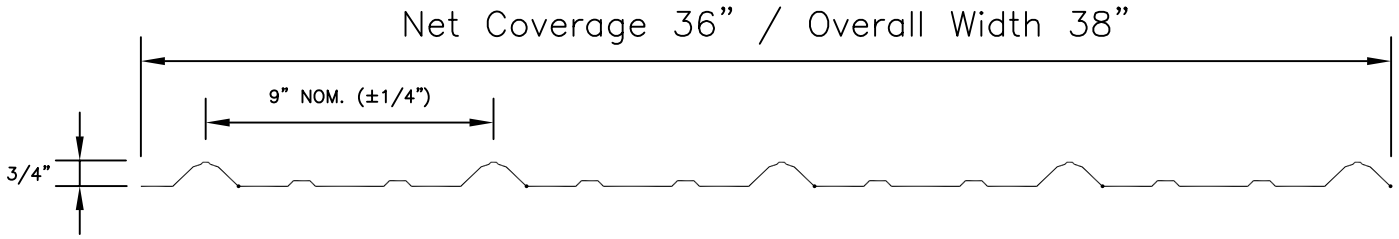
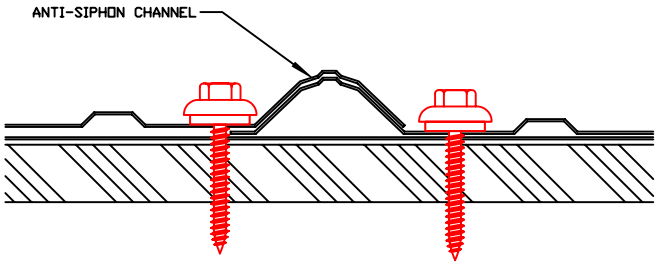
MILLENNIUM METALS, INC.

10200 EASTPORT ROAD JACKSONVILLE, FL 32218
LOCAL 904-358-8366 WATTS 1-877-358-Roof (7663)
FAX 904-358-8285 MMI2000.NET



RIB PANEL



Sidelap Detail

PITCH ALERT: THIS PRODUCT SHOULD NOT BE USED ON APPLICATIONS LESS THAN 3:12 PITCH WITHOUT A SECONDARY UNDERLAYMENT SUCH AS PEEL & SEAL AND SIDE LAP SEALANT APPLIED TO SIPHON CHANNEL. THE MINIMUM PITCH ALLOWANCE WITH THE SECONDARY UNDERLAYMENT AND SIDE LAP SEALANT IS 2:12.

Specifications:

Gauge	Finishes	Nominal Thickness	ASTM & Grade Specifications
29	Galvanized	.0142	ASTM A-653 Grade 80 Structural Steel
29	PTD Galvanized *	.0142	ASTM A-755 Grade 80 Structural Steel
26	PTD Galvanized **	.0185	ASTM A-755 Grade 80 Structural Steel
29	Acrylic Galvalume	.0142	ASTM A-792 AZ55 Grade 80 Structural Steel
26	Acrylic Galvalume	.0185	ASTM A-792 AZ55 Grade 80 Structural Steel

PTD Material is siliconized polyester unless otherwise noted.

Millennium Metals Offers a Limited 40 year warranty on Painted Panels, 25 year limited warranty on Mill Finished Galvalume Panels. Please request warranty information from your distributor.

* 29 colors: Red, White, Blue, Gray, Hunter Green, Stone, Brown, Charcoal, Tan, Ivory, Burgundy & Burnished Slate
** 26 colors: Red, Reflective White, Gallery Blue, Gray, Hunter Green, Stone, Brown, Charcoal, Tan & Ivory

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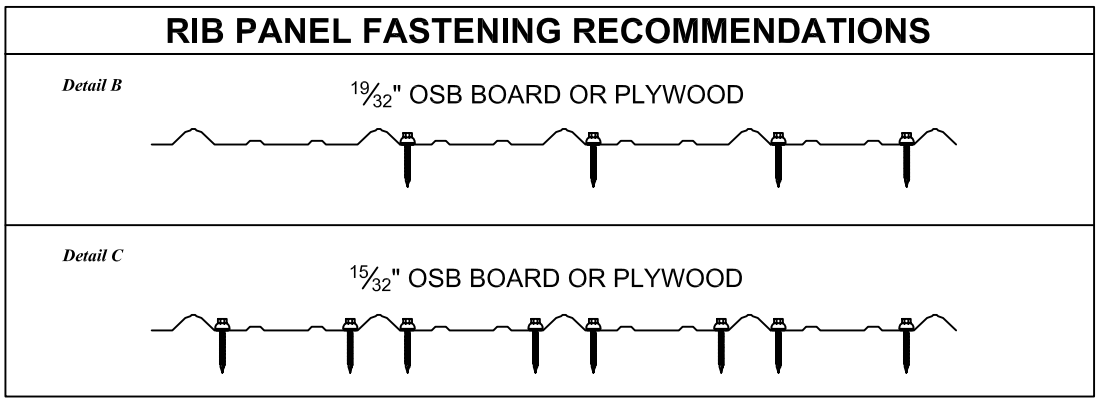
Rib Panel Installation Instructions:



Roof Application:

Step 1: Make sure the deck is even and square. Millennium Metals recommends the use of 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.

Step 2: Install Eave Drips/Roof Edge and Valleys according to details. Remember to use inside closure strips between Eave and Panel to eliminate water infiltration.

Step 3: Panel placement should begin on the gable end opposite the prevailing wind. Starter edge should be the lap edge. (Opposite of Purlin Bearing Leg) After laying first panel, check for squareness. Panel 2 should be lapped over purlin bearing leg of panel 1 with the lap edge. A minimum of 1" overhang is recommended at the eave. Alternative method of panel placement may begin in the center of the roof. Often this method is used when the area to be covered is not divisible by 3' or traditional placement allows for a pipe flashing to occur in a side lap. Endlaps must be a minimum of 12" and two strips of butyl sealant tape is recommended 8" on the uphill side of the lap to keep watertight.

Step 4: Fasten panel according to detail B or C based on approved solid substrate selection. Detail C shows additional screws to be spaced on each side of major ribs for all eaves, ridges, and endlaps.

Step 5: Any field cutting must be done with metal nibblers, metal snips, or blades designed for metal cutting. No cutting should be done on the roof, as it will cause iron shavings to be spread and adhere to roof panels. Proper cutting should be done with the panels finished side down. Do not use graphite, lead, or any other marking devices that may stain panel and void warranty.

Step 6: Install the remaining accessories such as pipe boots; rib profile vents, ridge caps, gable flashings, butyl sealant, caulks, and closures are necessary to maintain watertight seals. Inspect screw fasteners to insure that they are installed properly.

Step 7: Fasteners should penetrate deck material by ¼"

FASTENERS		
CORRECT	TOO LOOSE	TOO TIGHT
EPDM MATERIAL VISIBLE AT WASHER. FASTENER IS PROPERTY INSTALLED.	EPDM NOT AT VISIBLE JOINT. NOT ENOUGH COMPRESSION TO MAKE A SEAL.	EPDM IS PANNED AND IS PROTRUDING BEYOND EDGE OF FASTENER.

Aproximate Screw Chart

15/32" Plywood = 200 screws per square

19/32" Plywood = 100 screws per square

33.17 Lineal Feet = 1 Square

Attention Installer: Please refer to the important notes section of this manual for safety, storage, oil canning disclaimer, and shaving disclaimer prior to beginning this project.

Important Notes:

Code Requirements vary from project type and location. Millennium Metals recommends licensed roofing professionals to install materials. It is the responsibility of the roofing contractor to meet all prescriptive requirements if not indicated in our recommendations.

Safety when using metal materials is imperative. It is necessary to inspect deck integrity to insure it is safe to walk on before beginning any work. Never walk on material when wet or unsuitable weather conditions are present. Millennium Metals recommends the use of gloves and eye goggles when working handling materials. OSHA fall protection should be strictly adhered to on all projects.

Job Specific engineering should be considered for any Florida application not installed according to Florida product testing. Millennium Metals Inc has a third party engineer who can provide this documentation for a nominal fee. Millennium Metals Inc. accepts no responsibility for the information provided.

Florida Product Testing
Millennium Metals Inc. has Florida Product approval over ½" and 5/8" plywood. The current product approval is available on our website at mmi2000.net. Figure 2-1 and 2-2 indicate attachment for these approvals.

Fastener length for new construction should be a minimum of 1- 1/ 2" in the field of the project. The length of the fastener should penetrate the plywood a minimum of a ¼".

If re-roofing over one layer of shingles with ½" or 5/8" plywood and felt a minimum of a 2" fastener should be used.

A Limited Warranty is available on Acrylic Galvalume and Pre-painted materials. A copy of this warranty is available to review at our website mmi2000.net. Failure to request warranty indicates customer accepts conditions stated within the warranty. Millennium Metals warrants material only. Long life fasteners are required in warranty content. Please consult us if you have any questions regaurding fastener selection. Watertight warranties are not available.

Estimating materials is available through a third party. We accept no responsibility for the accuracy of this information. It is the sole responsibility of the customer/contractor to verify information. Changes to quantity, length, or accessories should be made prior to ordering.

Metal Roofing Materials are special order products and therefore not returnable. Cancellations will not be honored if materials have been produced.

Materials should not be stored in a place where moisture can penetrate the bundles or covered with plastic. If immediate installation is not possible, material should be placed on wood blocks to separate from the ground or concrete with one end elevated. The bands should be cut to allow material to expand. A loose canvas tarp should be used to cover material so that air can circulate.

Oil canning is a wavy appearance in the surface of the panel. This condition is inherit to all metal panels but visible in designs with flat surfaces. This slight distortion in no way effects the warranty nor is reason for rejection or refusal.

Shavings are iron filings left from the cutting or drilling of steel materials. The iron particles tend to go airborne and settle on sheets. Failure to remove the particles will cause embedment of the iron and rust marks.

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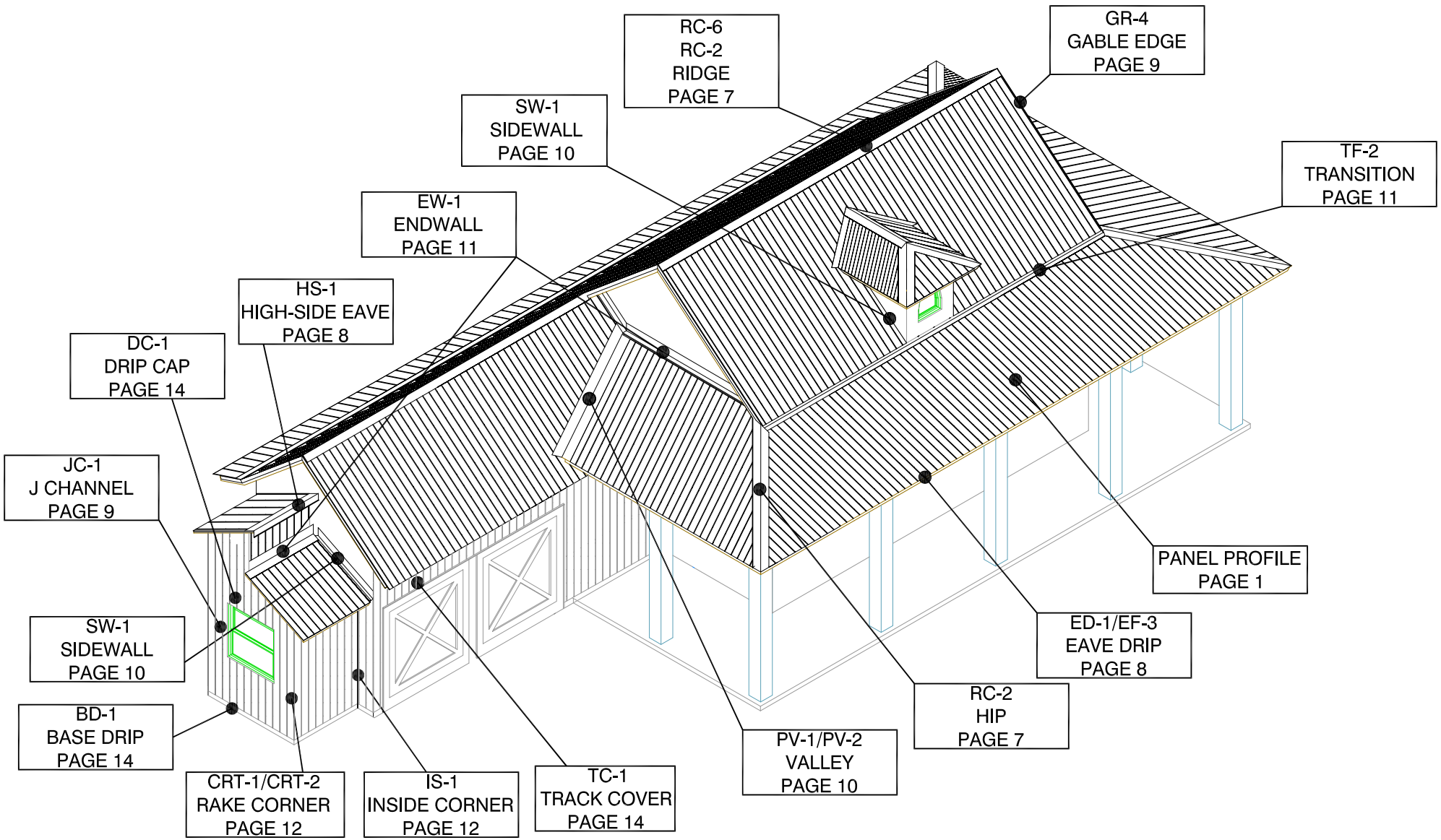
RIB PANEL DETAIL LOCATIONS



SUBJECT TO CHANGE WITHOUT NOTICE

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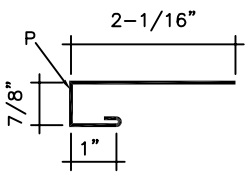
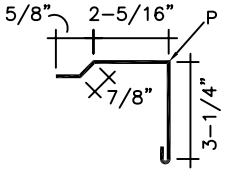
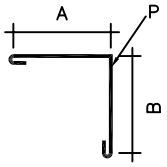
A. J-CHANNEL (JC-1)



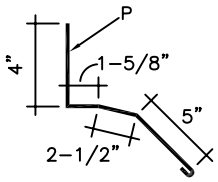
B. GABLE TRIM (GR-4)



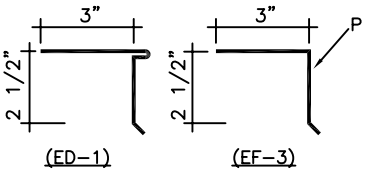
C. POST COVER (PC)



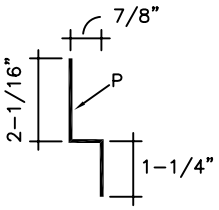
D. TRACK COVER (TC-1)



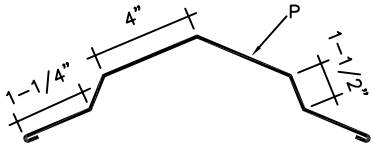
E. EAVE DRIP



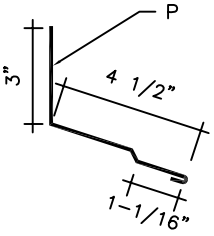
F. DOUBLE ANGLE (DA-1)



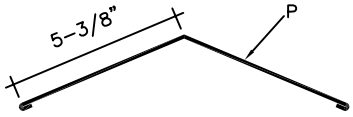
G. RIDGE CAP (RC-2)



H. ENDWALL FLASHING (EW-1)

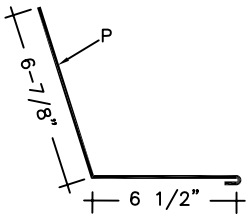


I. VENTED RIDGE (RC-6)

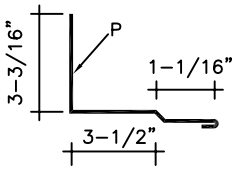


VENT DETAIL REQUIRES
VERSA VENT

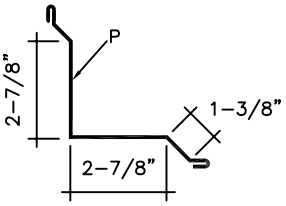
J. TRANSITION FLASHING (TF-1)



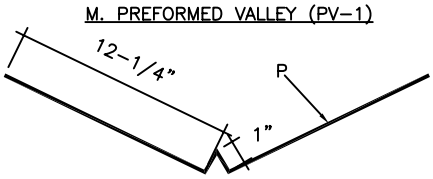
K. SIDEWALL FLASHING (SW1)



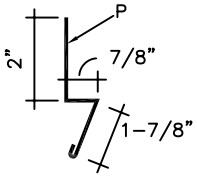
L. INSIDE CORNER (IS-1)



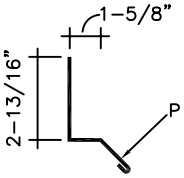
M. PREFORMED VALLEY (PV-1)



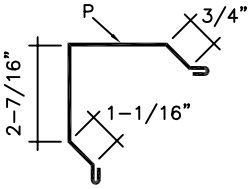
N. BASE DRIP (BD-1)



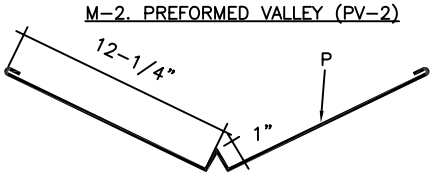
O. DRIP CAP (DC-1)



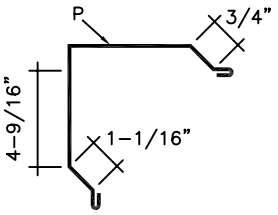
P. RAKE CORNER (CRT-1)



M-2. PREFORMED VALLEY (PV-2)



P. RAKE CORNER (CRT-2)



*ALL HEMS ARE ⅜ OF AN INCH

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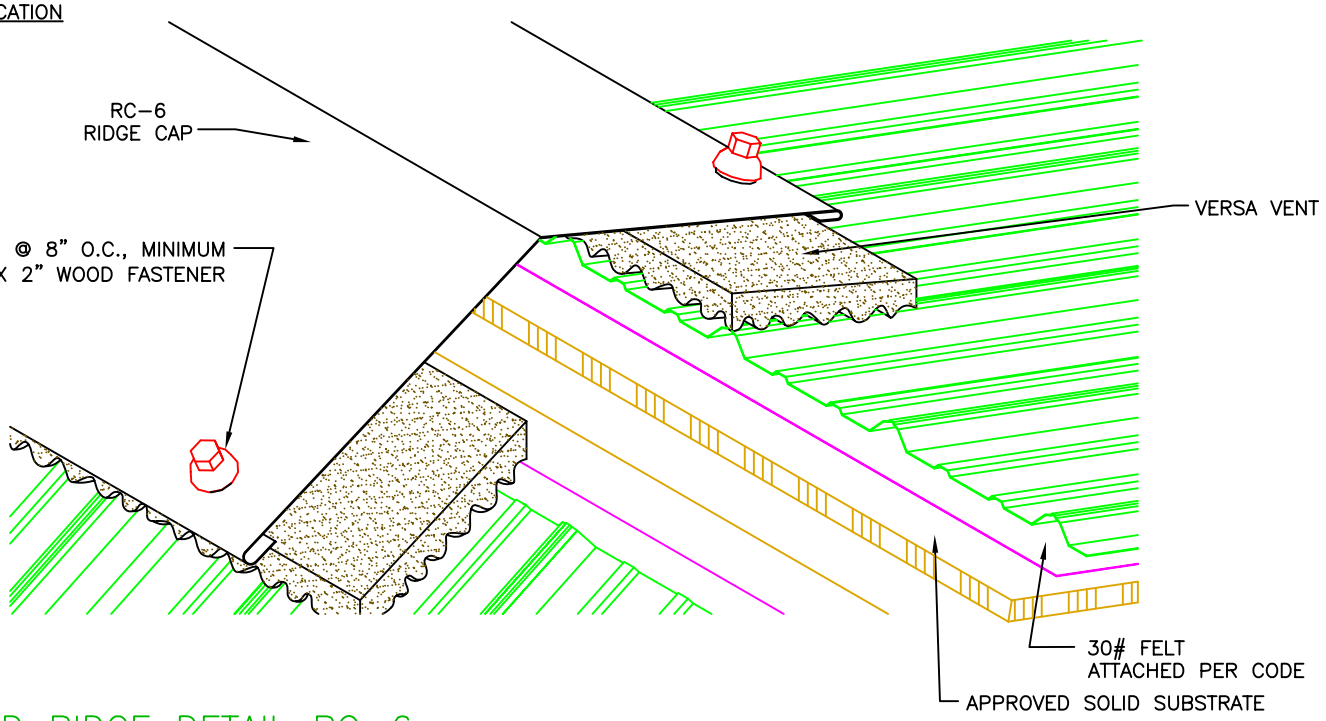
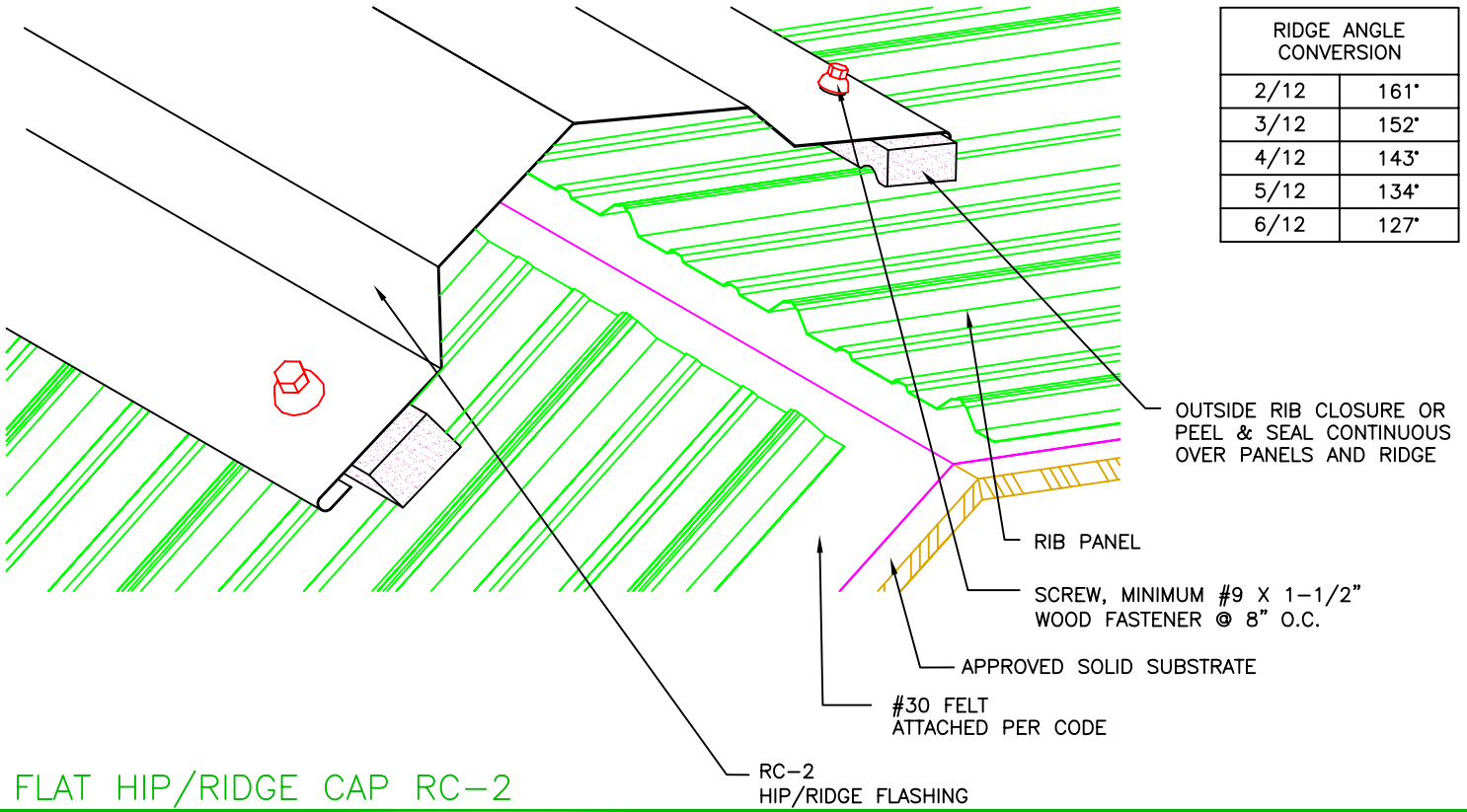
ROOFING APPLICATION



VENTED RIDGE DETAIL RC-6

ROOFING APPLICATION



RIDGE ANGLE CONVERSION	
2/12	161°
3/12	152°
4/12	143°
5/12	134°
6/12	127°

FLAT HIP/RIDGE CAP RC-2

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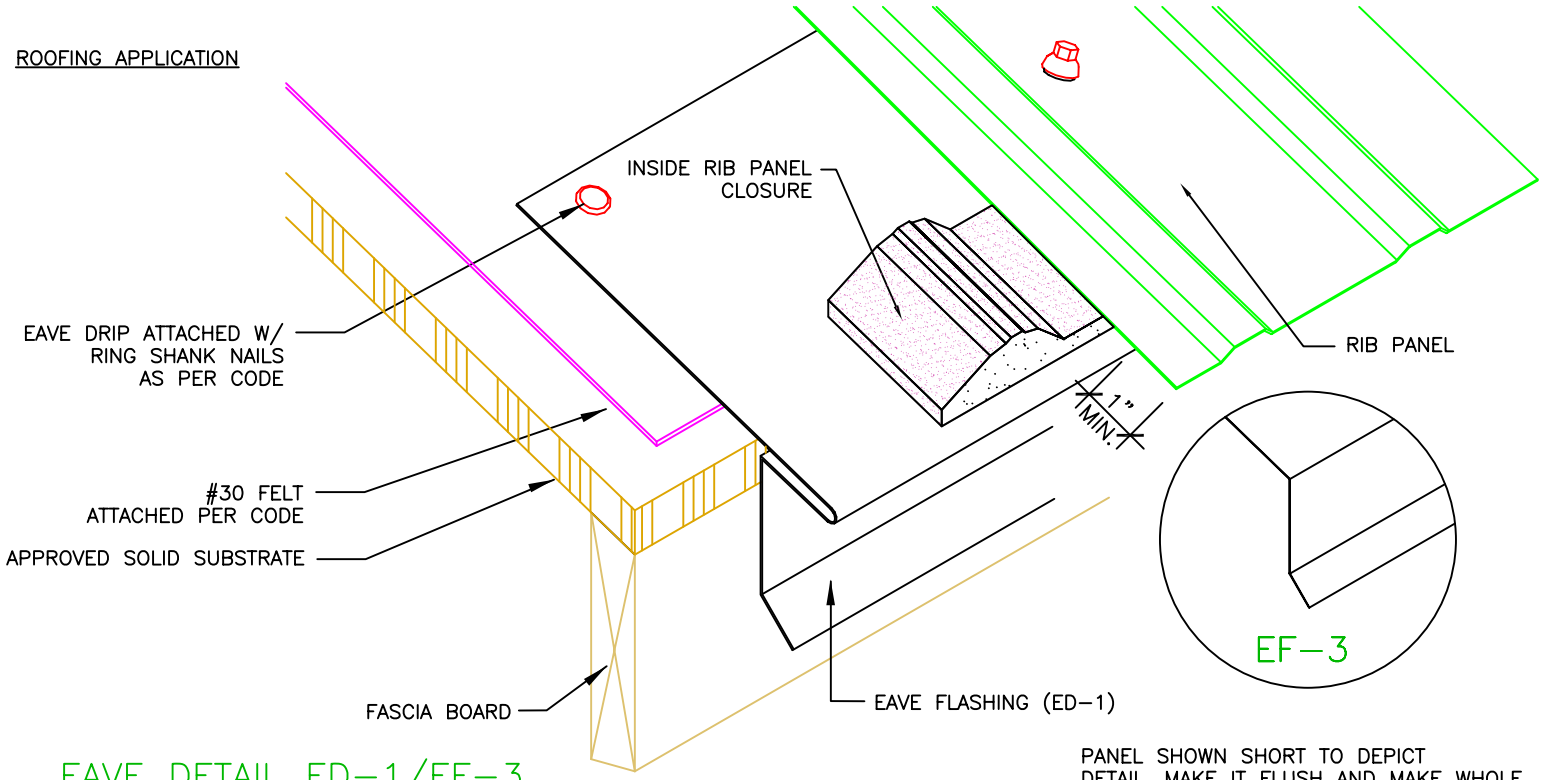
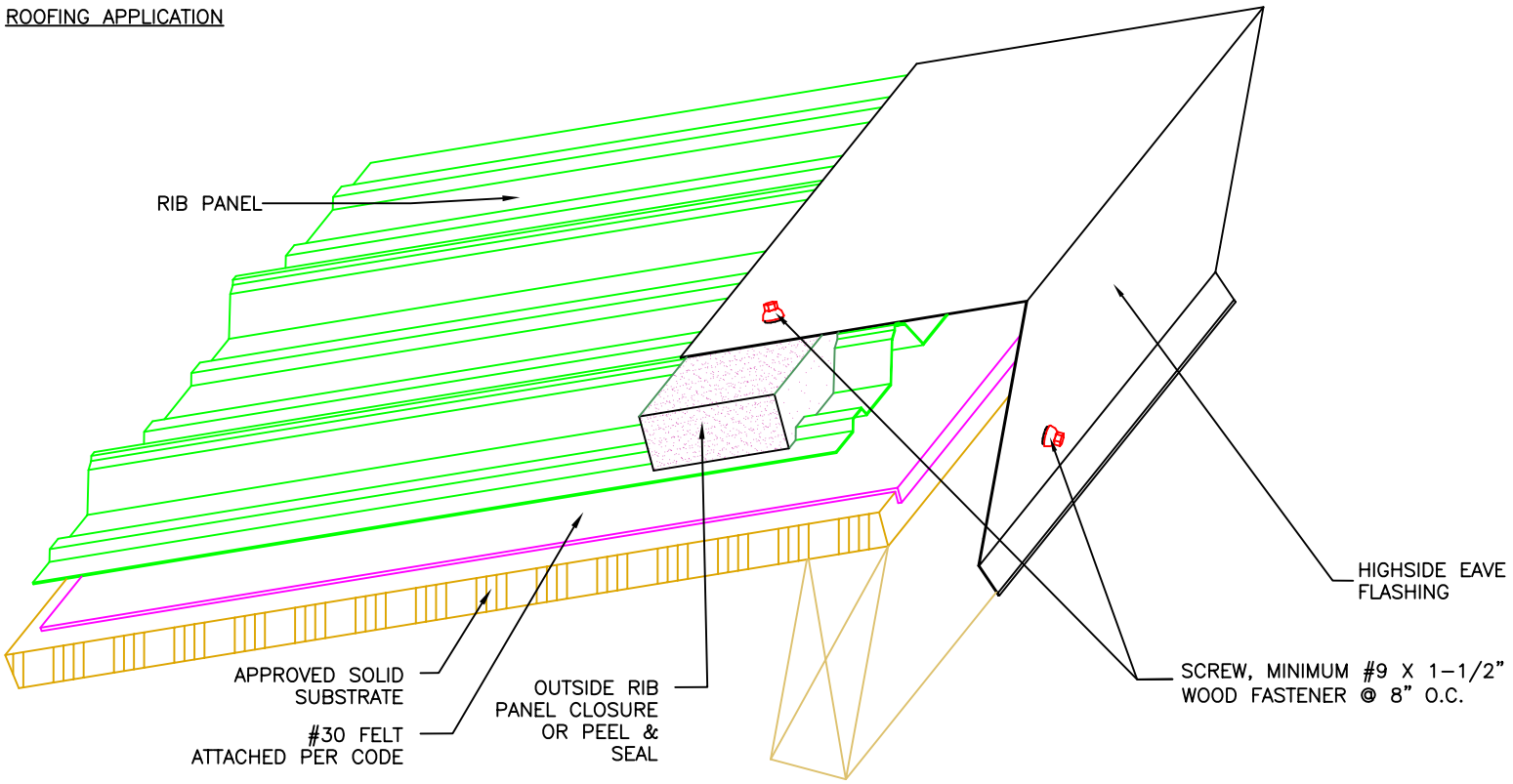


EAVE DETAIL ED-1/EF-3

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

ROOFING APPLICATION



HIGHSIDE EAVE DETAIL HS-1

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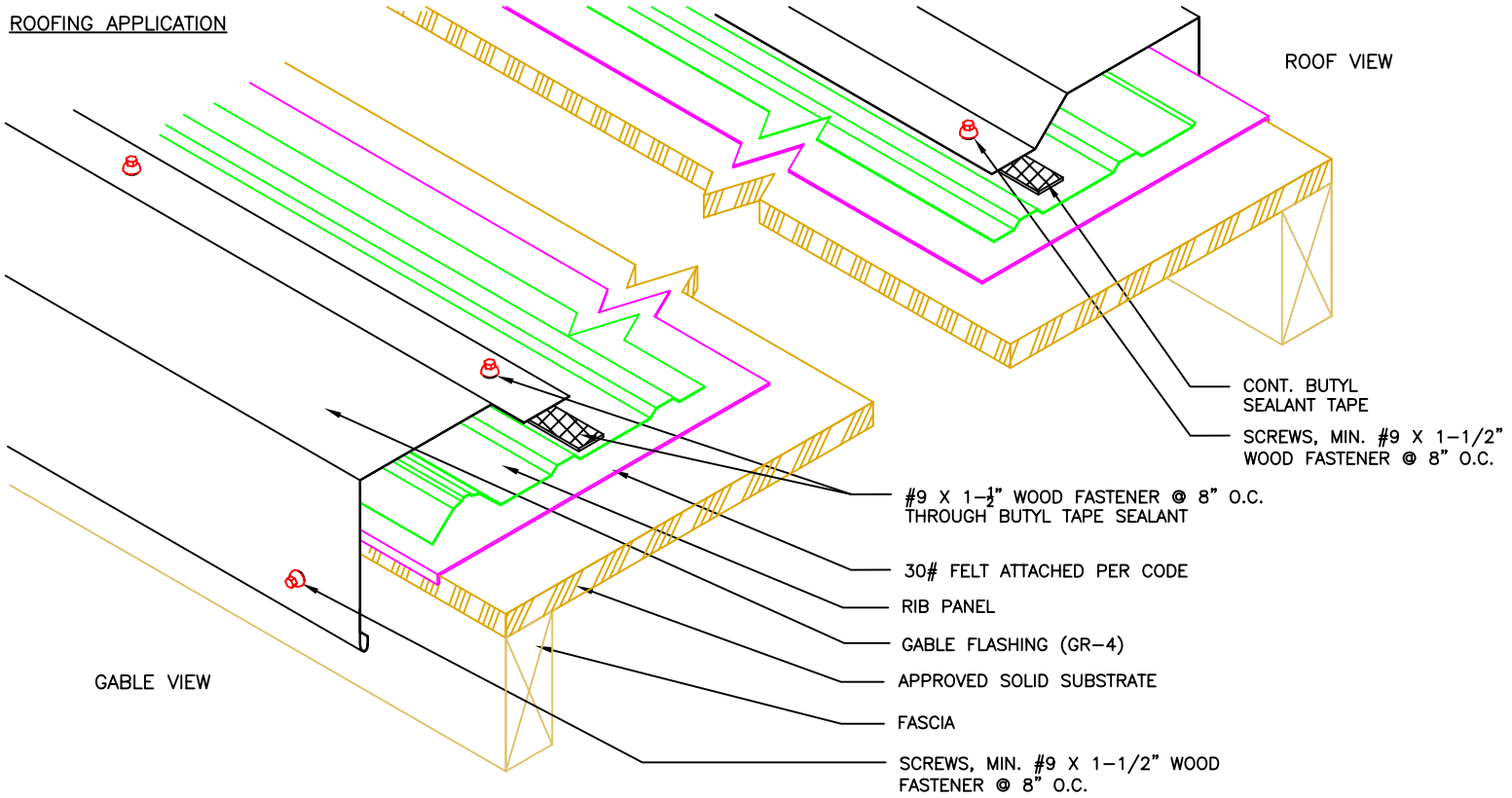
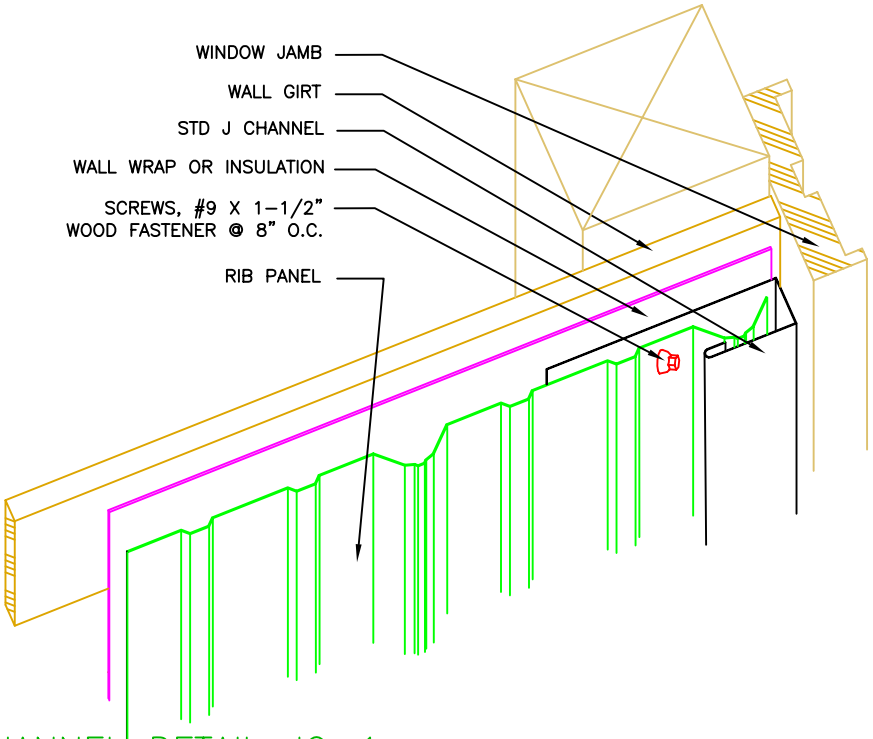
ROOFING APPLICATION



STANDARD GABLE TRIM DETAIL GR-4

SIDING APPLICATION



STANDARD J-CHANNEL DETAIL JC-1

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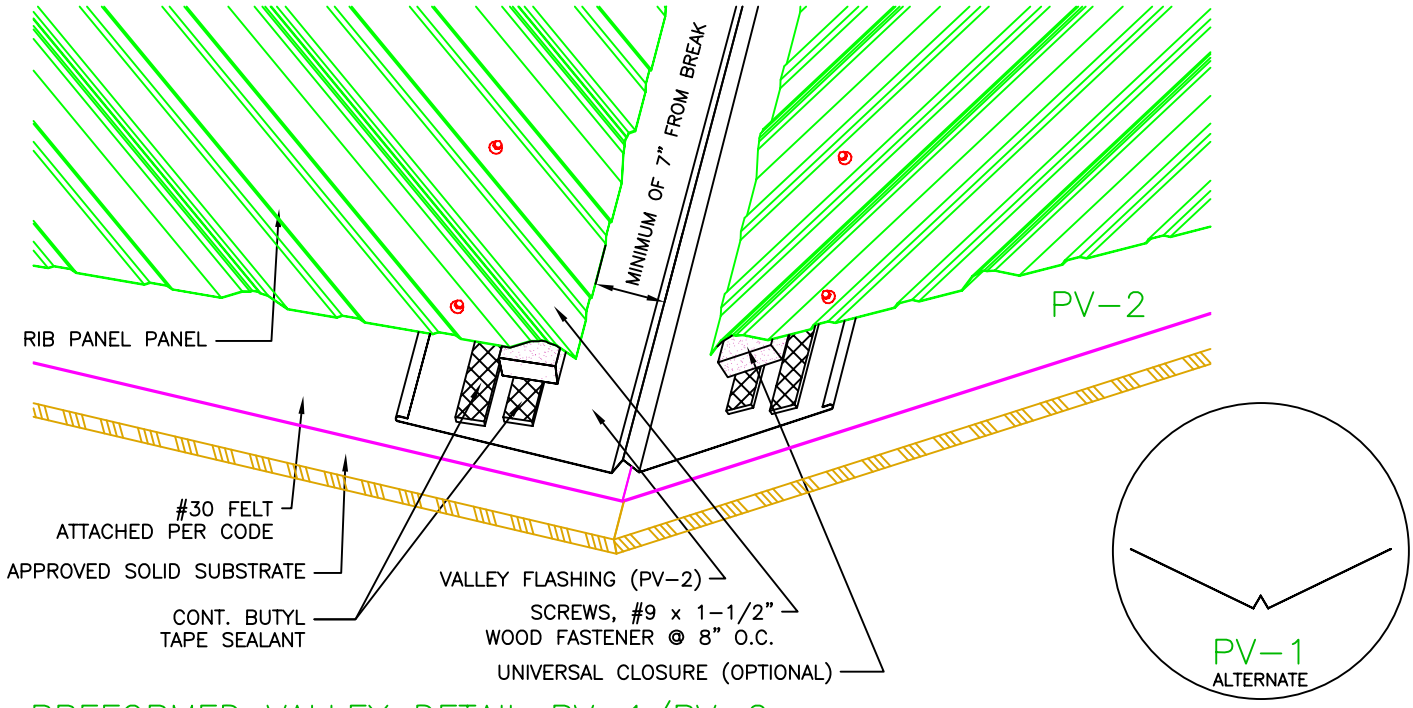
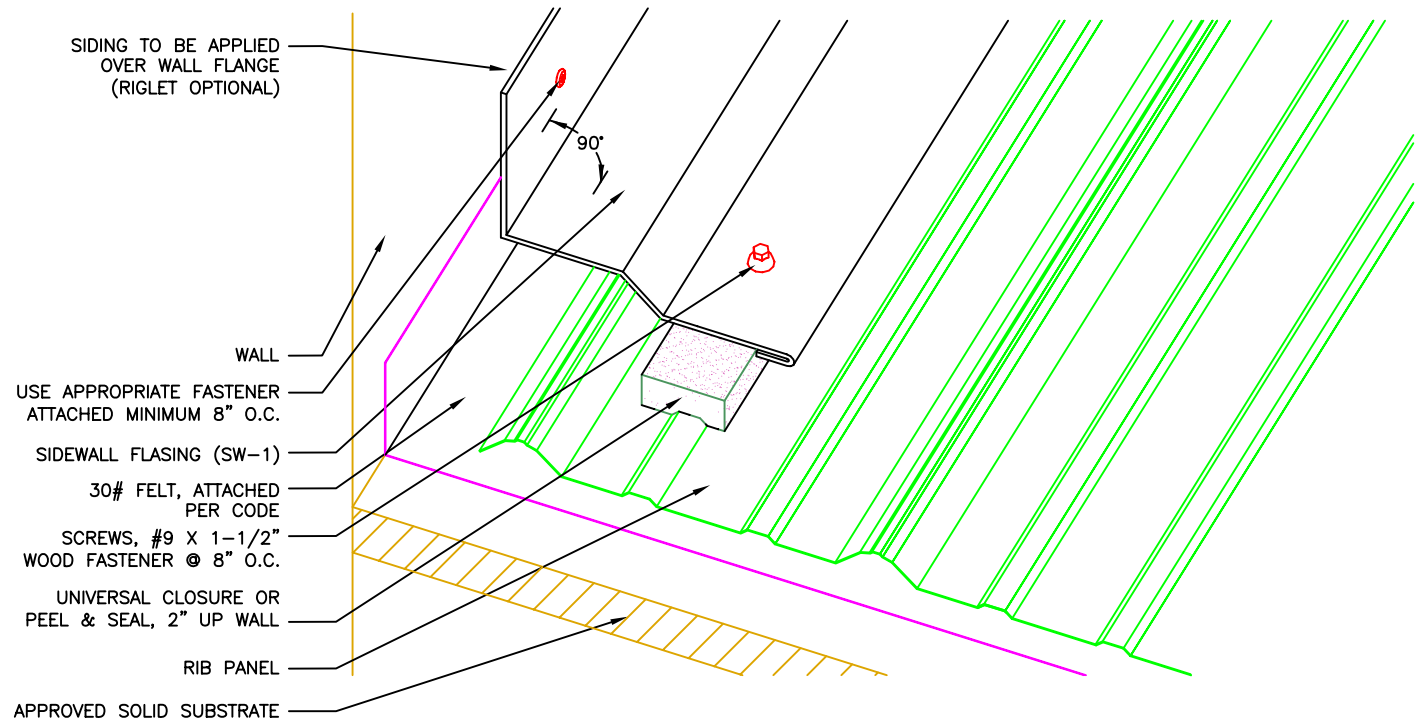


PREFORMED VALLEY DETAIL PV-1/PV-2

ROOFING APPLICATION



SIDEWALL FLASHING DETAIL (SW-1)

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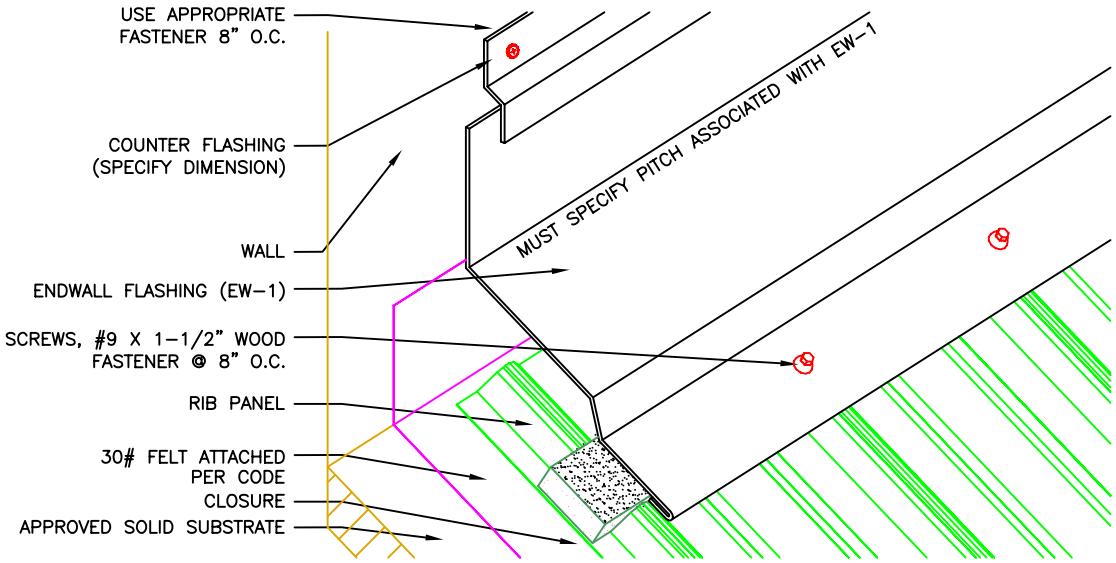
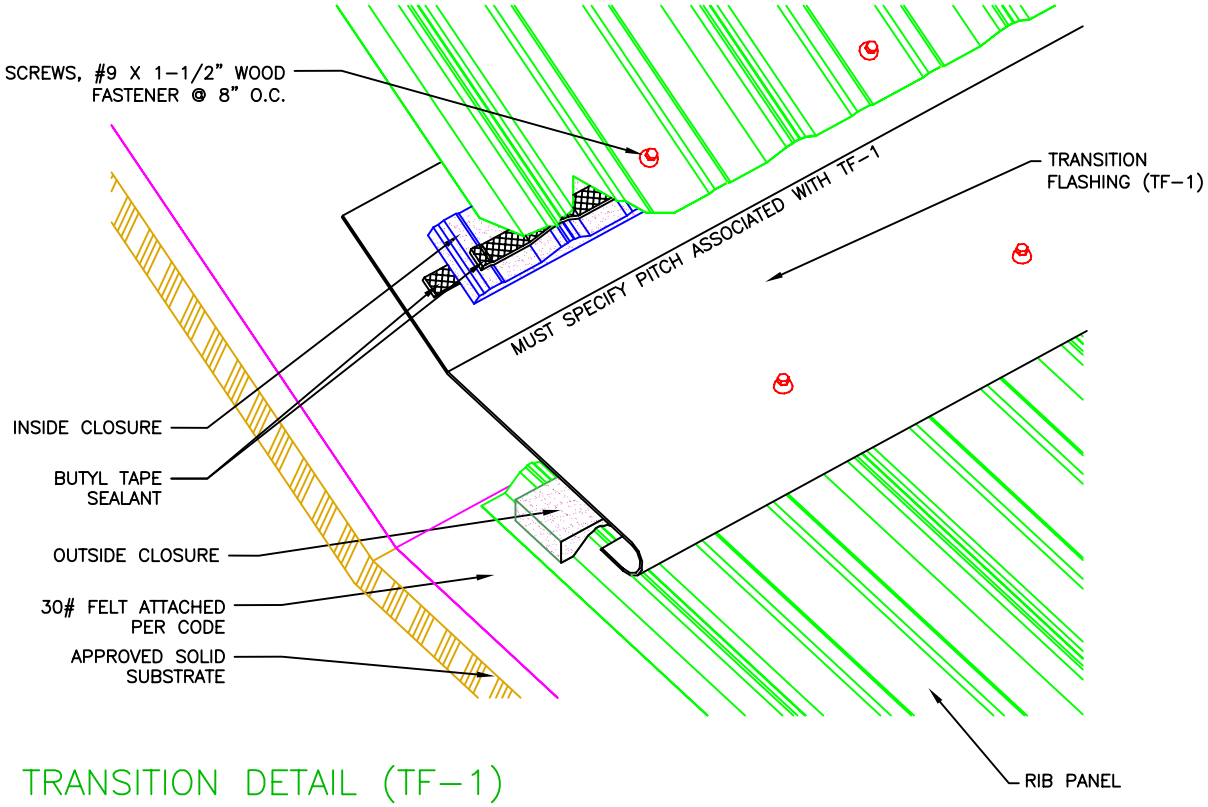


ANGLE CONVERSION	
2/12	99°
3/12	104°
4/12	108°
5/12	113°
6/12	117°

END WALL FLASHING DETAIL EW-1

ROOFING APPLICATION



TRANSITION DETAIL (TF-1)

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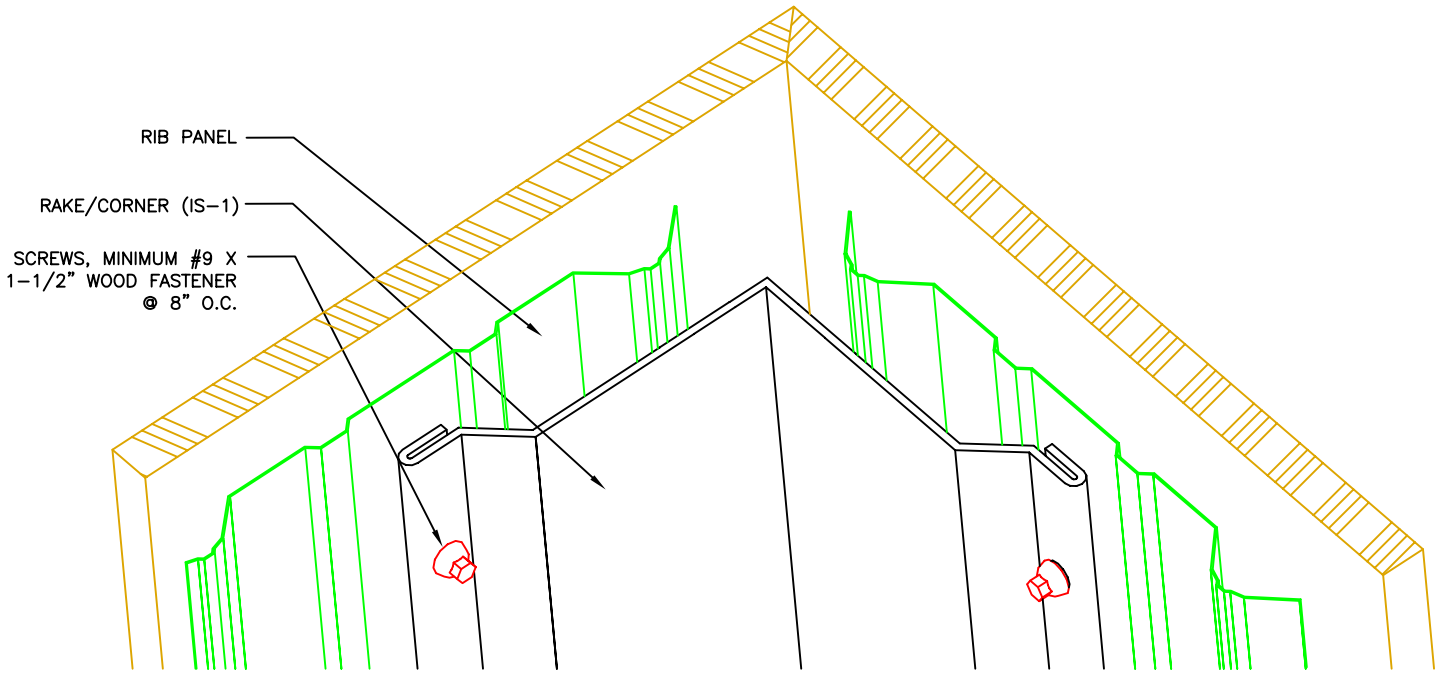
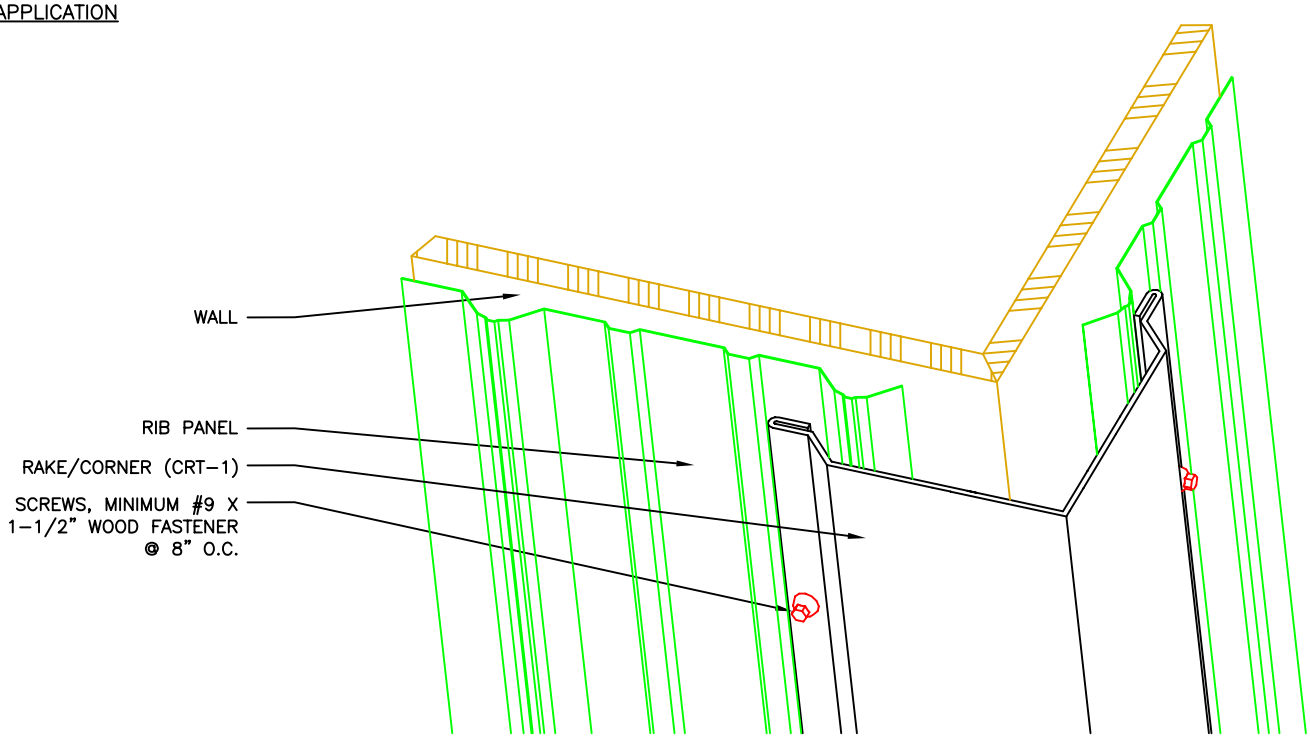
SIDING APPLICATION



INSIDE CORNER IS-1

SIDING APPLICATION



RAKE / CORNER CRT-1 / CRT-2

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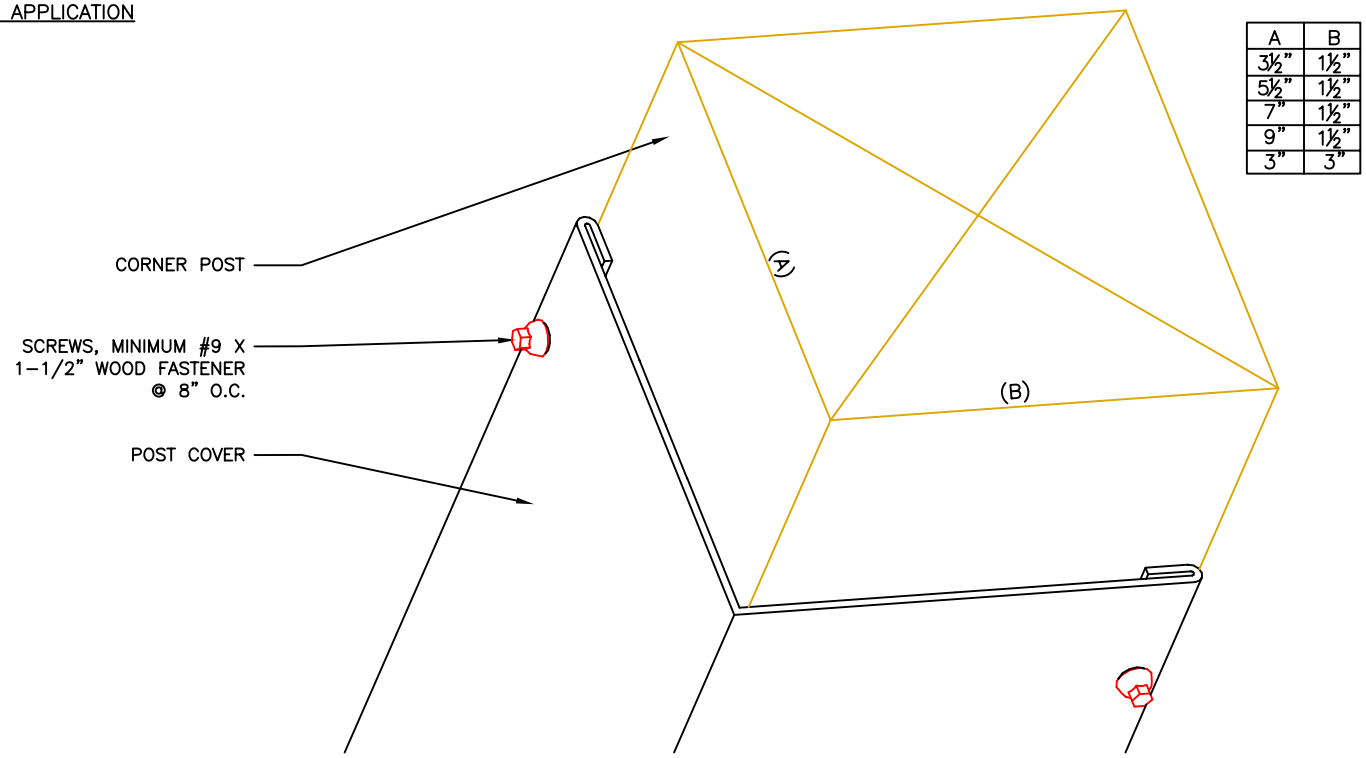
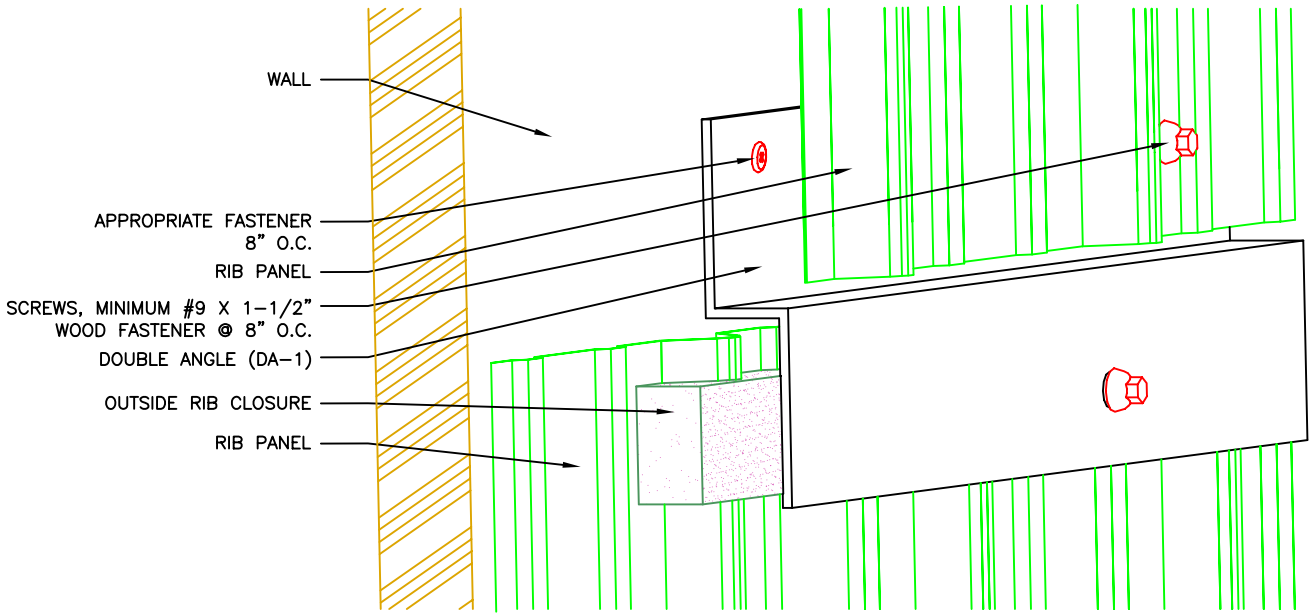
FAX 904-358-8285 MMI2000.NET

SIDING APPLICATION



POST COVER P-1/P-2/P-3/P-4/P-5

SIDING APPLICATION



DOUBLE ANGLE (DA-1)

MILLENNIUM METALS, INC.

10200 EASTPORT ROAD JACKSONVILLE, FL 32218
LOCAL 904-358-8366 WATTS 1-877-358-Roof (7663)
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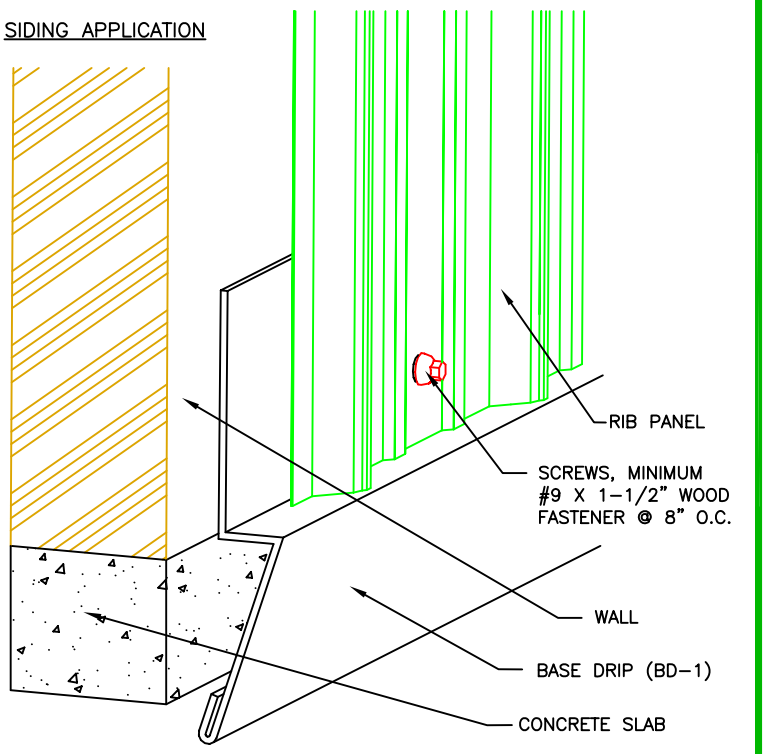
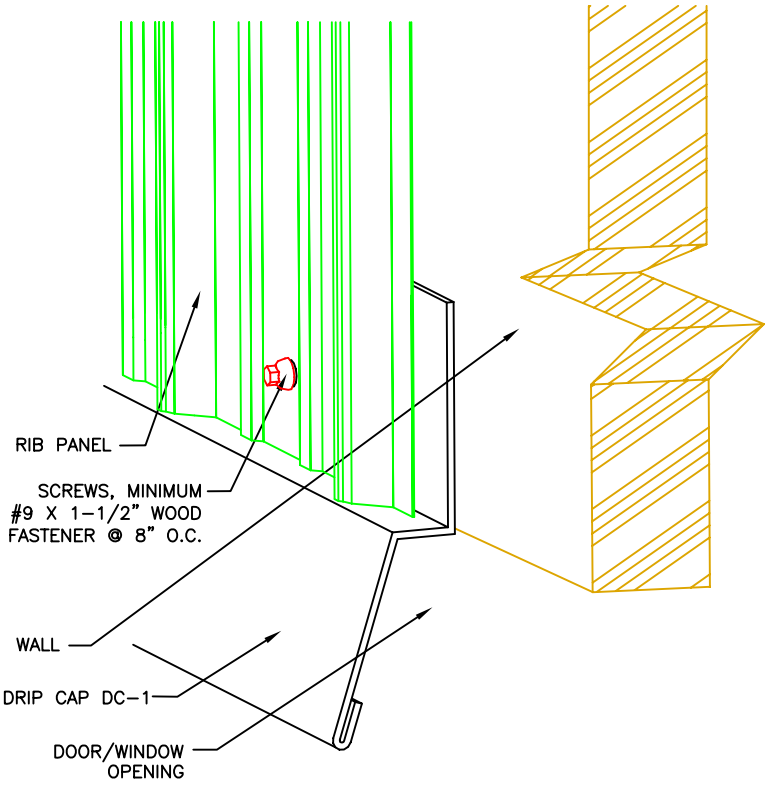
SIDING APPLICATION

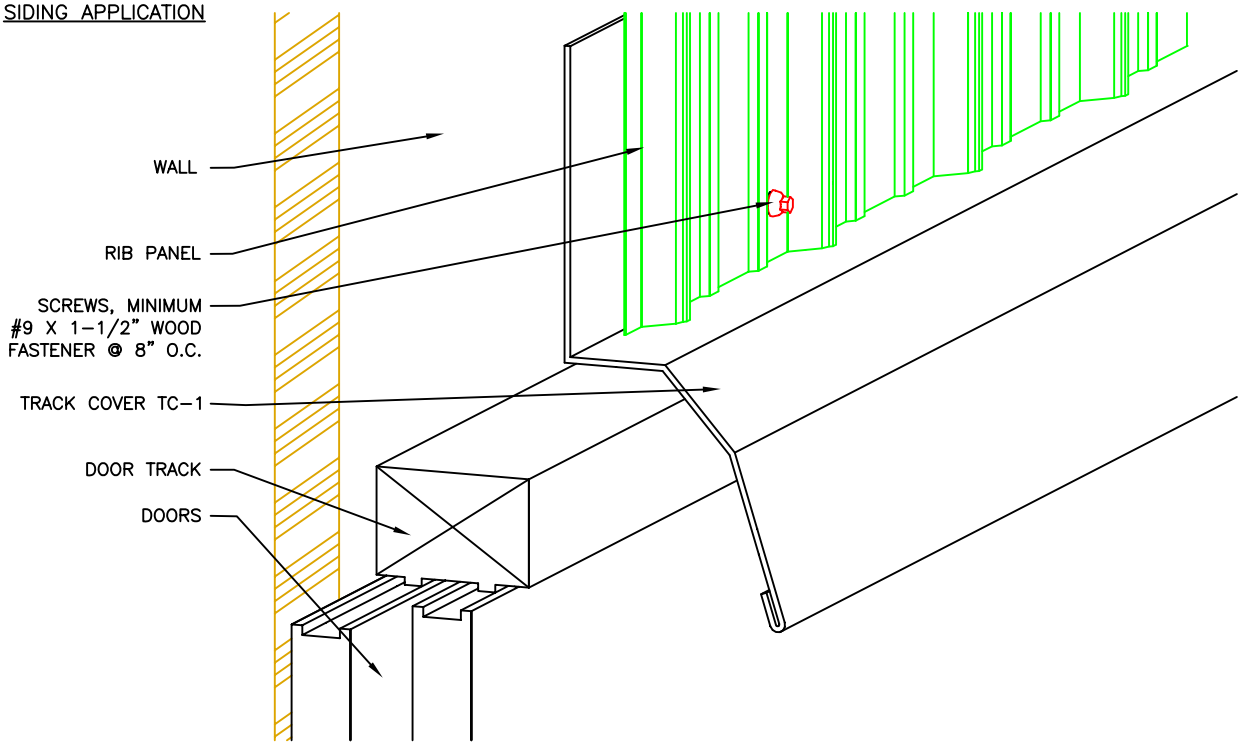


BASE DRIP DETAIL BD-1



DRIP CAP DETAIL DC-1

SIDING APPLICATION



TRACK COVER DETAIL (TC-1)

*MILLENNIUM METALS DOES NOT SELL DOORS OR DOORMATTS

Notes:

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