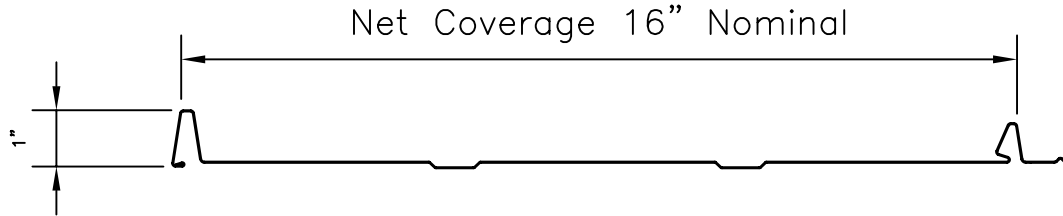
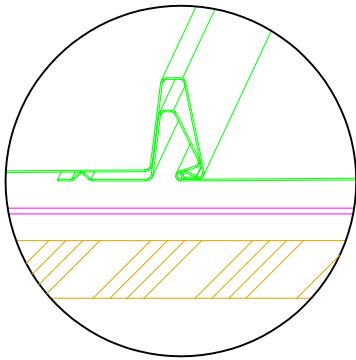


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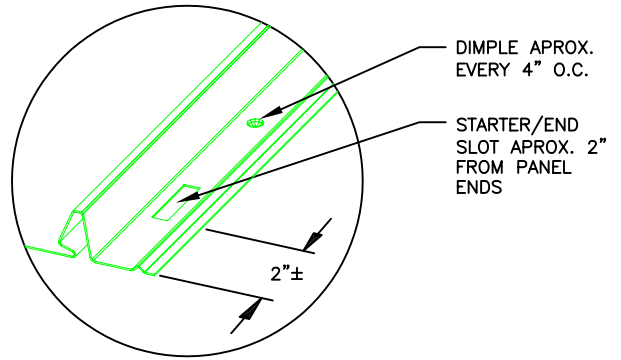
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PANEL PROFILE



Sidelap Detail



Nailstrip Detail

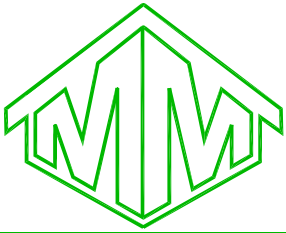
NOTES:

1. M-Seam Panels are only available with minor ribs to reduce oil canning.
2. Oil canning is inherent to all metal panels and therefore is not considered a manufacturers defect nor a warranty condition.
3. Consult your contractor immediately if you need information concerning this condition.

Gauge	Finishes	Nominal Thickness	ASTM & Grade Specifications
26	Acrylic Galvalume	.0179	ASTM A-792 AZ55
26	PTD Galvalume *	.0179	ASTM A-792 AZ55
24	Acrylic Galvalume	.0240	ASTM A-792 AZ55

* PTD Galvalume is 70% Kynar 500 or Hylar 5000 PVDF Resin unless otherwise indicated.

Millennium Metals Offers a Limited 25 year warranty on Painted Panels, 20 year limited warranty on Mill Finished Acrylume Panels.
Please request warranty information from your distributor.



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M-Seam Installation Instructions:

Panel Attachment: M-Seam recommended attachment is 8" on center along the edge of the nailer strip. This attachment may not be suitable for all applications. Projects may require an engineer to evaluate conditions such as mean height, exposure type, and roof configuration as indicated in ASCE 7-98 and ASCE 7-02. Additional fasteners may be required along the end zones on the panel (eave, ridge, and perimeter).

Pitch Alert: This product should not be used on applications less than a 2/12 pitch.

Roof Application:

Step 1: Make sure deck is even and square.

Step 2: Panel should begin on the gable end opposite of the prevailing wind. Begin with the receiving edge of panel (female side) along the Gable (see *Gable Rake Detail*). The edge away from the Gable should be the nailstrip. After checking that the panel is square to the eave, make sure the panel is attached as indicated in panel attachment (see above) and also 2" from the leading and trailing end of the panel on the nailstrip. The screw should be placed in the center of the nailstrip slot provided. Sealant is recommended on applications less than a 3/12 pitch.

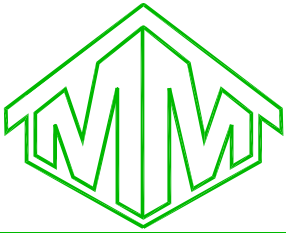
Step 3: After attaching the first panel completely, panel 2 should be snapped in place using a rubber mallet. A minimum of 1" overhang is recommended at the eave. Typical eave detail requires the use of a hemming tool to hem the panel over the ED2 (detail has 1-1/2" overhang).

Install the remaining accessories. Millennium Metals offers a variety of products such as pipe boots, butyl tape, and ventilation materials. Do not use copper or lead products in conjunction with M-Seam as it will void the warranty.

ATTENTION INSTALLER: PLEASE REFER TO THE IMPORTANT NOTE SECTION OF THIS MANUAL FOR SAFETY, STORAGE, OIL CANNING DISCLAIMER, AND SHAVING DISCLAIMER PRIOR TO BEGINNING PROJECT.

Code requirements vary from area to area and job type as well as roof configuration. Job specific engineering is not a service provided by Millennium Metals. Estimates/Takeoff's are provided at a nominal fee for materials only. It is the sole responsibility of the customer to review the takeoff and make any changes to the quantity, length or accessories he/she feels necessary. Millennium Metals takes no responsibility as to the accuracy of the information provided.

M-Seam is a special order product and therefore is not returnable. Please verify all items prior to ordering.



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Important Notes:

Millennium Metals recommends licensed roofing professionals to install our materials. Please use gloves, glasses, and other protection when handling material to prevent injury. It is necessary to inspect deck integrity to insure it is safe to walk on before beginning any work. Millennium Metals recommends all installers follow the OSHA requirement for fall protection. Never walk on materials when wet or when unsuitable weather conditions are present.

Storage:

Materials should be installed immediately. Any unused materials should be stored in a dry place where moisture will not reach and penetrate bundles. Material should always be placed on wood block to separate from the ground or concrete. Do not cover with plastic!!! Instead, use loose canvas tarps so that air can circulate. Cut the bands so that the material can expand.

Millennium Metals warrants the material only. We do not offer weather tightness warranties. Any such warranty is up to the contractor to include in their contract.

Decking:

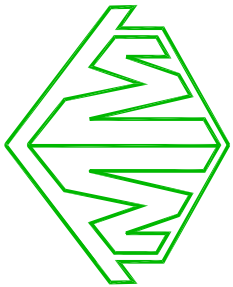
Millennium Metals recommends the use of minimum ½" plywood or OSB Board attached in accordance with code. The deck must be supported by an engineered truss system not to exceed 24" on center. A moisture barrier such as 30# felt or other ASTM approved underlayment should be used over decking to control moisture. Metal should never come in direct contact with green or pressure treated lumber as it will cause corrosion. If tin tabs are required to attach felt it will be necessary to apply a 15# felt in the direction of the panel as an additional separation barrier. M-seam is recommended on application with 2-1/2 / 12 or greater.

Oil Canning Disclaimer:

Oil canning is industry wide and inherit to all metal panels. It is more visible in designs with flat spans as with this panel. Oil canning is a wavy appearance in the surface of the metal panel. This slight distortion in no way effects the warranty nor is a reason for rejection or refusal.

Shavings Disclaimer:

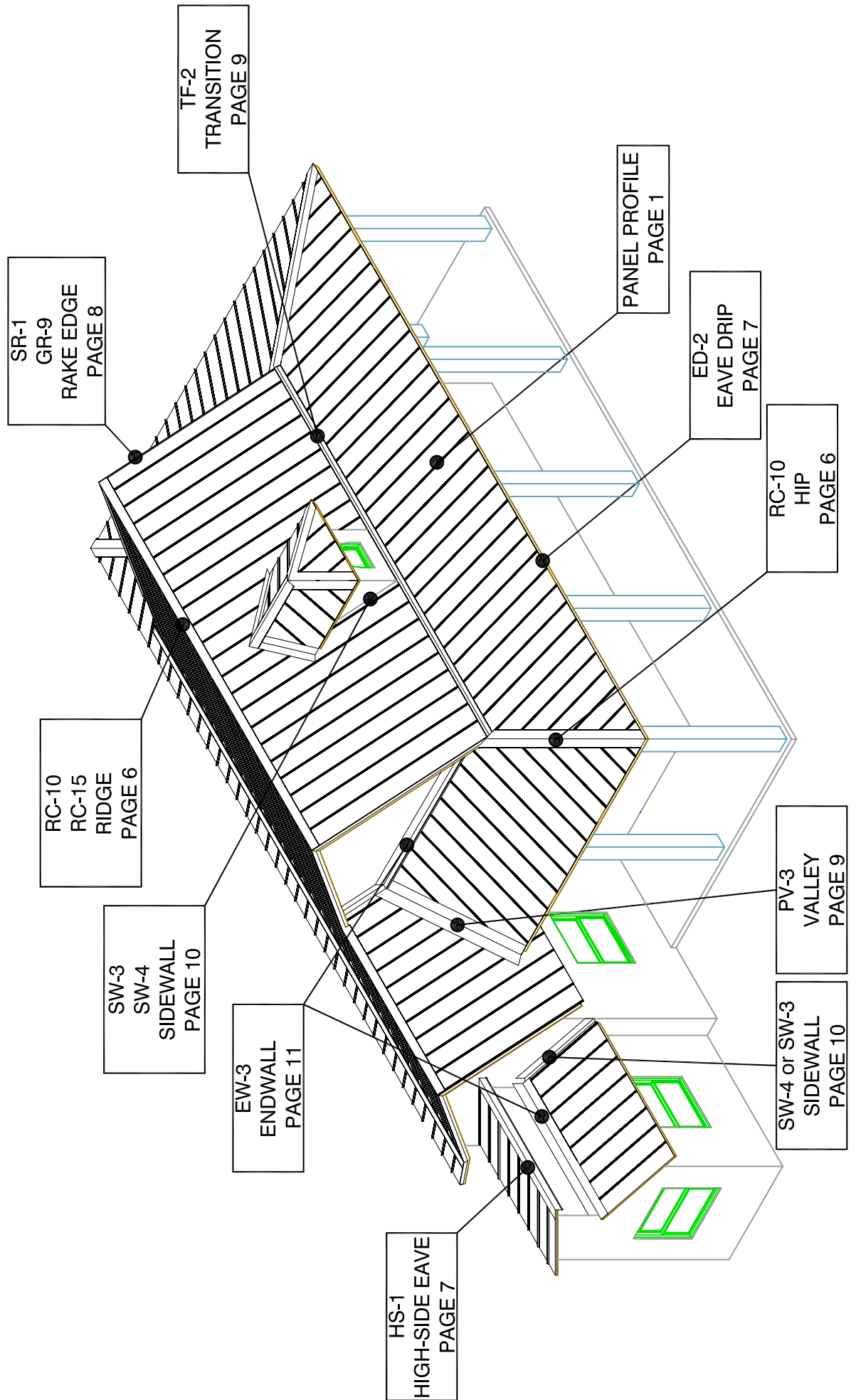
When using fasteners to penetrate steel sheets the iron particles tend to go airborne and settle on the sheet. It is necessary to remove these particles to prevent embedment and rust marks.

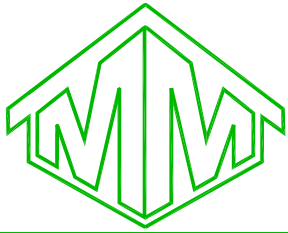


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M-SEAM DETAIL LOCATIONS

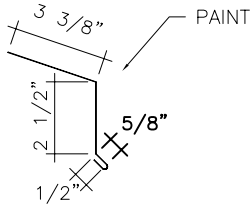




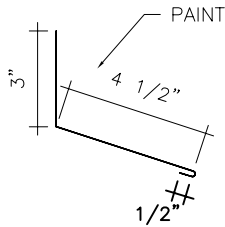
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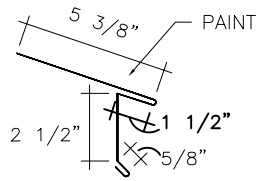
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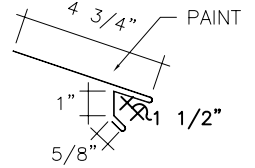
2. ENDWALL FLASHING (FW-3)



3. EXTENDED EAVE (ED-2)



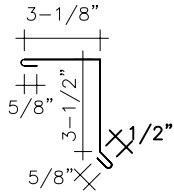
3. EXTENDED EAVE (ED-2R)



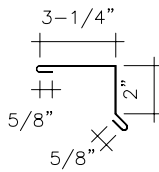
OVERHANG: 1-1/2"

OVERHANG: 1-1/2"

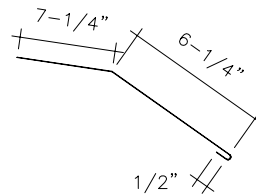
4. GABLE RAKE (GR-9)



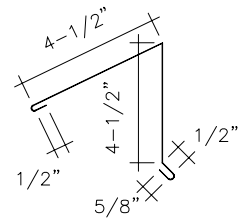
4. GABLE RAKE (GR-9R)



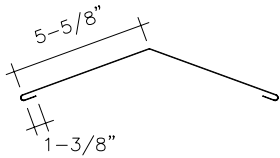
5. GAMBREL FLASHING (GF-2)



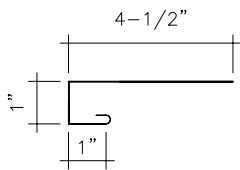
6. HIGHSIDE EAVE (HS-1)



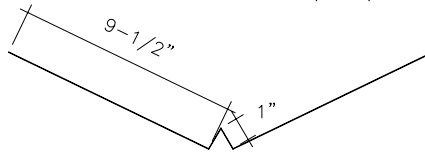
7. HIP CAP (RC-10)



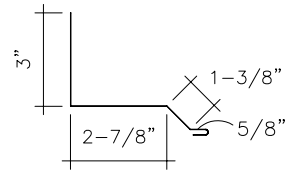
8. J-CHANNEL (JC-7)



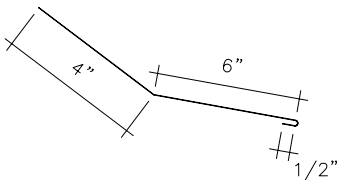
9. PREFORMED VALLEY (PV-3)



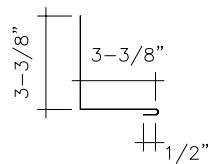
10. STEP SIDEWALL (SW-4)



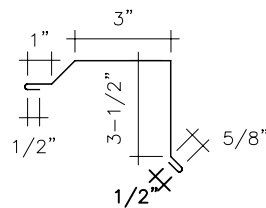
11. TRANSITION FLASHING (TF-2)



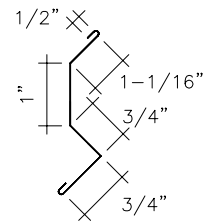
12. SIDEWALL FLASHING (SW-3)



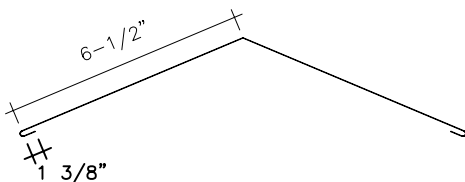
13. STEP RAKE (SR-1)



14. COUNTER FLASHING (CF-1)



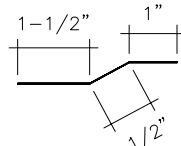
15. RIDGE CAP (RC-20)



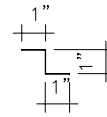
CLEAT



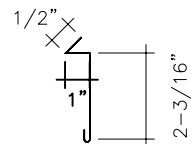
OFFSET CLEAT (CL-2)



Z-CLOSURE (ZC-1)



REGLET FLASHING (RF-1)



FLASHING PROFILES

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FAX: 904-358-8285

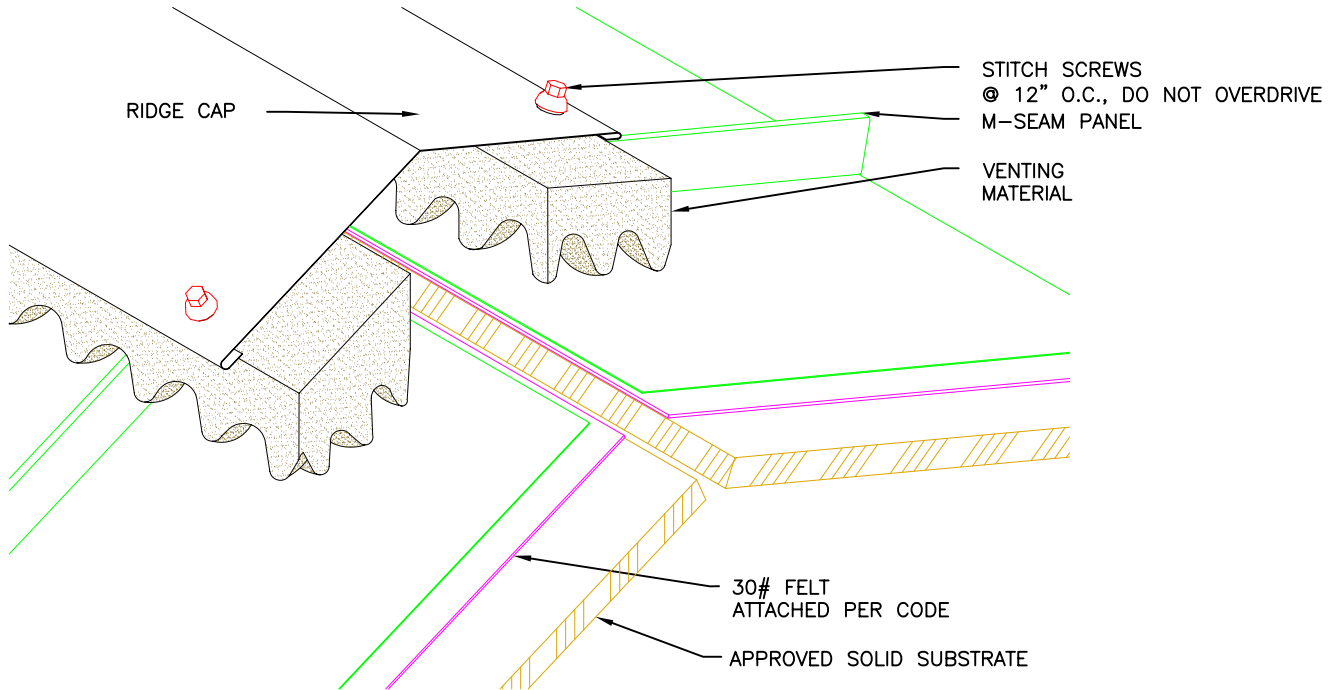
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PAGE 5

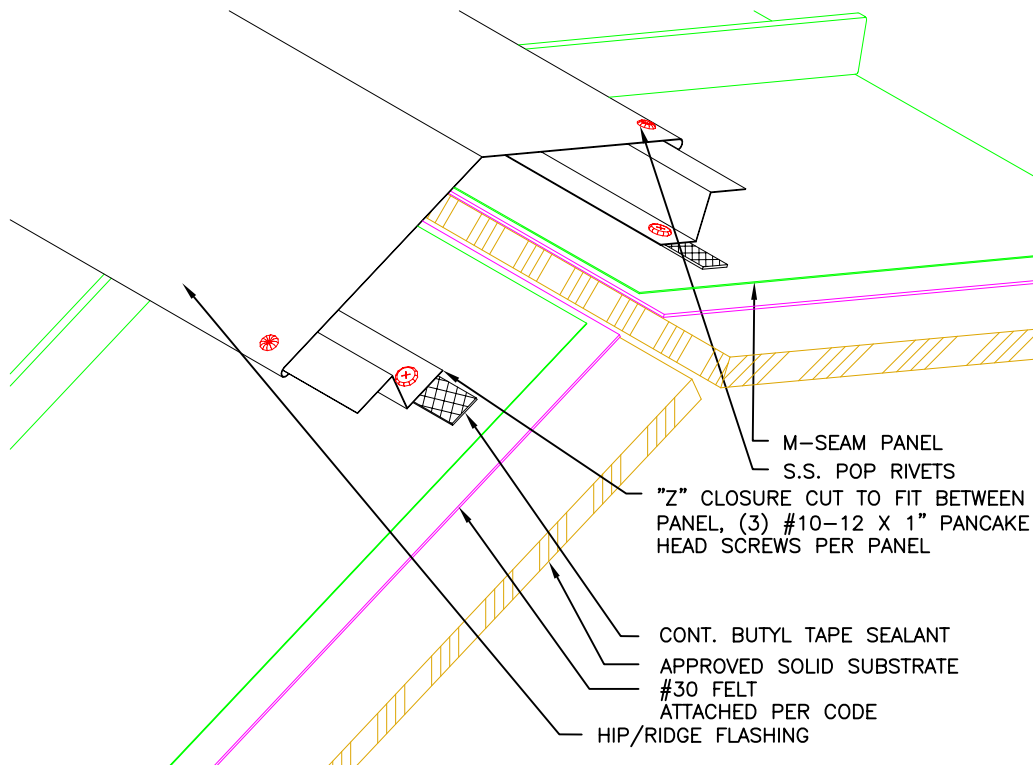


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VENTED RIDGE DETAIL RC-15



RIDGE CAP RC-10/RC-20

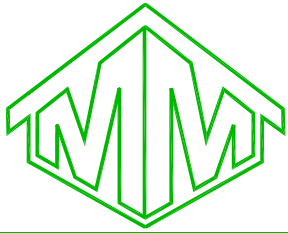
MILLENNIUM METALS INC.

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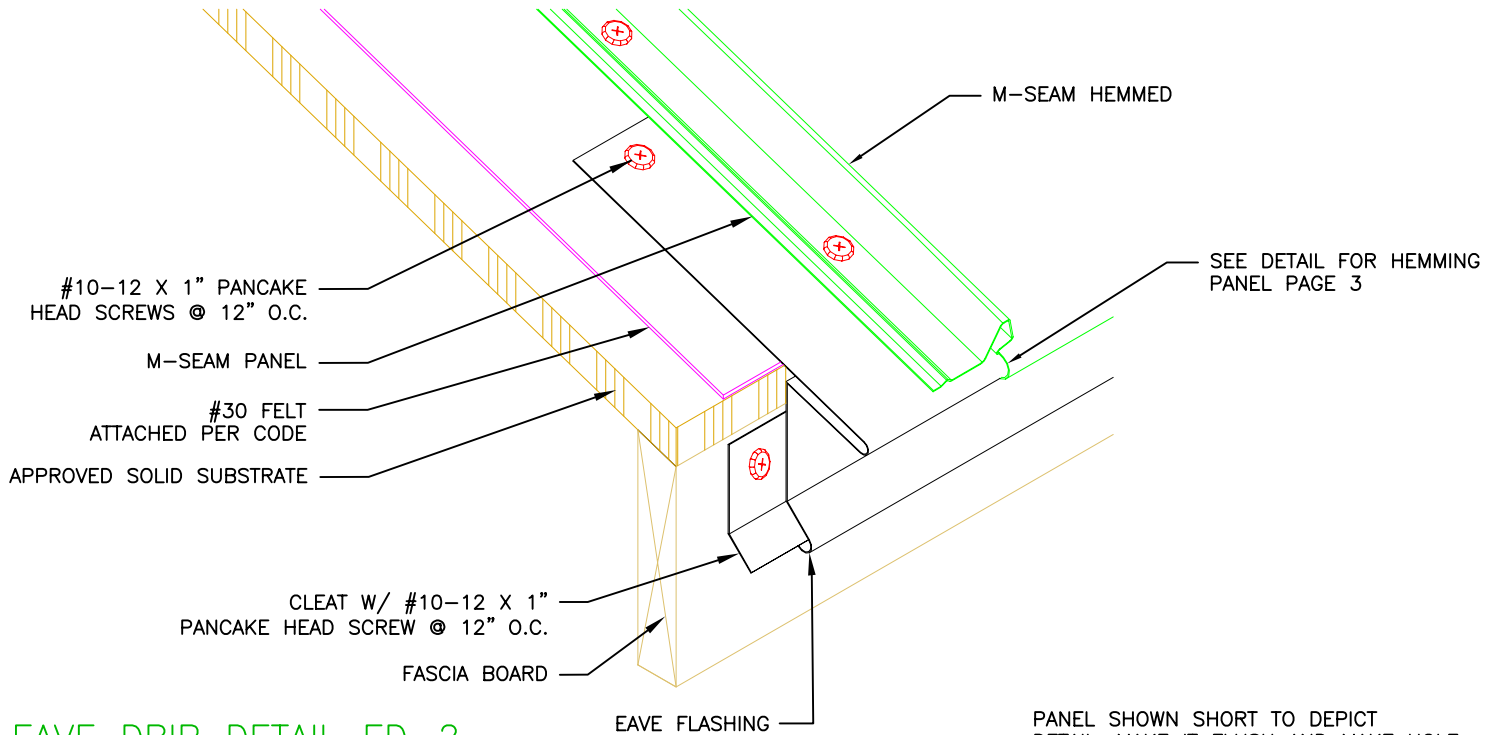
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PAGE 6



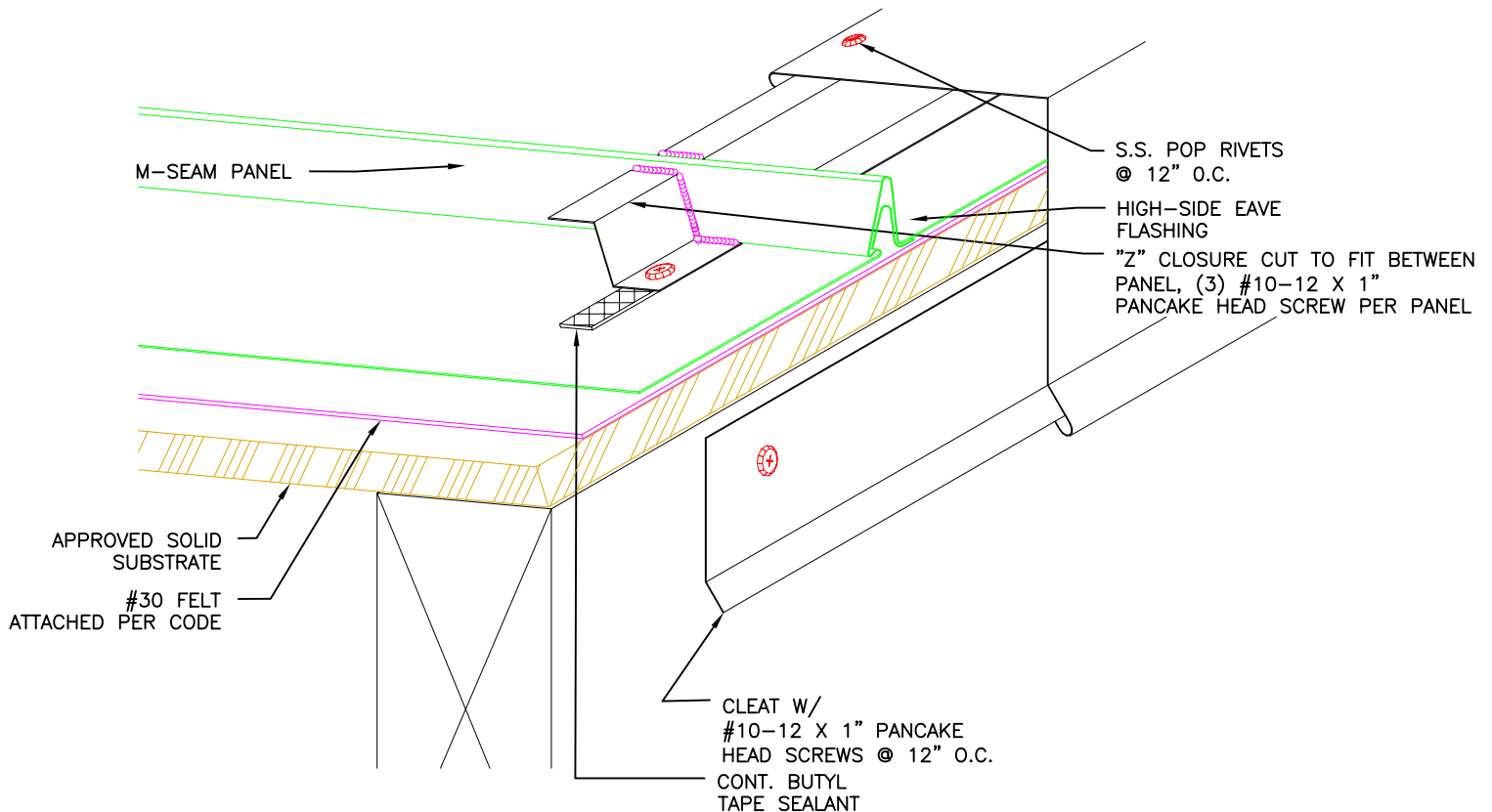
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EAVE DRIP DETAIL ED-2

PANEL SHOWN SHORT TO DEPICT
DETAIL. MAKE IT FLUSH AND MAKE HOLE.



HIGHSIDE EAVE DETAIL HS-1

MILLENNIUM METALS INC.

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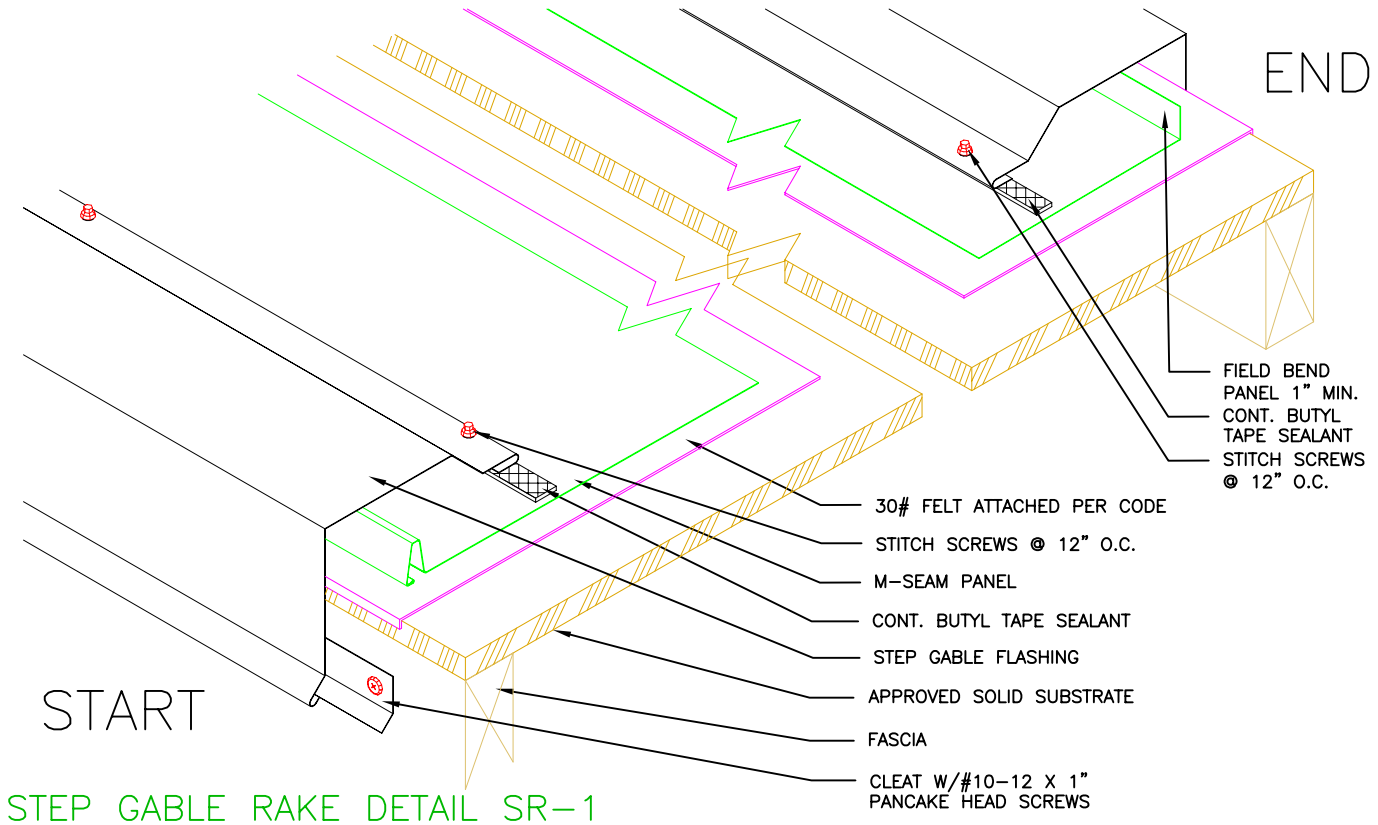
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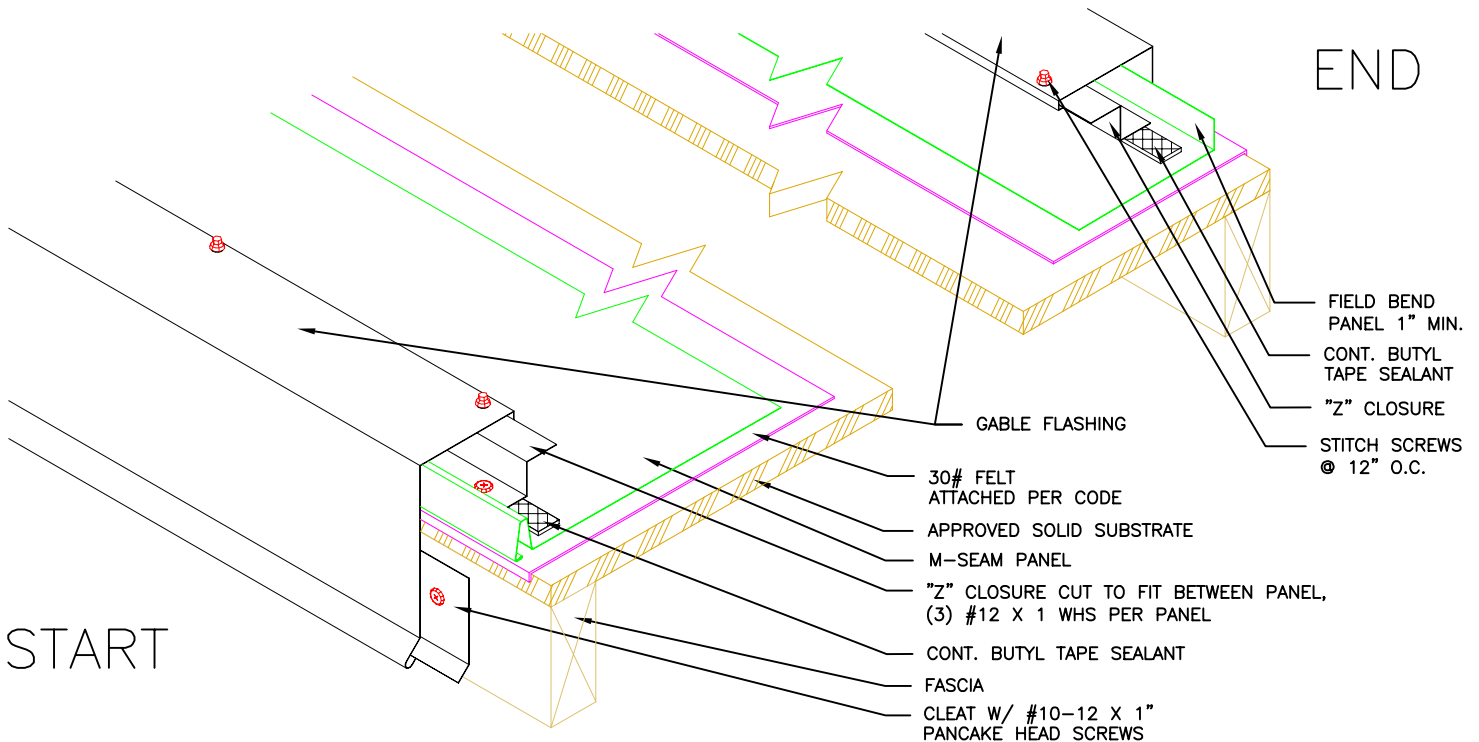
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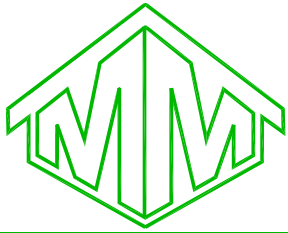
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STEP GABLE RAKE DETAIL SR-1

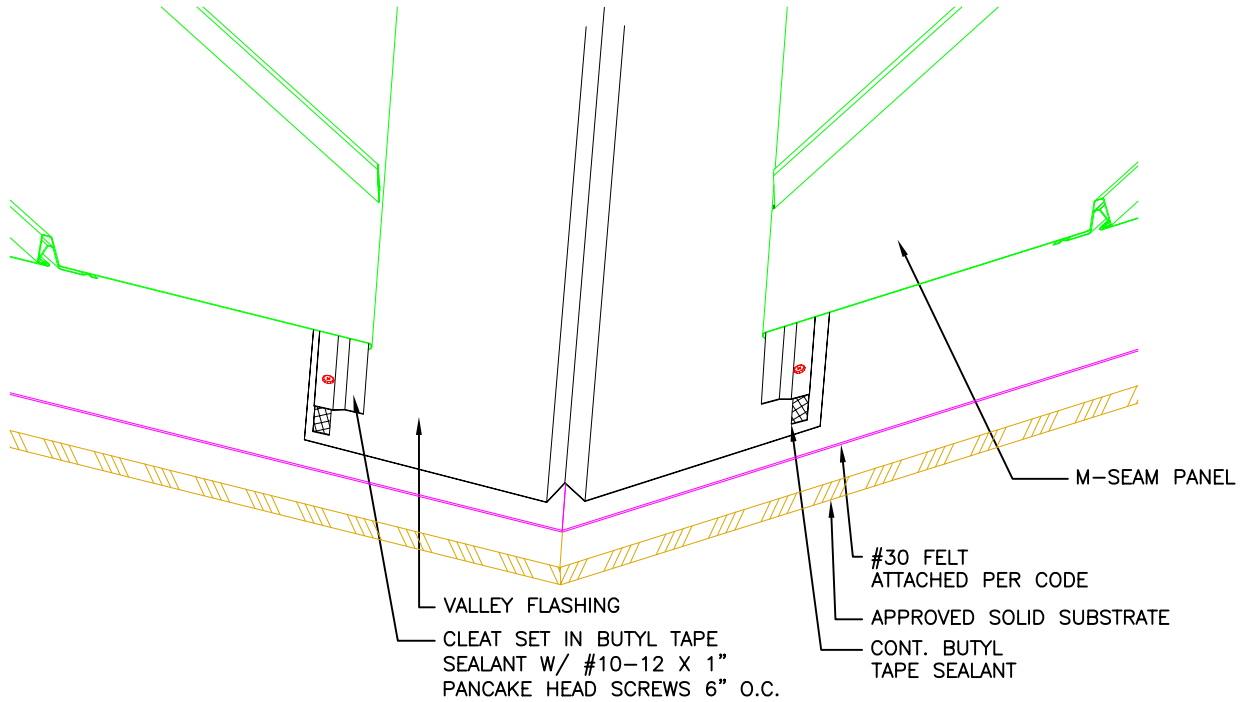


GABLE RAKE DETAIL GR-9

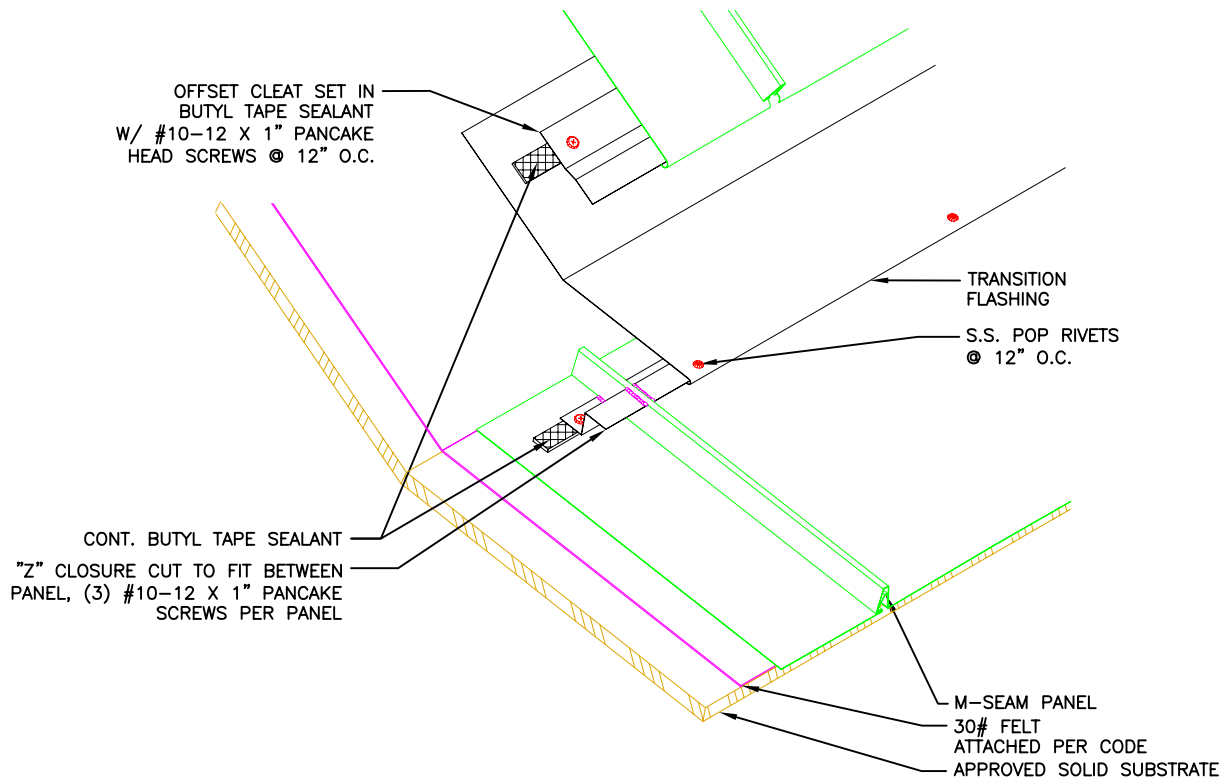


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PREFORMED VALLEY DETAIL PV-3



TRANSITION DETAIL

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FAX: 904-358-8285

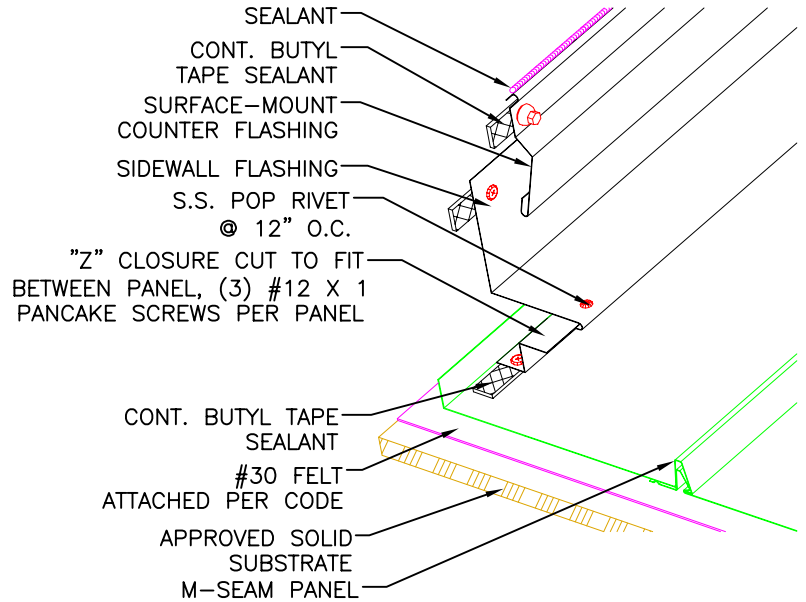
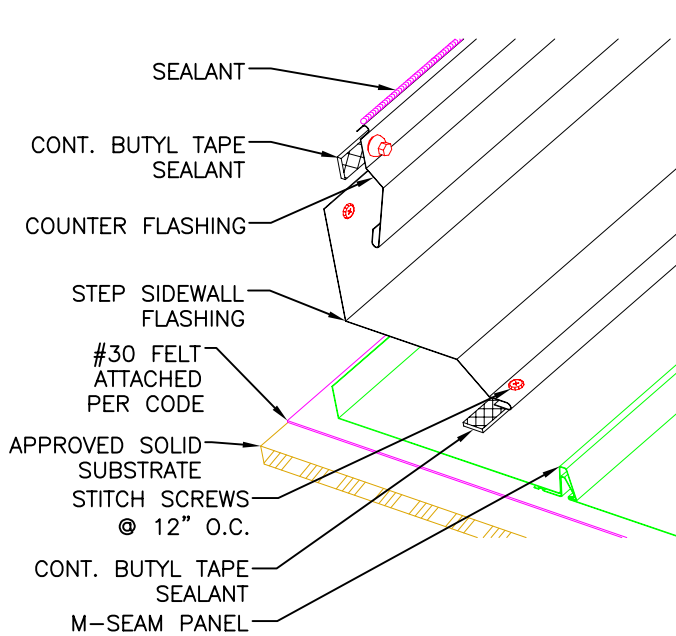
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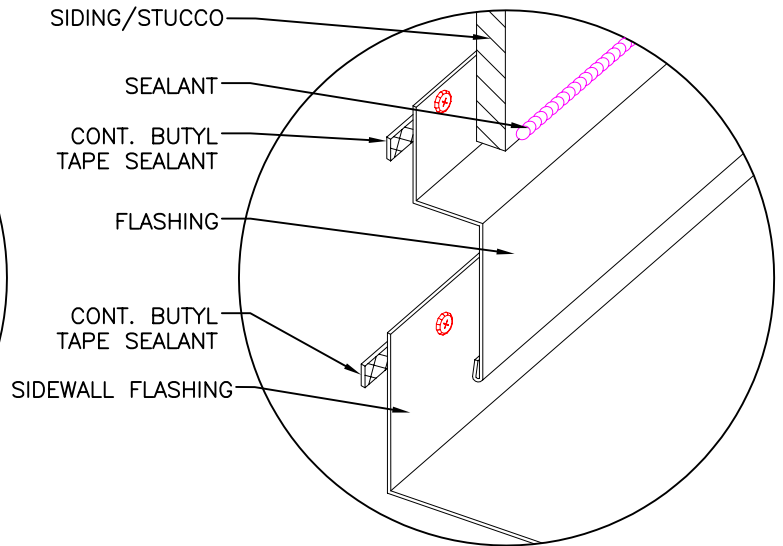
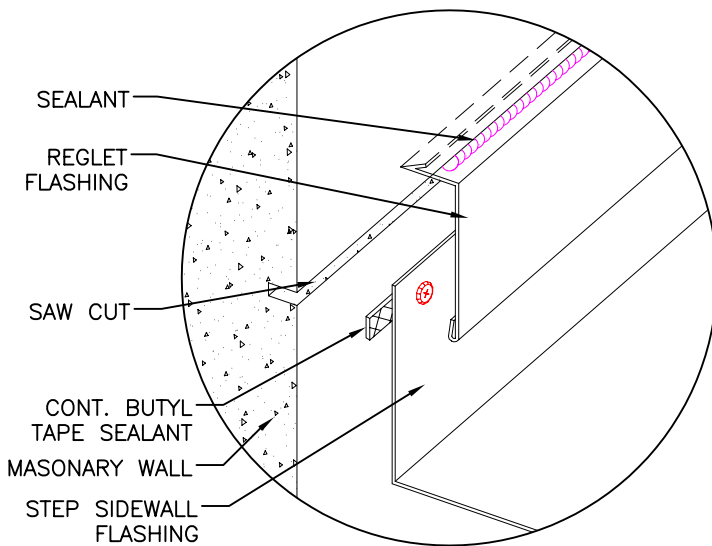


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SIDEWALL FLASHING DETAIL SW-3 & SW-4



SIDEWALL COUNTER FLASHING OPTIONS

MILLENNIUM METALS INC.

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FAX: 904-358-8285

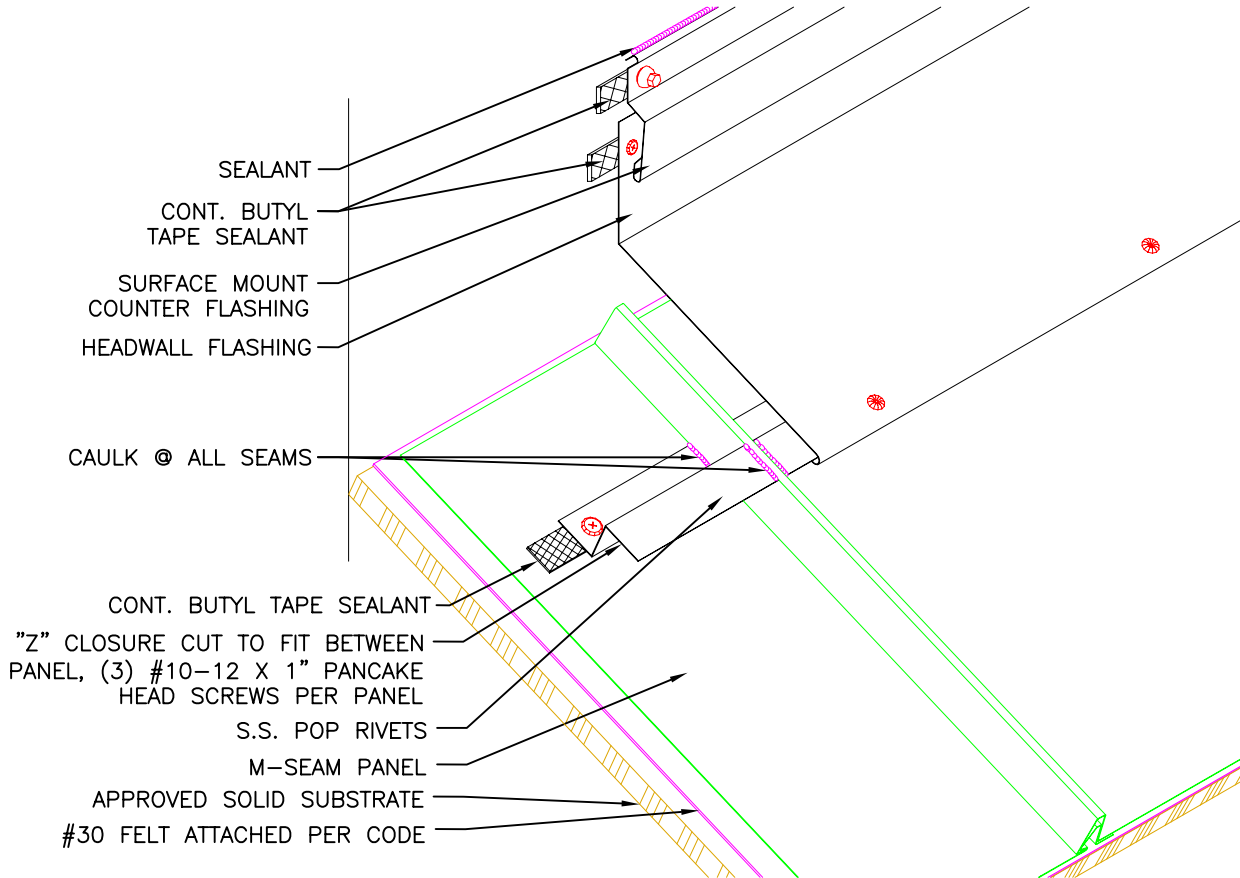
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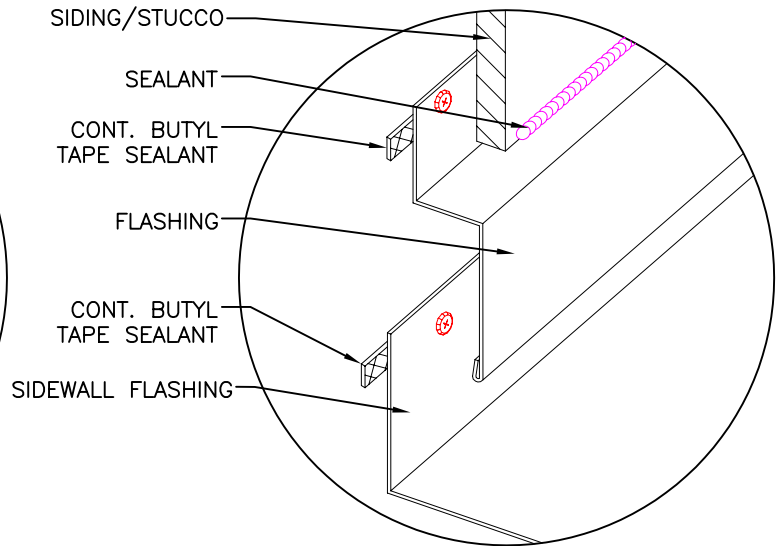
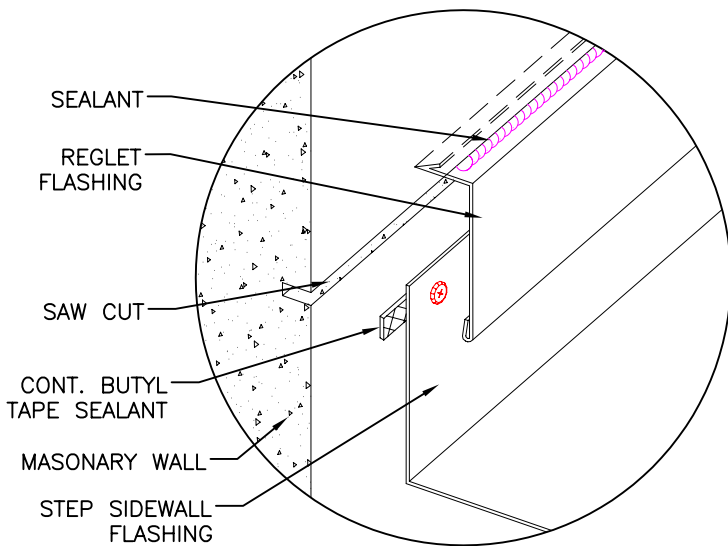


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ENDWALL DETAIL EW-3



ENDWALL COUNTER FLASHING OPTIONS

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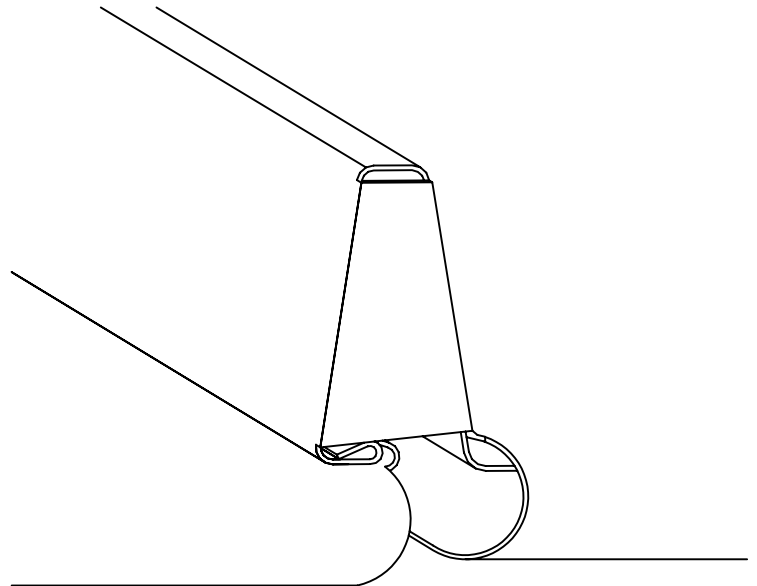
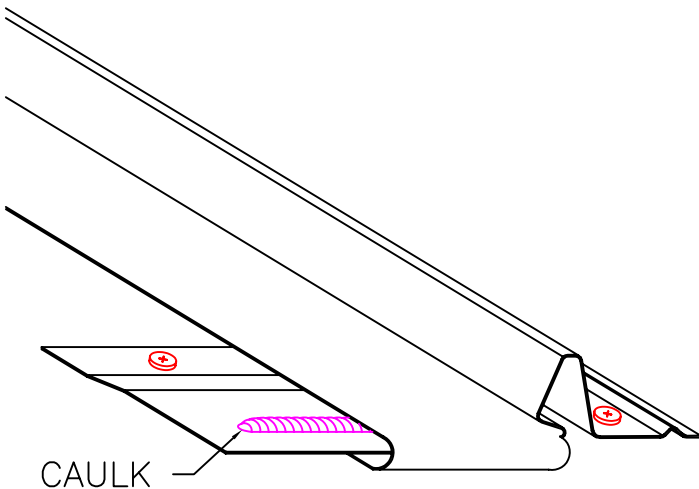
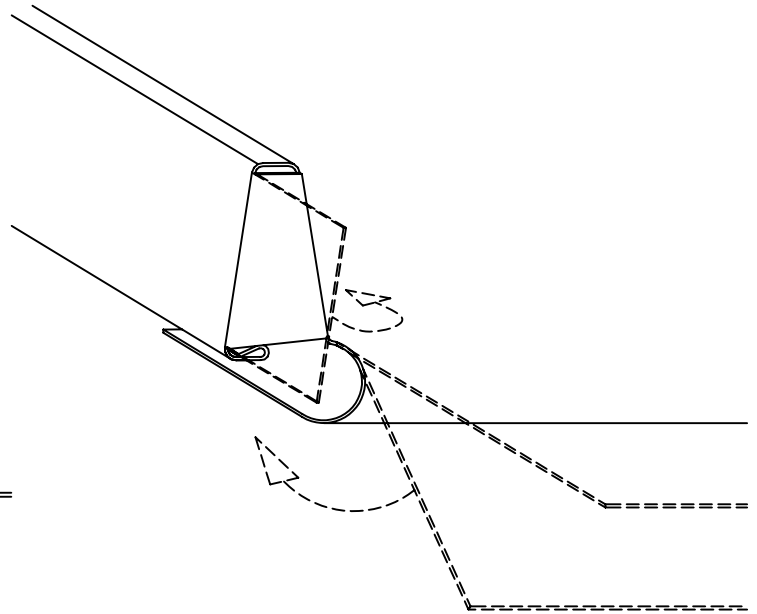
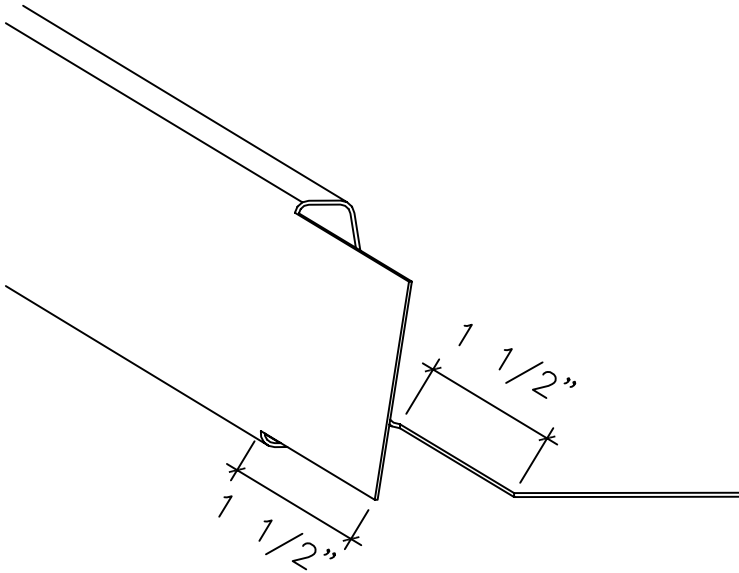
PAGE 11



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PANEL HEMMING



CUT PANEL BACK 1 1/2" TO
CREATE HEM. USE HEMMING TOOL.