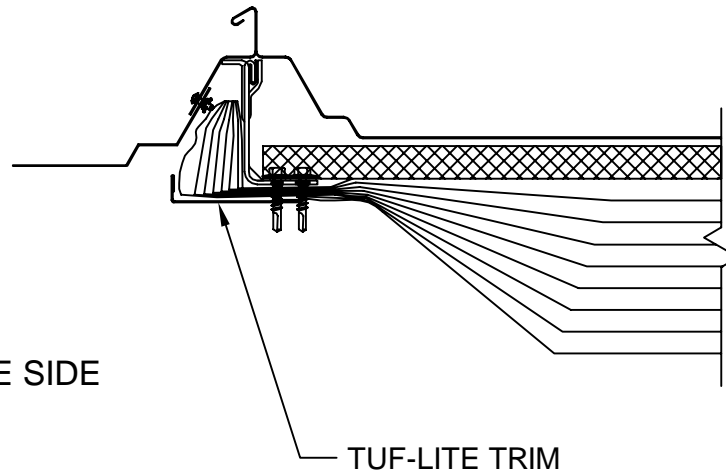


INTERMEDIATE PURLIN FORM CUSHION FROM INSULATION OR WRAP THERMAL BLOCK.

ALONG EACH SIDE POSITION INSULATION BETWEEN TUF-LITE TRIM AND SSR CLIP. FOLD EXCESS INSULATION INTO RIB AREA.



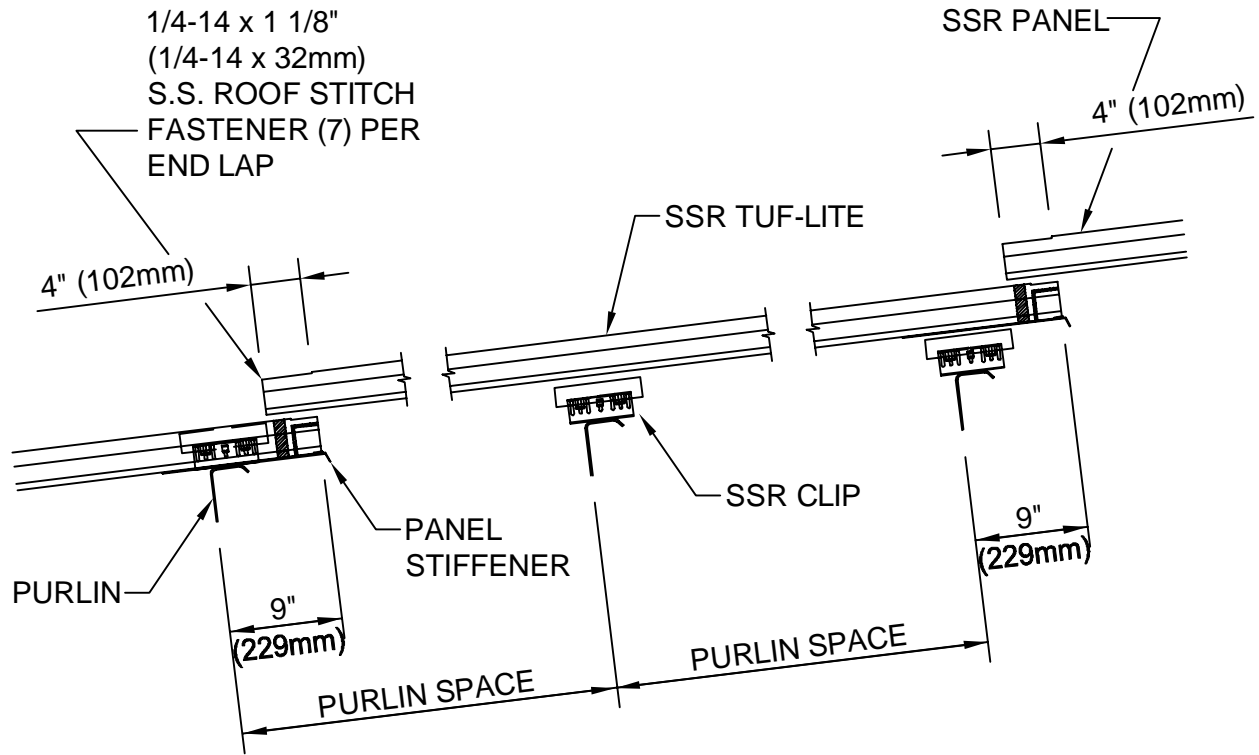
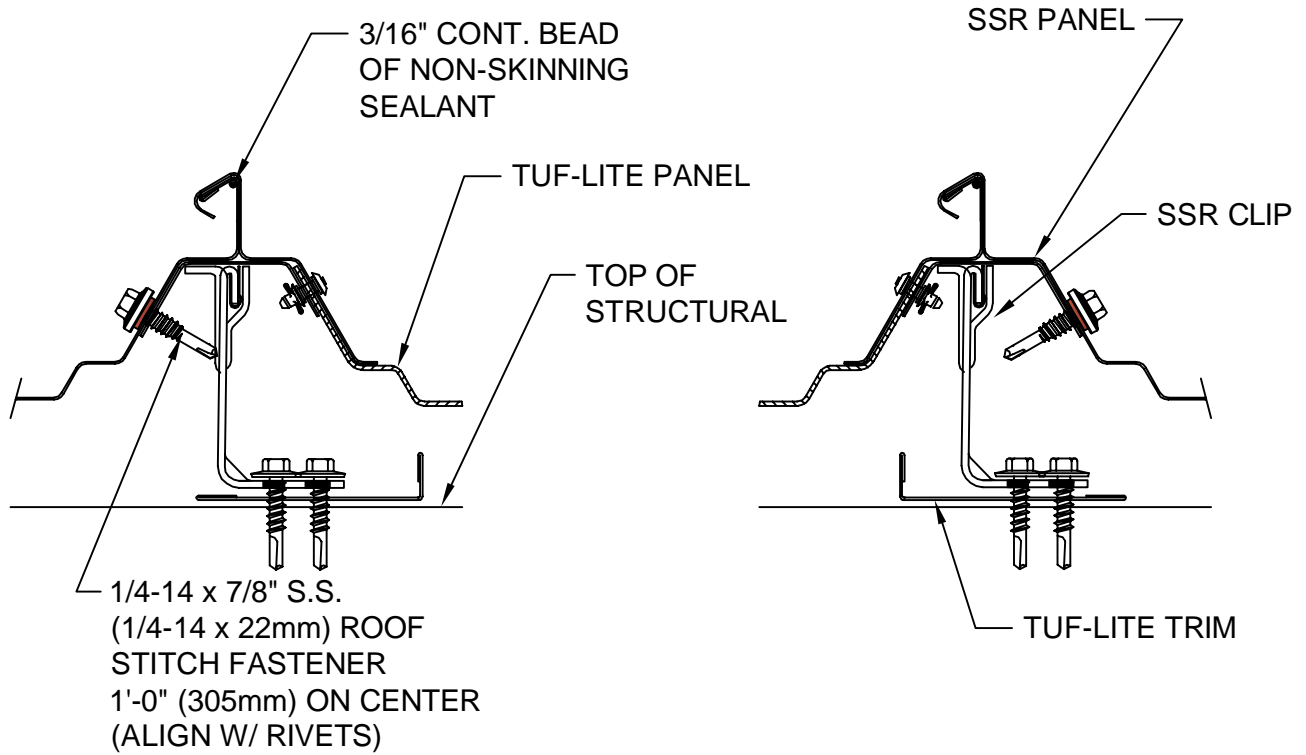
FEMALE SIDE



MALE SIDE

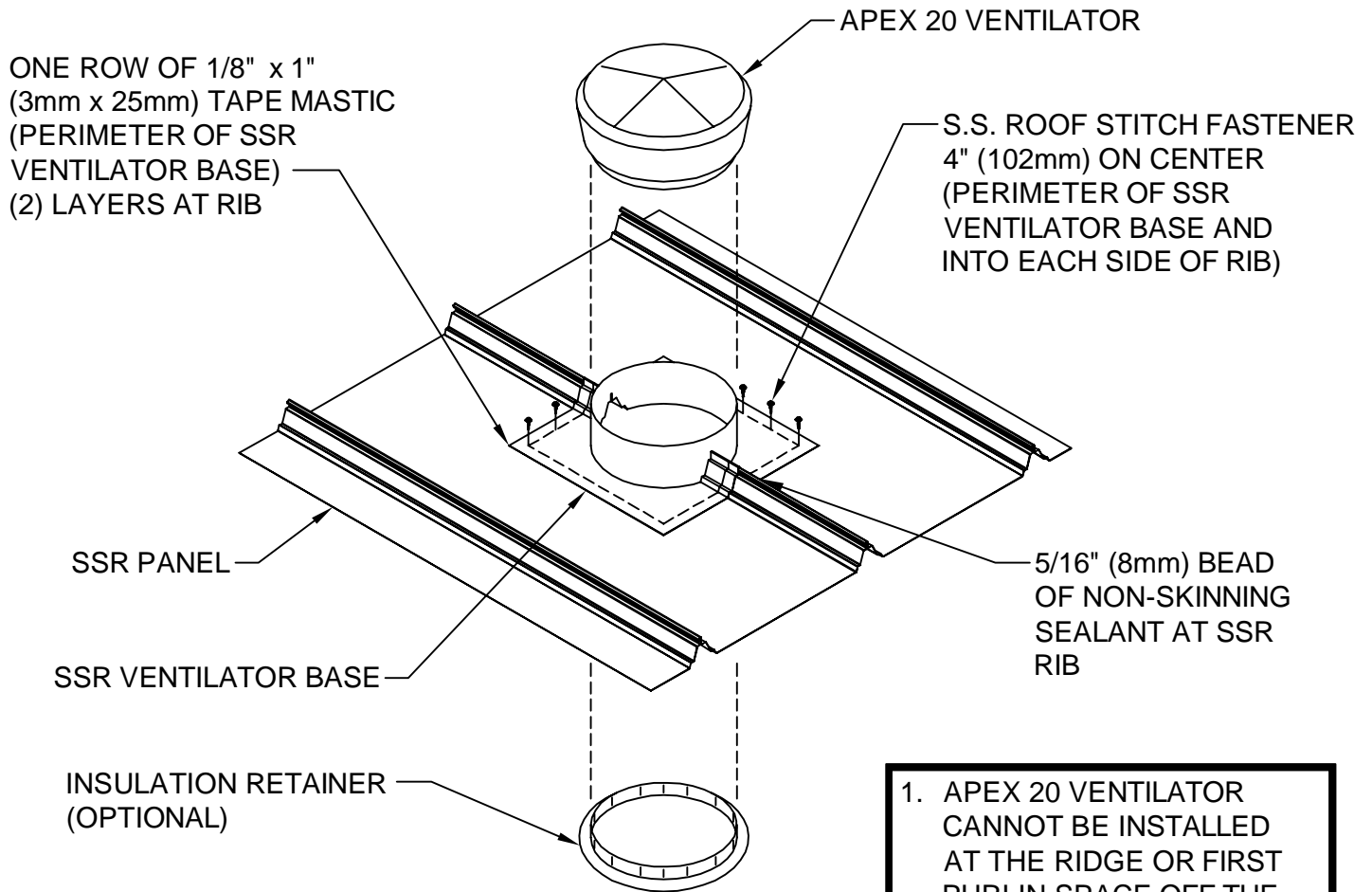
TUF-LITE TRIM

ROOF ACCESSORIES
SSR TUF-LITE (U.L. 90)



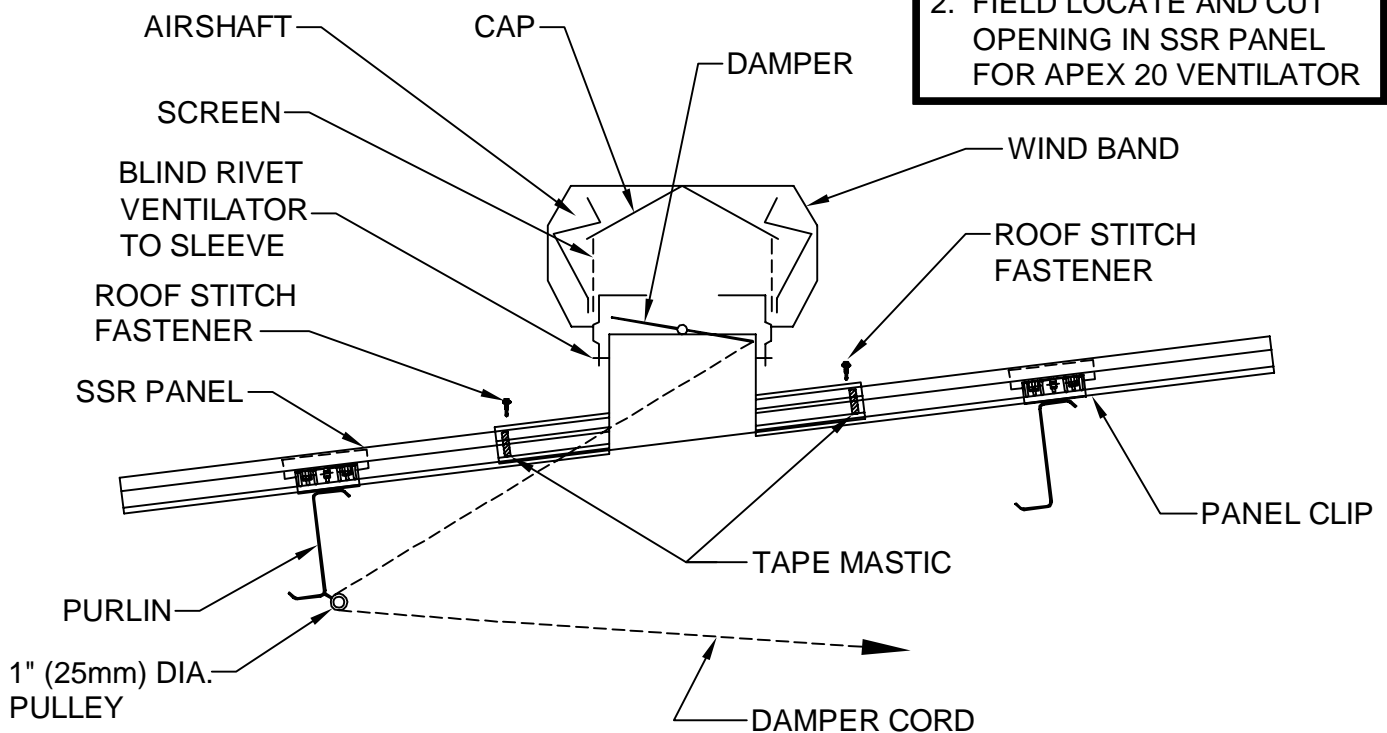
ALL SSR PANELS ARE FACTORY NOTCHED

APEX 20 VENTILATOR



1. APEX 20 VENTILATOR CANNOT BE INSTALLED AT THE RIDGE OR FIRST PURLIN SPACE OFF THE RIDGE OF A BUILDING.
2. FIELD LOCATE AND CUT OPENING IN SSR PANEL FOR APEX 20 VENTILATOR

APEX 20 VENTILATOR



NOTE: DETAILED INSTRUCTIONS ARE PACKAGED WITH EACH VENTILATOR FOR SHIPMENT.

ROOF ACCESSORIES

RIGID BOARD INSULATION

Rigid Board Insulation is normally not supplied by VP Buildings. When used, the SSR roof and various other VP components are modified before shipment to the jobsite. Refer to VP erection drawing for necessary part numbers. Refer to insulation shipping documents (NOT BY VP) for insulation thickness and lengths.

Special length structural fasteners are used to attach the SSR clips and bearing plates through the Rigid Board insulation to the purlins. (2 fasteners per clip) Refer to erection drawings for fastener sizes.

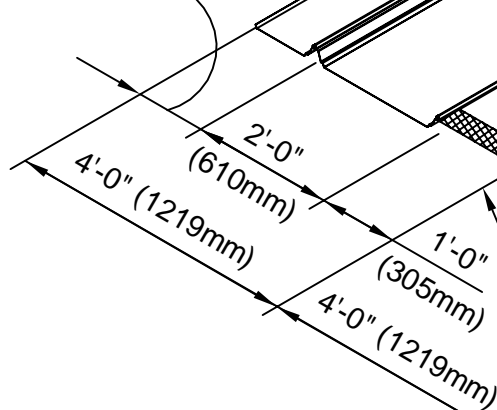
IMPORTANT

When installing fasteners: use nose piece on screw guns, drive & seat first fastener. Then drive and seat the second fastener. Reseat 1st & 2nd fastener. (Rigid Board Insulation compression causes installed fasteners to loosen when next fastener is installed.) **DO NOT** install SSR clips without bearing plates under them.

ALL CONDITIONS SHOWN ON THIS PAGE MUST BE COMPLIED WITH WHEN UL-90 SSR WITH RIGID BOARD INSULATION IS BEING INSTALLED.

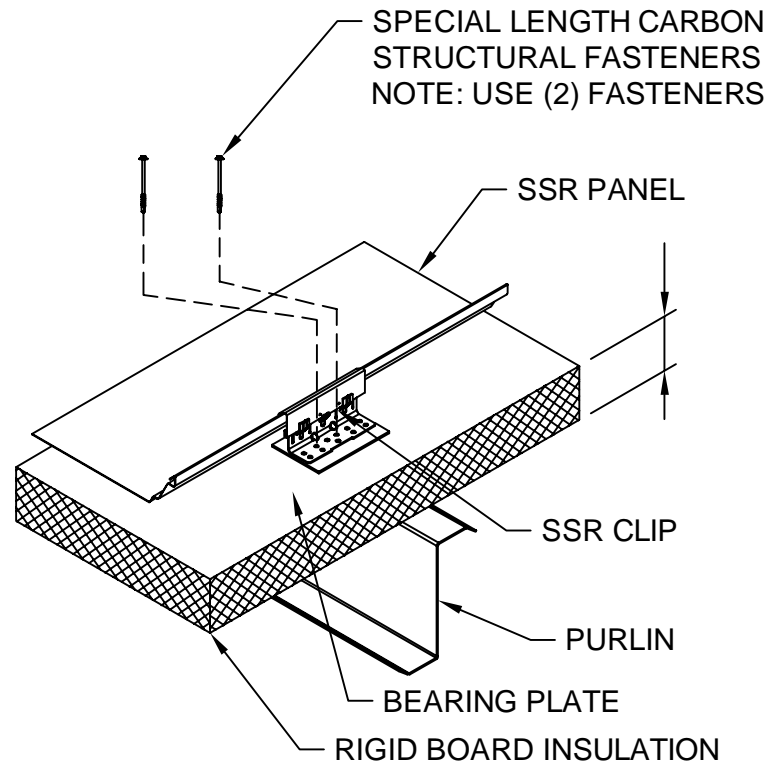
SSR panels are installed in the normal manner when Rigid Board Insulation is used to insulate the roof. The following page shows the minor deviations.

STARTER
PANEL
DIMENSION



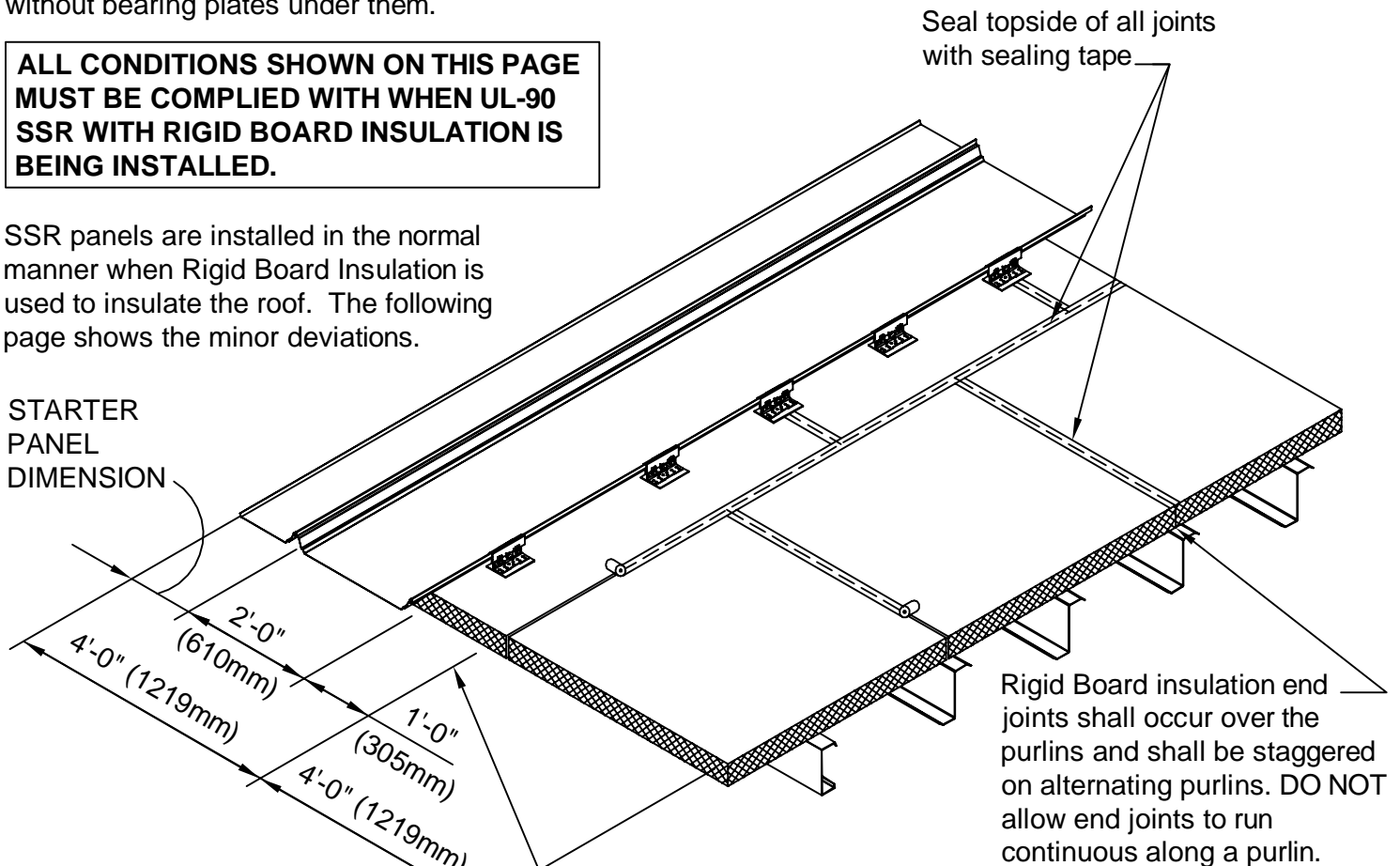
RIGID BOARD INSULATION LAYOUT

Rigid Board insulation side joints shall occur under the center flat area of the SSR panel. **DO NOT** allow side joints to occur at seam/clip location.



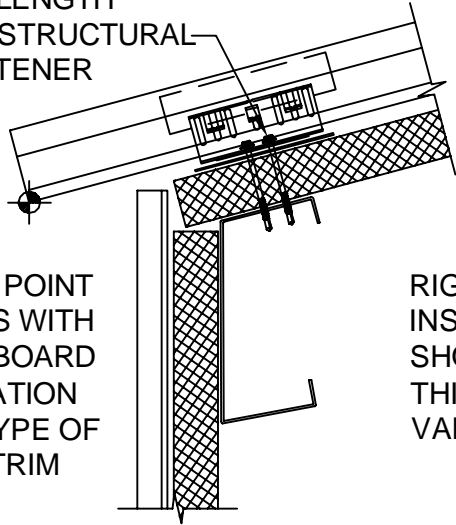
SSR CLIP INSTALLATION

Seal topside of all joints with sealing tape



RIGID BOARD INSULATION

SPECIAL LENGTH
CARBON STRUCTURAL
CLIP FASTENER

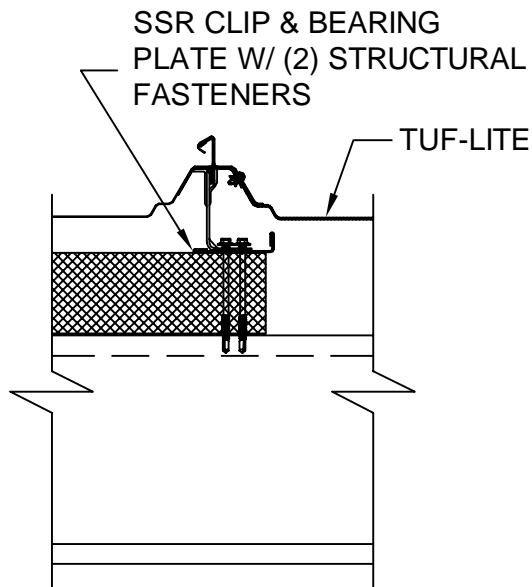


WORK POINT
VARIES WITH
RIGID BOARD
INSULATION
AND TYPE OF
EAVE TRIM

RIGID BOARD
INSULATION
SHOWN SHADED.
THICKNESS
VARIES

EAVE

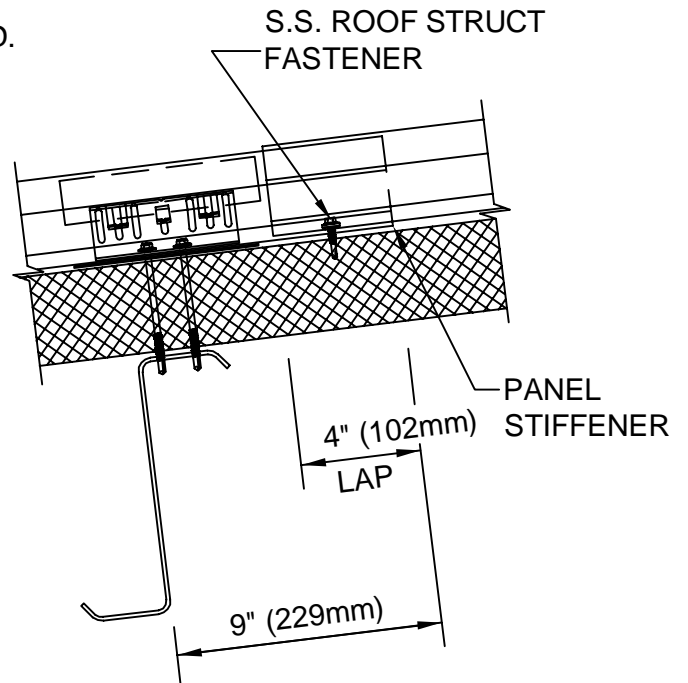
Detail on this page show the items that are affected when Rigid Board Insulation is used to insulate VP Buildings. Refer to specific sections of this manual for items and procedures not shown.



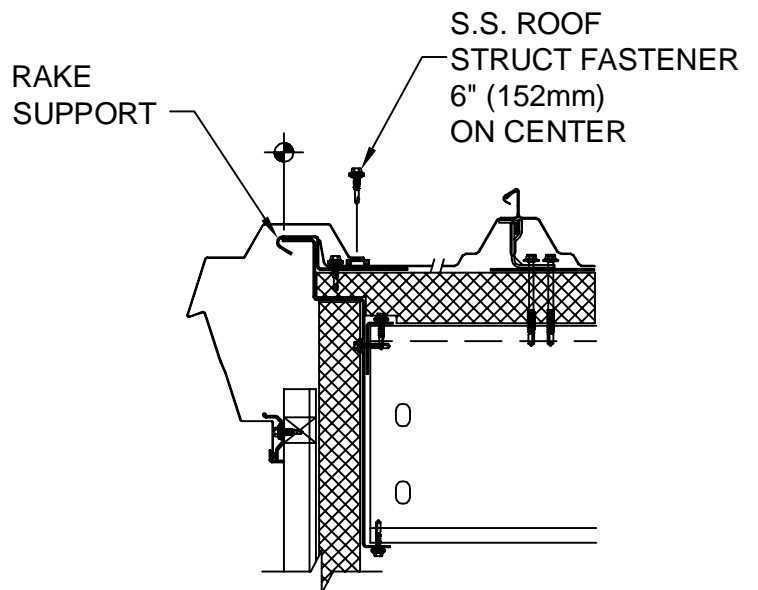
TUF-LITE

REFER TO STANDARD
ERECTION DETAILS FOR
PERIMETER CHANGES

NOTE:
ROOF RUMBLE MAY OCCUR
WITH RIGID BOARD INSULATION
WITHOUT ISOLATOR BETWEEN
INSULATION AND ROOF PANEL.



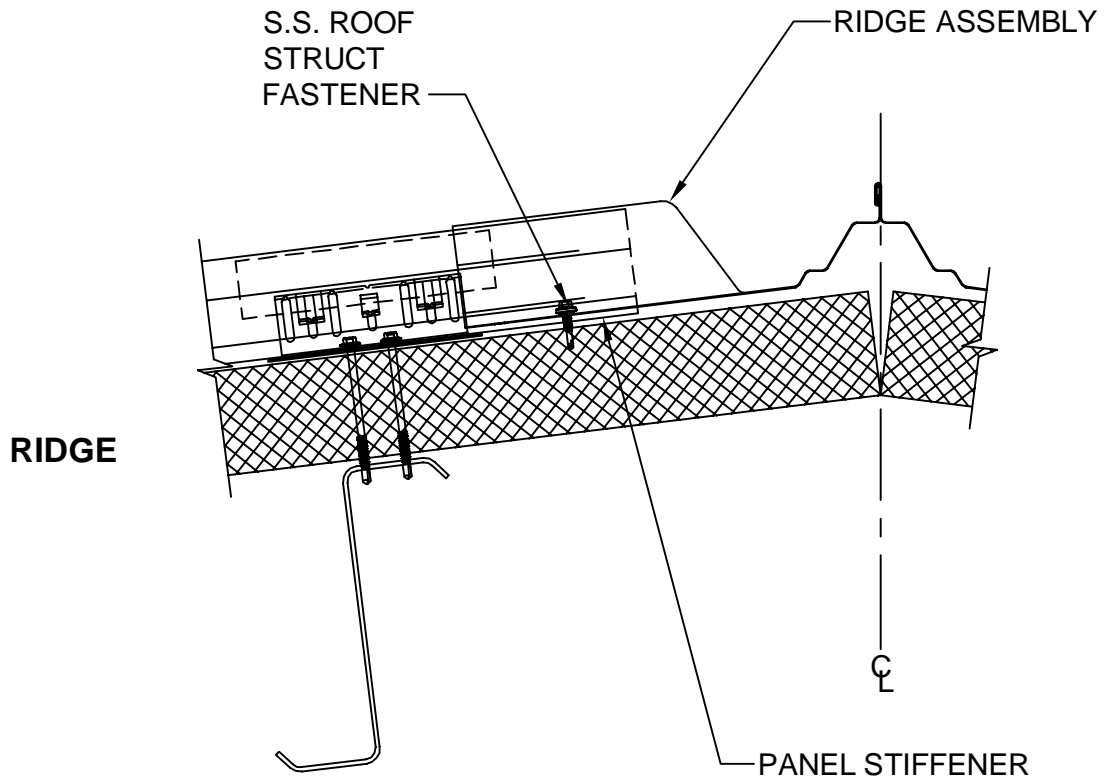
END LAP



RAKE

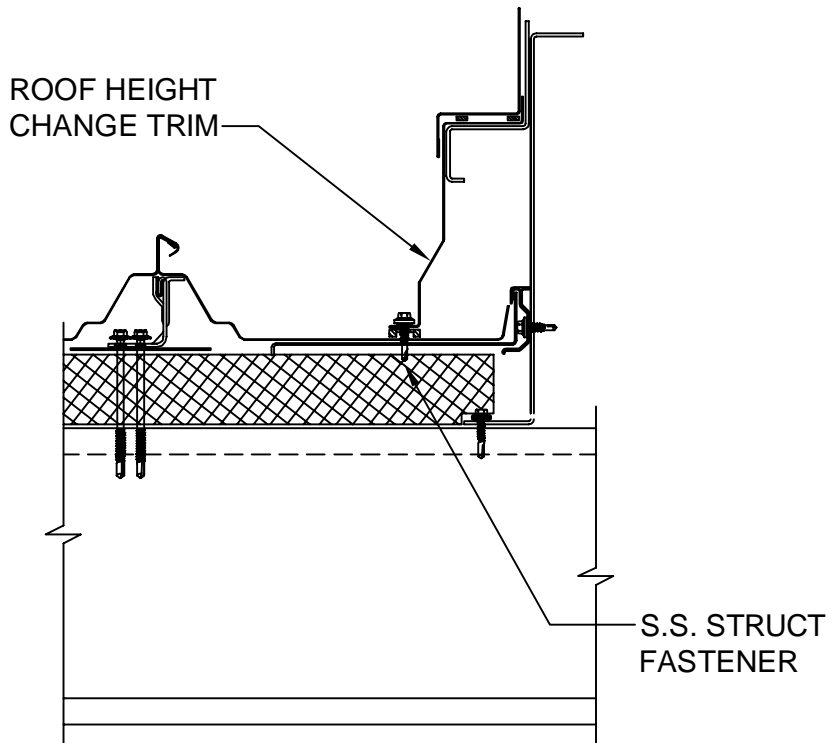
ROOF ACCESSORIES

RIGID BOARD INSULATION



Refer to **STANDARD ERECTION DETAILS** for perimeter changes.

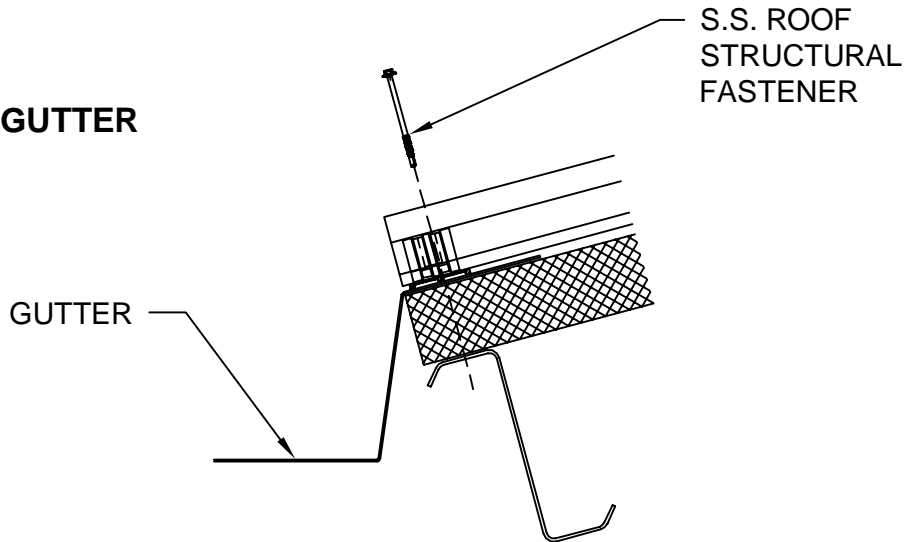
ROOF HEIGHT CHANGE



NOTE:
ROOF RUMBLE MAY OCCUR
WITH RIGID BOARD INSULATION
WITHOUT ISOLATOR BETWEEN
INSULATION AND ROOF PANEL.

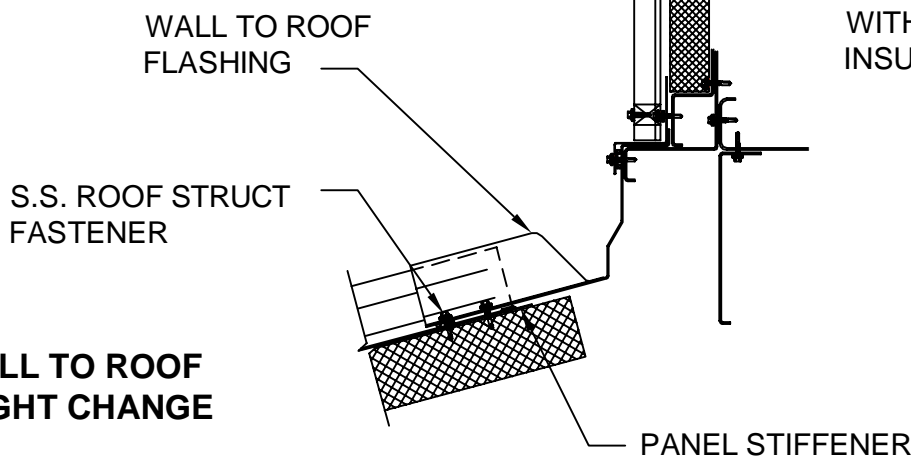
RIGID BOARD INSULATION

INTERIOR GUTTER

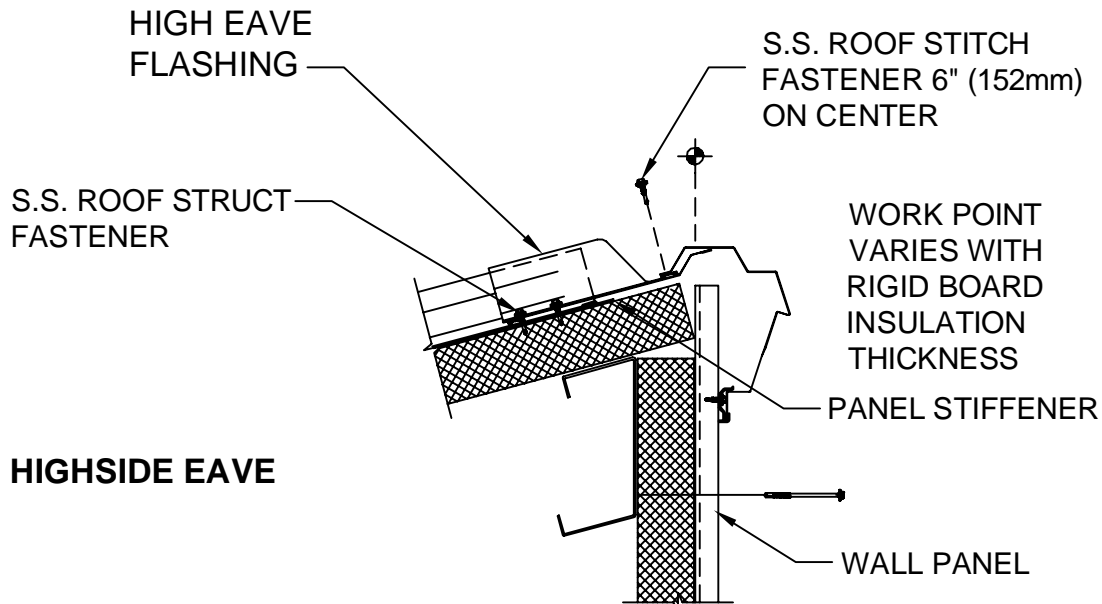


NOTE:
ROOF RUMBLE MAY OCCUR
WITH RIGID BOARD INSULATION
WITHOUT ISOLATOR BETWEEN
INSULATION AND ROOF PANEL.

WALL TO ROOF
HEIGHT CHANGE



HIGH EAVE
FLASHING



HIGHSIDE EAVE

NOTES

Design and recommended installation procedures are subject to change at any time, due to continued development work by Varco Pruden Buildings.

• • •

All panels formed from light gauge metal may exhibit waviness, also known as "Oil-Canning," commonly occurring in, but not restricted to, flat portions of a panel. This inherent characteristic is not a defect of material or manufacturing and is not cause for rejection.

• • •

For field installation questions, call your local VP Service Center. The job number is included on all building plans:

Arkansas:870-534-6030
 California:.....209-667-4951
 Missouri:.....816-238-7550
 North Carolina:336-996-4801
 Wisconsin:608-882-5000

