

Evaluation Report "Rib Panel" Metal Roof Assembly

Manufacturer:
Millennium Metals, Inc.

**10200 Eastport Road
Jacksonville, FL 32218**

(877) 358-7663

for

Florida Product Approval

FL 5211.2 R8

Florida Building Code 7th Edition (2020)

Per Rule 61G20-3

Method: 1 - D

Category: Roofing

Sub - Category: Metal Roofing

Product: "Rib Panel"

Material: Steel

Panel Thickness: 29 gauge, Minimum

Panel Width: 36"

Support: Wood Deck

This item has been electronically signed and sealed by James L. Buckner, P.E., on this date using a Digital Signature. Printed copies of this document are not considered signed and sealed, and the signature must be verified on any electronic copies.

Prepared by:

James L. Buckner, P.E., SECB

Florida Professional Engineer # 31242

Florida Evaluation ANE ID: 1916

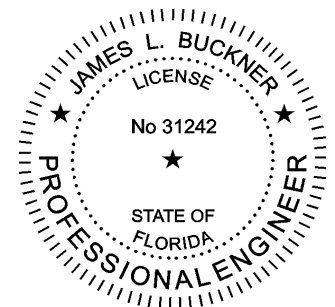
Report No. 20-224-Rib-S9W-ER

Date: 10 / 11 / 2020

Contents:

Evaluation Report

Pages 1 – 8



A handwritten signature in blue ink, appearing to read "James L. Buckner".

2020.10.11 21:24:38 -04'00'

CBUCK, Inc. – Palm Beach County, Florida

Phone: (561) 491-9927 · Email: cbuck@cbuckinc.net · Website: www.cbuckinc.net

Main Office: 1374 Community Drive, Jupiter, Florida 33458

Manufacturer:	Millennium Metals, Inc.
Product Name:	“Rib Panel”
Product Category:	Roofing
Product Sub-Category	Metal Roofing
Compliance Method:	State Product Approval Rule 61G20-3.005 (1) (d)
Product/System Description:	“Rib Panel” 29 gauge (Minimum Thickness) Steel roof panel mechanically attached to Plywood Deck with screws.
Product Assembly as Evaluated:	Refer to Page 4 of this report for product assembly components/materials & standards: <ol style="list-style-type: none">1. Roof Panel2. Fasteners3. Underlayment4. Insulation (Optional)5. Barrier Board (Optional)
Support:	Type: Wood Deck (Design of support and its attachment to support framing is outside the scope of this evaluation.) Description: <ul style="list-style-type: none">• 15/32 (min.) or 19/32” (min.) or greater plywood,• or Wood plank (min. specific gravity of 0.42)
Slope:	Minimum slope shall be in compliance with FBC Chapter 15 Section 1507.4.2, applicable code sections and in accordance with manufacturer’s recommendations.
Performance:	Wind Uplift Resistance: <ul style="list-style-type: none">• Design Uplift Pressure: Refer to Table “A” (Refer to “Table A” attachment details herein)

- Performance Standards:** The product described herein has demonstrated compliance with:
- UL580-06 – *Test for Uplift Resistance of Roof Assemblies*
 - UL 1897-12 – *Uplift test for roof covering systems*
- Standards Equivalency:**
- The UL 580-94 standard version used to test the evaluated product assembly is equivalent to UL580-06 standard version adopted by the Florida Building Code 7th Edition (2020).
 - The UL 1897-98 standard version used to test the evaluated product assembly is equivalent to UL1897-12 standard version adopted by the Florida Building Code 7th Edition (2020).
- Code Compliance:** The product described herein has demonstrated compliance with the performance standards listed above as referenced in the Florida Building Code 7th Edition (2020).
- Evaluation Report Scope:** This product evaluation is limited to compliance with the structural requirements of the Florida Building Code, as related to the scope section to Florida Product Approval Rule 61G20-3.001.
- Limitations and Conditions of Use:**
- Scope of “Limitations and Conditions of Use” for this evaluation:
This evaluation report for “Optional Statewide Approval” contains technical documentation, specifications and installation method(s) which include “Limitations and Conditions of Use” throughout the report in accordance with Rule 61G20-3.005. Per Rule 61G20-3.004, the Florida Building Commission is the authority to approve products under “Optional Statewide Approval”.
 - Option for application outside “Limitations and Conditions of Use”
Rule 61G20-3.005(1)(e) allows engineering analysis for “project specific approval by the local authorities having jurisdiction in accordance with the alternate methods and materials authorized in the Code”. Any modification of the product as evaluated in this report and approved by the Florida Building Commission is outside the scope of this evaluation and will be the responsibility of others.
 - This report is a building code product evaluation per FLPE rule (FAC) 61G15-36 to comply with Florida product approval rule (FAC) 61G20-3. This evaluation report is part of the Florida Building Commission approval for the listed code related criteria. This report by James Buckner, P.E. and CBUGK Engineering is not a design certification of code compliance construction submittal documentation, per FBC section 107, for any individual structure, site specific or permit design.
 - All metal components and fasteners shall be corrosion resistant in accordance with applicable sections of FBC, including but limited to Sections 1504.3.2, 1506.6 and 1507.4.4.
 - Design of support system is outside the scope of this report.
 - Fire Classification is outside the scope of Rule 61G20-3, and is therefore not included in this evaluation.
 - This evaluation report does not evaluate the use of this product for use in the High Velocity Hurricane Zone code section. (Dade & Broward Counties)
- Quality Assurance:** The manufacturer has demonstrated compliance of roof panel products in accordance with the Florida Building Code and Rule 61G20-3.005 (3) for manufacturing under a quality assurance program audited by an approved quality assurance entity through **Keystone Certifications, Inc.** (FBC Organization #: QUA 1824).

**Components/Materials
(by Manufacturer):**

Roof Panel:

Product Identification: Rib Panel
Material: Steel
Thickness: 29 gauge (min.)
Panel Width: 36" (max.) Coverage
Rib Height: 3/4"
Yield Strength: 40 ksi min.
Corrosion Resistance: In compliance with FBC Section 1507.4.3:

- ASTM A792 coated, or
- ASTM A653 G90 galvanized steel

Fastener:

Type: Hex-Head Wood Screw with WSW
Size: #10 (× length to meet min. penetration through deck)
Penetration Through: 3/16" min. through wood deck
Corrosion Resistance: Per FBC Section 1506.6 and 1507.4.4
Standard: Per ANSI/ASME B18.6.4

**Components/Materials
(by Others):**

Underlayment:

Material and application shall be in compliance with FBC Section 1507.1.1 and in accordance with applicable code sections and manufacturer's recommendations.

Insulation (Optional):

Type: Rigid Insulation Board
Thickness: 3" (max.)
Properties:
Density: 2.25 pcf (lbs/ft³) min.
Or Compressive Strength: 20 psi min.

Insulation Notes:

- Rigid Insulation shall meet minimum density OR compressive strength.
- Insulation shall comply with FBC Section 1508. When insulation is incorporated, fastener length shall conform to penetrate thru bottom of support a minimum of 3/16".

Barrier (Optional):

Barrier Board: Approved Barrier, up to 1/2" thick

Installation:

Installation Method:

(Refer to drawings on Pages 6-8 of this report.)

- Fastener spacing: **Refer to Table “A” Below**
(along the length of the panel)
- Row Spacing: **Refer to Table “A” Below**
(along the row, across the panel profile)
- Rib Interlock: Lapped
- Minimum fastener penetration thru bottom of support, 3/16”.
- For panel construction at the end of panels, refer to manufacturer’s instructions and any site specific design.

TABLE “A” ALLOWABLE LOADS					
	Deck Thickness	Fastener Spacing	Row Spacing	Refer to Drawings	* Design Pressure (PSF)
METHOD 1	15/32”	9”	24”	A	- 47.5
METHOD 2	15/32”	9”	12”	A	- 95
METHOD 3	15/32”	5”,4”,5”,4”,... Pattern	16”	B	- 113.75
METHOD 4	19/32”	9”	16”	A	- 71
METHOD 5	19/32”	5”,4”,5”,4”,... Pattern	16”	B	- 144.25
* Allowable design pressure for allowable stress design (ASD) with a margin of safety of 2 to 1.					

Install the “Millennium Rib” roof panel assembly in compliance with the installation method listed in this report and applicable code sections of FBC 7th Edition (2020). The installation method described herein is in accordance with the scope of this evaluation report. Refer to manufacturer’s installation instructions as a supplemental guide for attachment.

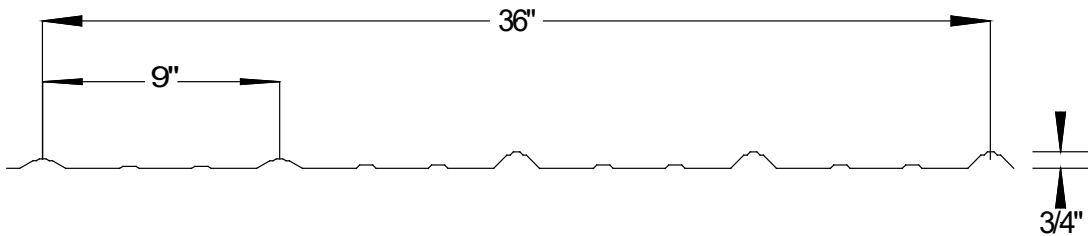
Referenced Data:

1. UL580-94 & UL 1897-98 Uplift Test
By Hurricane Test Laboratory, LLC (FBC Organization #TST ID: 1527)
Report #: 0232-0321-03, Report Date: 8/27/03, Specimens #1-2
Report #: 0232-0510-03, Report Date: 8/27/03, Specimen #2
2. UL580-94 & UL 1897-98 Uplift Test
By Hurricane Test Laboratory, LLC (FBC Organization #TST ID: 1527)
Report #: 0232-0911-05, Report Date: 9/27/04, Specimen #1
3. Engineering Analysis
By CBUCK Engineering
4. Quality Assurance
By Keystone Certifications, Inc. (QUA ID: 1824)
Millennium Metals Licensee # 423
5. Equivalency of Test Standard Certification
By James L. Buckner, P.E. @ CBUCK Engineering
(FBC Organization # ANE 1916)
6. Certification of Independence
By James L. Buckner, P.E. @ CBUCK Engineering
(FBC Organization # ANE 1916)

Installation Method

Millennium Metals "Rib Panel" Roof Panel Attached to Wood Deck

Profile Drawings



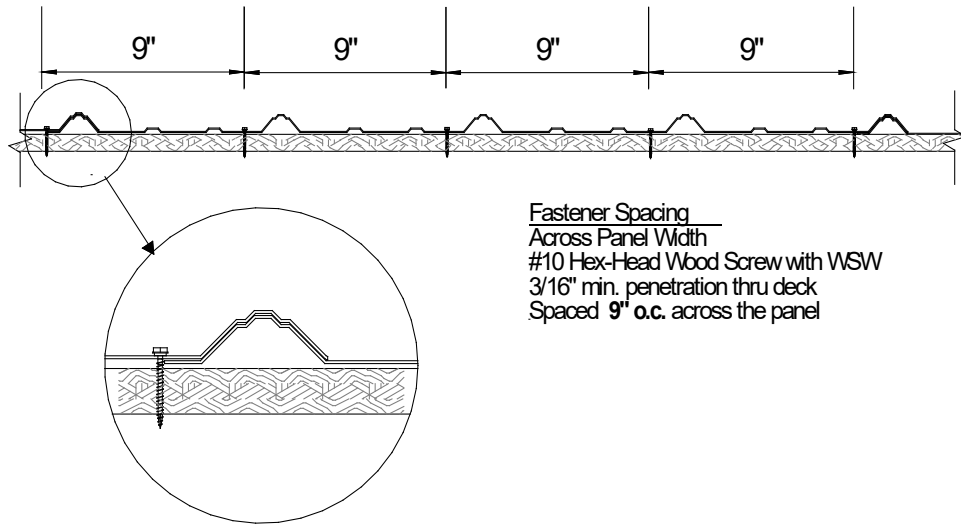
Typical Panel Profile View (Not To Scale)

TABLE "A"					
ALLOWABLE LOADS					
	Deck Thickness	Fastener Spacing	Row Spacing	Refer to Drawings	* Design Pressure (PSF)
METHOD 1	15/32"	9"	24"	A	- 47.5
METHOD 2	15/32"	9"	12"	A	- 95
METHOD 3	15/32"	5",4",5",4",... Pattern	16"	B	- 113.75
METHOD 4	19/32"	9"	16"	A	- 71
METHOD 5	19/32"	5",4",5",4",... Pattern	16"	B	- 144.25

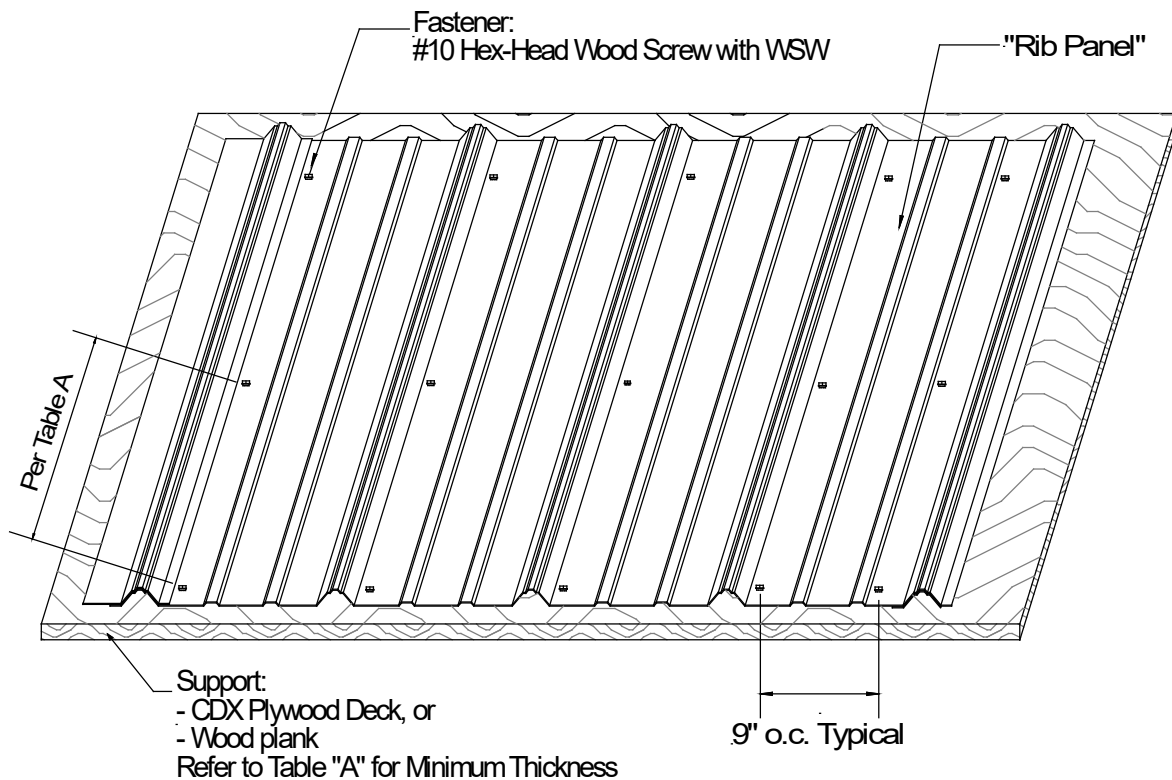
* Allowable design pressure for allowable stress design (ASD) with a margin of safety of 2 to 1.

Installation Method

Millennium Metals "Rib Panel" Roof Panel Attached to Wood Deck



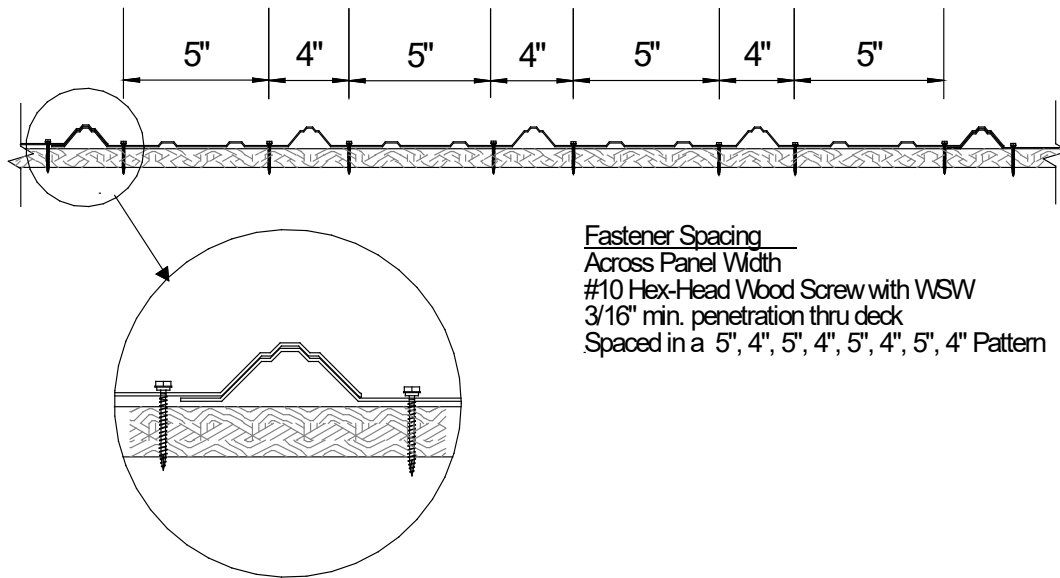
Detail A - Typical Assembly Profile View (Not To Scale)



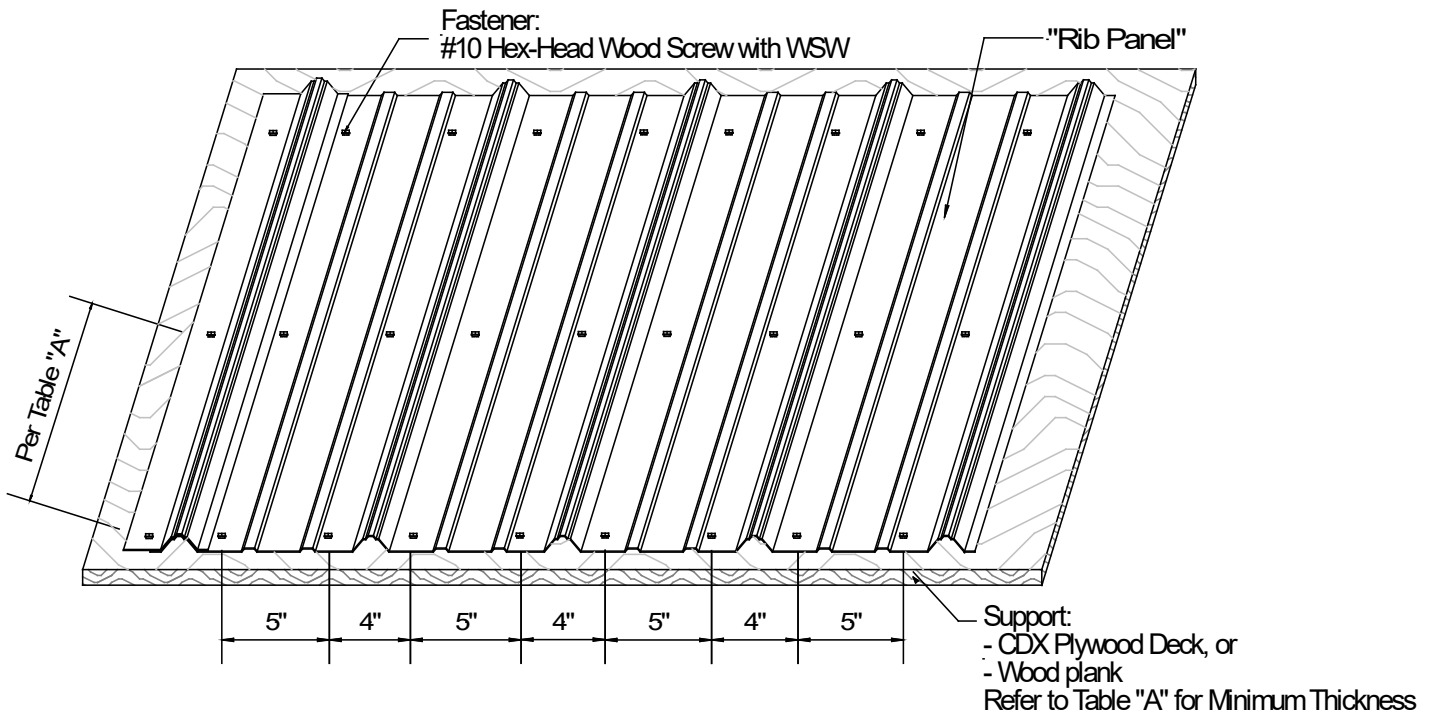
Detail A - Typical Assembly Isometric View (Not To Scale)

Installation Method

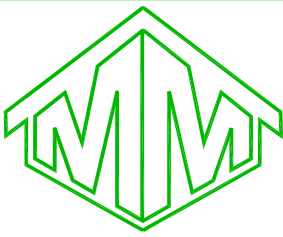
Millennium Metals "Rib Panel" Roof Panel Attached to Wood Deck



Detail B - Typical Assembly Profile View (Not To Scale)

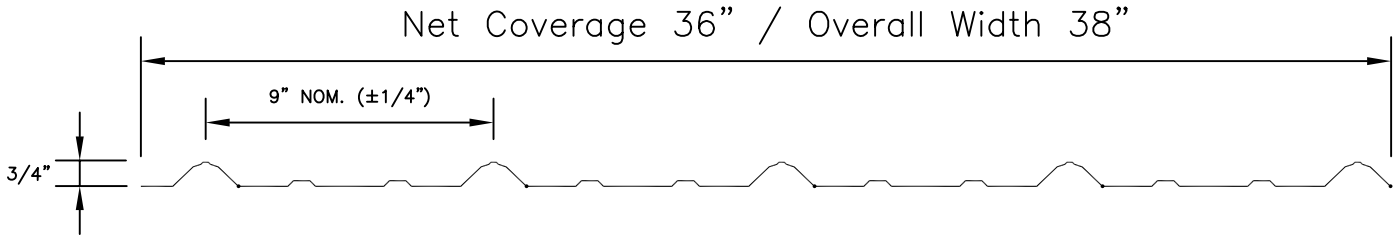


Detail B - Typical Assembly Isometric View (Not To Scale)

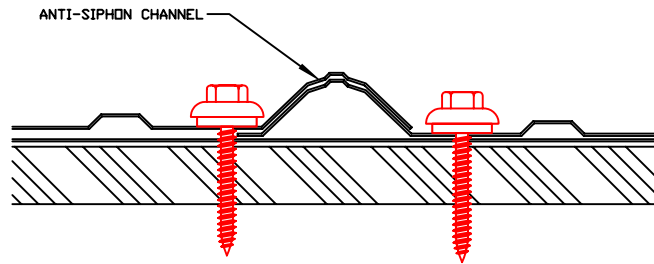


MILLENNIUM METALS, INC.

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

MILLENNIUM METALS INC.

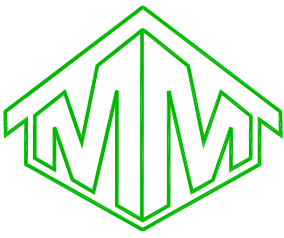
TOLL FREE: 1-877-358-7663

FAX: 904-358-8285

MMI2000.NET

SUBJECT TO CHANGE WITHOUT NOTICE

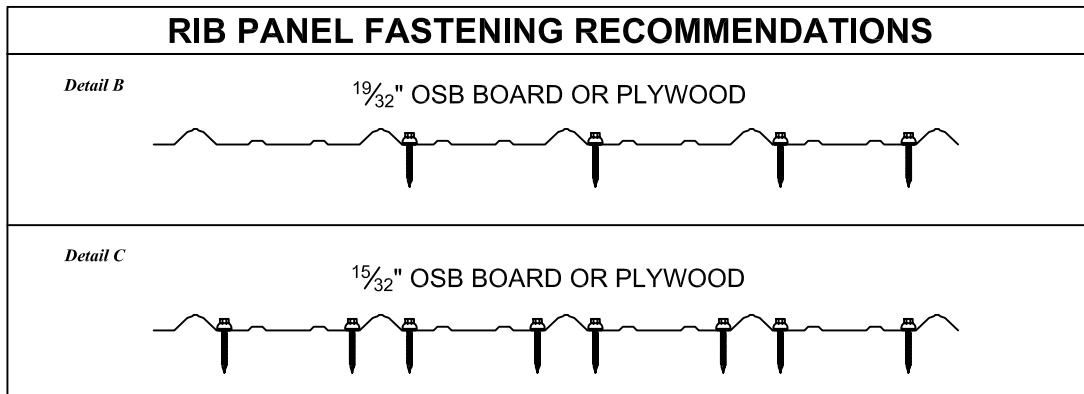
PAGE 1



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 Installation Instructions:



Roof Application:

Step 1: Make sure the deck is even and square. Millennium Metals recommends the use of $\frac{1}{2}$ " 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.



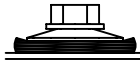
Step 6: Install the remaining accessories such as pipe boots; rib profile vents, ridge caps, gable flashings, butyl sealant, caulks, and closures are necessary to maintain watertight seals. Inspect screw fasteners to insure that they are installed properly.



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

Step 7: Fasteners should penetrate deck material by ¼”

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

Approximate Screw Chart

1½” Plywood = 200 screws per square
 1¼” 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.

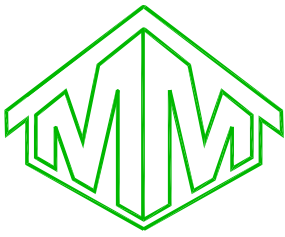
Florida Product Testing

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 regarding fastener selection. Watertight warranties are not available.



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

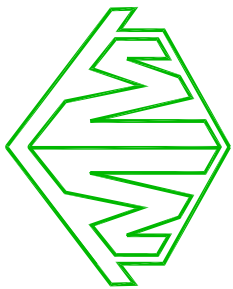
Estimating materials is available through a third party. We accept no responsibility for the accuracy of this information. It is the sole responsibility of the customer/contractor to verify information. Changes to quantity, length, or accessories should be made prior to ordering.

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.

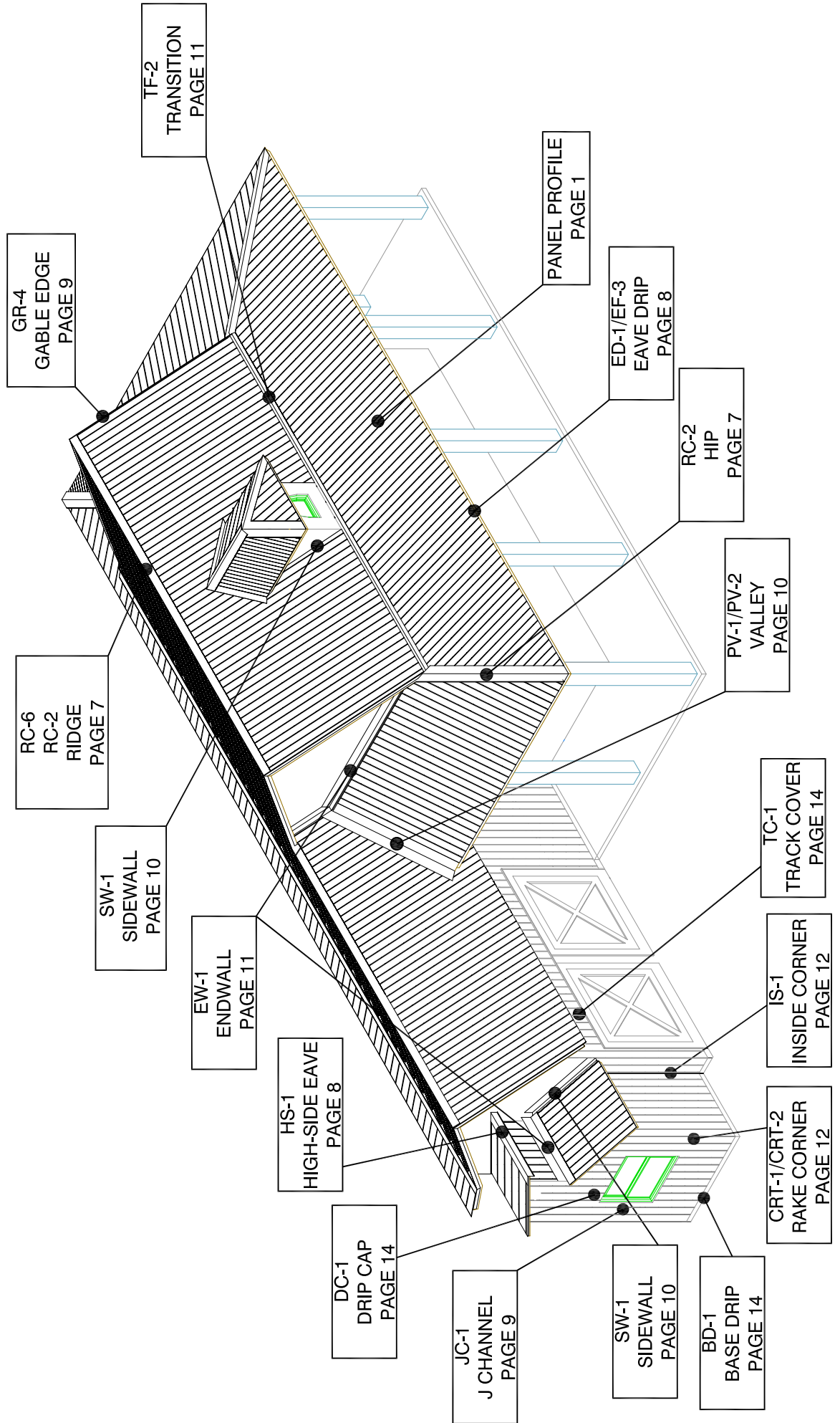
Shavings are iron filings left from the cutting or drilling of steel materials. The iron particles tend to go airborne and settle on sheets. Failure to remove the particles will cause embedment of the iron and rust marks.

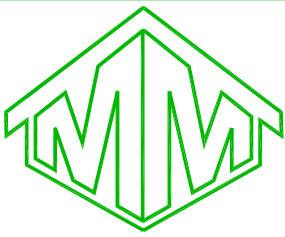


MILLENNIUM METALS, INC.

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

RIB PANEL DETAIL LOCATIONS

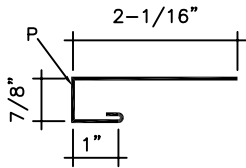




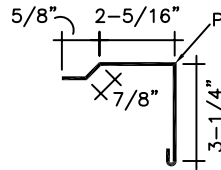
MILLENNIUM METALS, INC.

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

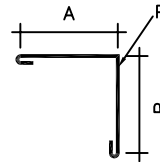
A. J-CHANNEL (JC-1)



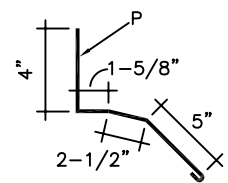
B. GABLE TRIM (GR-4)



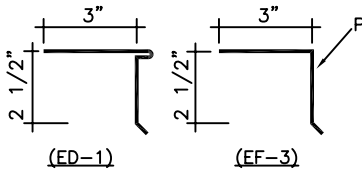
C. POST COVER (PC)



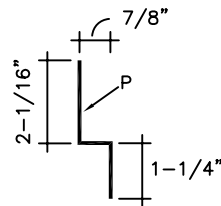
D. TRACK COVER (TC-1)



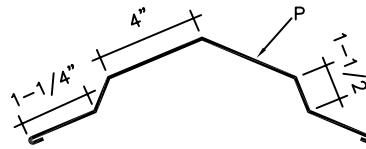
E. EAVE DRIP



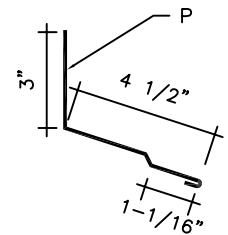
F. DOUBLE ANGLE (DA-1)



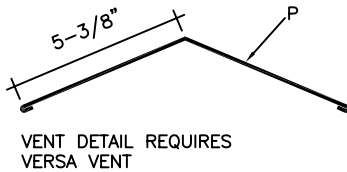
G. RIDGE CAP (RC-2)



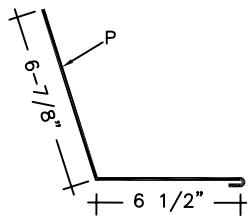
H. ENDWALL FLASHING (EW-1)



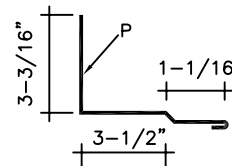
I. VENTED RIDGE (RC-6)



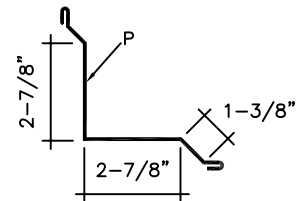
J. TRANSITION FLASHING (TF-1)



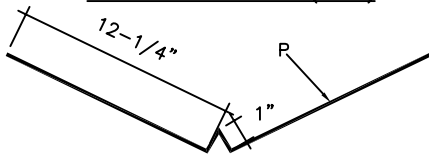
K. SIDEWALL FLASHING (SW1)



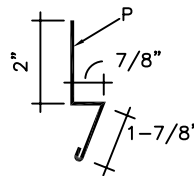
L. INSIDE CORNER (IS-1)



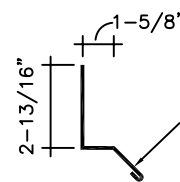
M. PREFORMED VALLEY (PV-1)



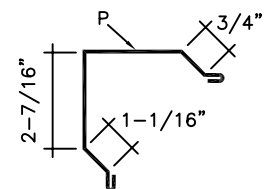
N. BASE DRIP (BD-1)



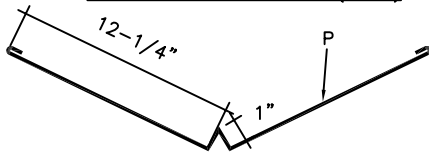
O. DRIP CAP (DC-1)



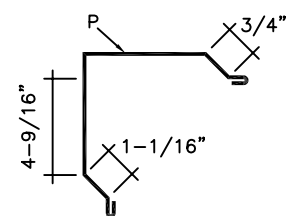
P. RAKE CORNER (CRT-1)



M-2. PREFORMED VALLEY (PV-2)



P. RAKE CORNER (CRT-2)



*ALL HEMS ARE 3/8 OF AN INCH

MILLENNIUM METALS INC.

TOLL FREE: 1-877-358-7663

FAX: 904-358-8285

MMI2000.NET

SUBJECT TO CHANGE WITHOUT NOTICE

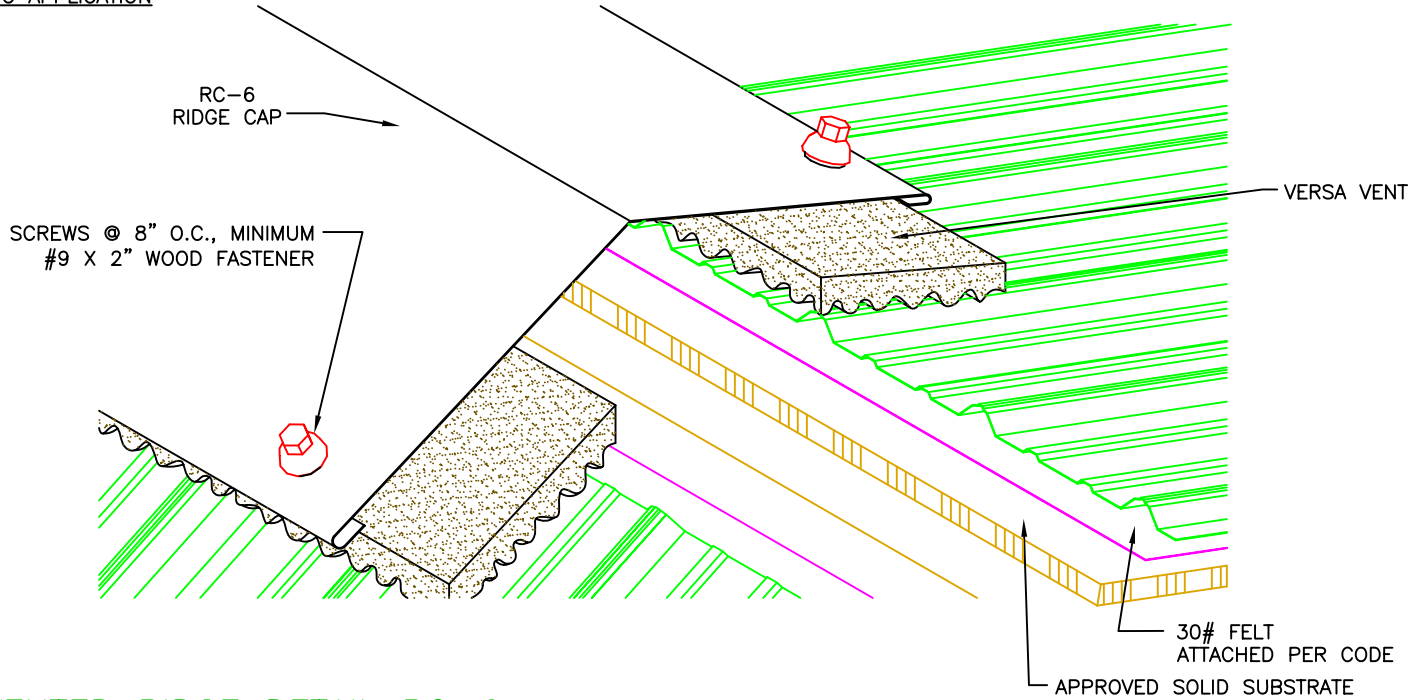
PAGE 6



MILLENNIUM METALS, INC.

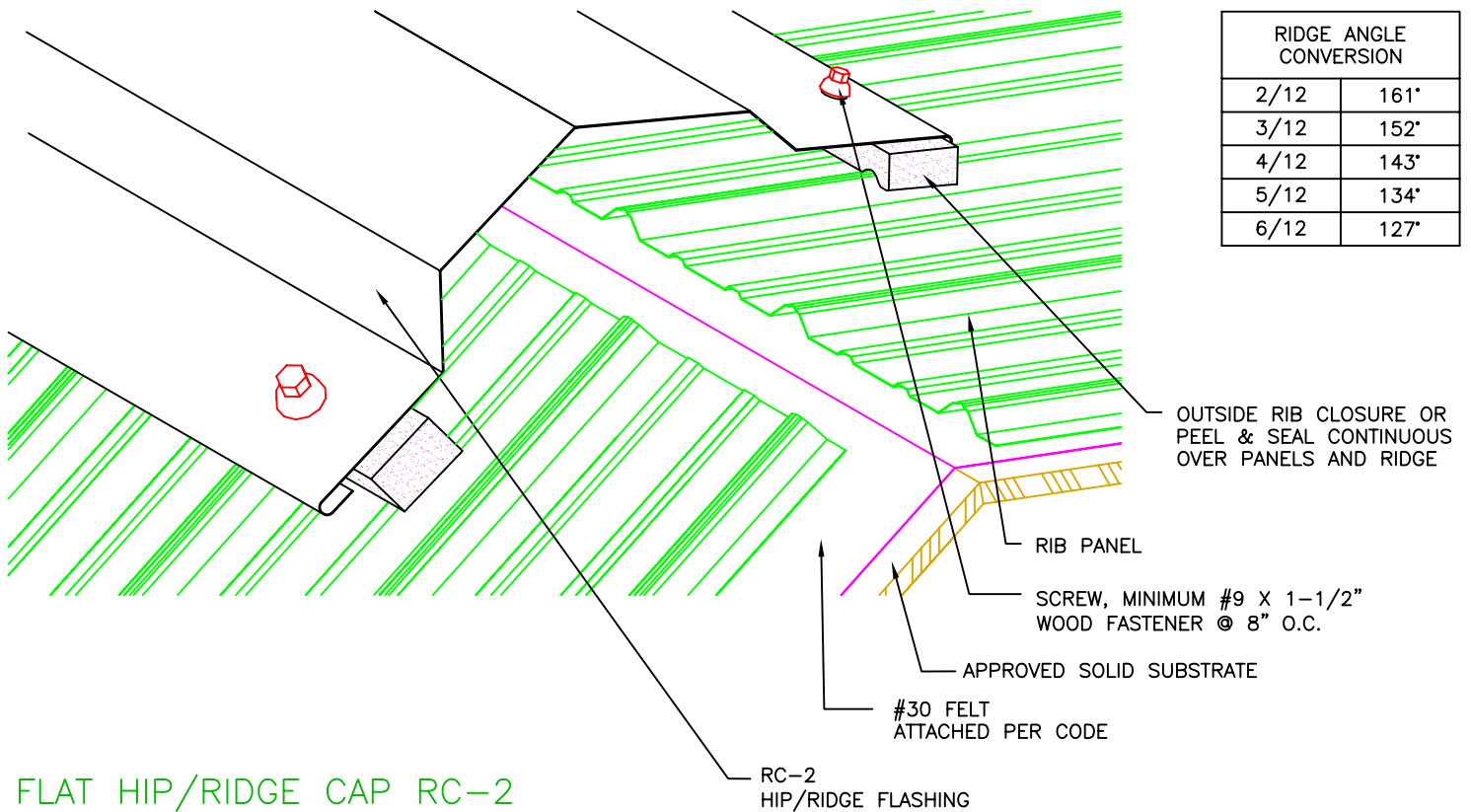
10200 EASTPORT ROAD JACKSONVILLE, FL 32218
 LOCAL 904-358-8366 WATTS 1-877-358-Roof (7663)
 FAX 904-358-8285 MMI2000.NET

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

MILLENNIUM METALS INC.

TOLL FREE: 1-877-358-7663
 FAX: 904-358-8285
 MMI2000.NET

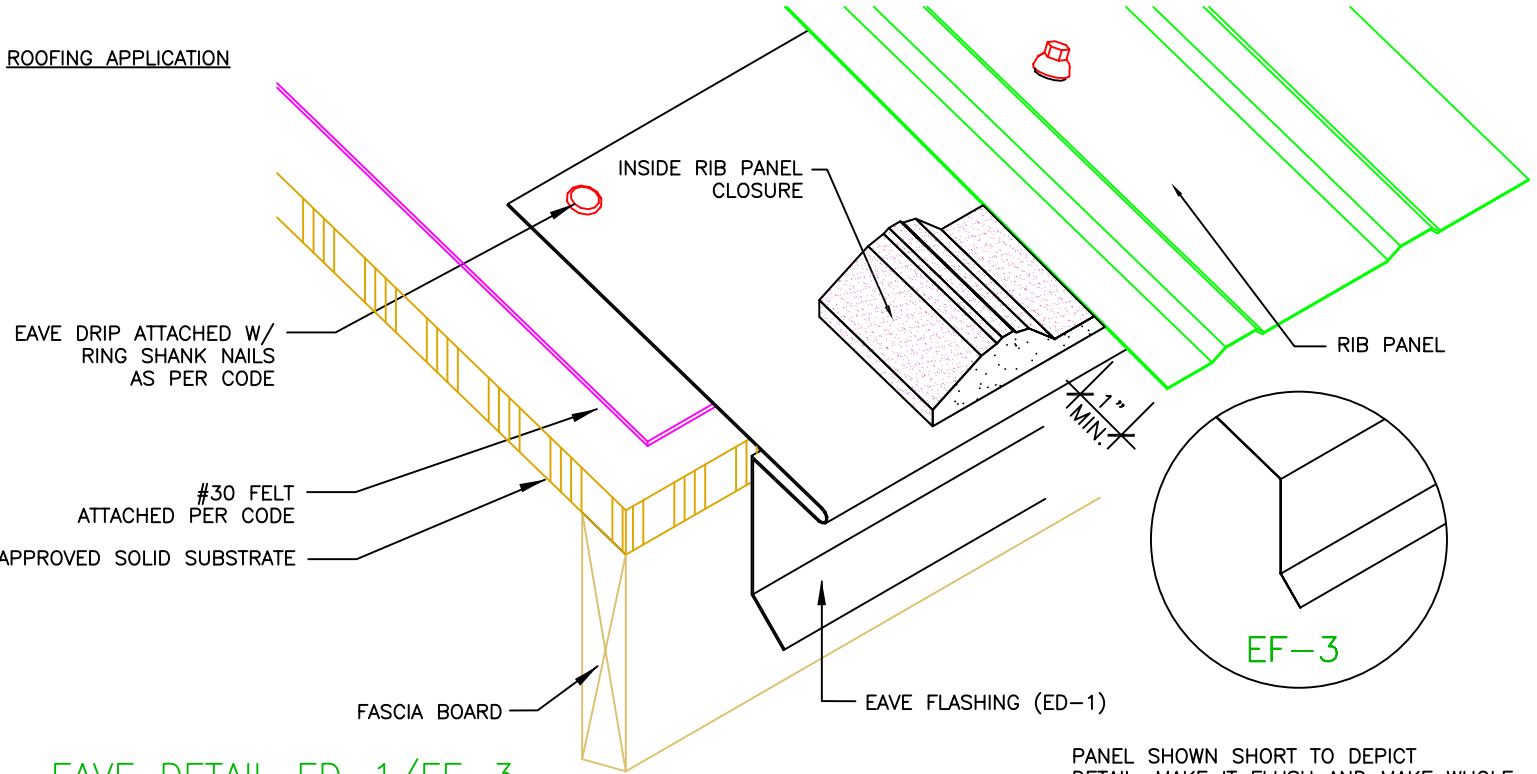
SUBJECT TO CHANGE WITHOUT NOTICE



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

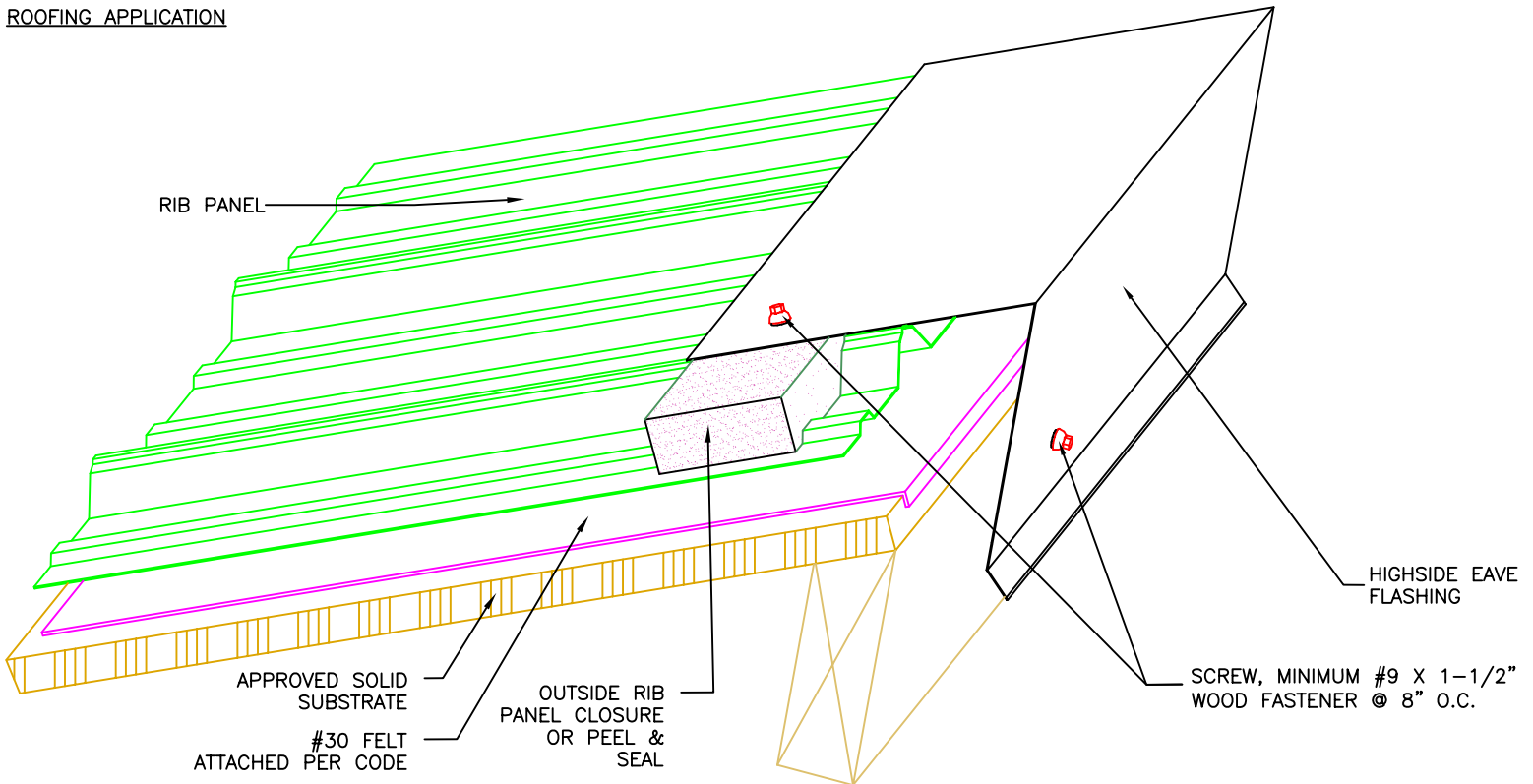
ROOFING APPLICATION



EAVE DETAIL ED-1/EF-3

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

ROOFING APPLICATION

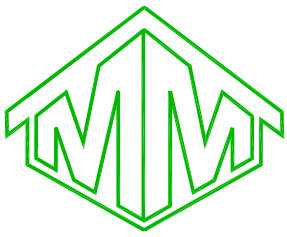


HIGHSIDE EAVE DETAIL HS-1

MILLENNIUM METALS INC.

TOLL FREE: 1-877-358-7663
FAX: 904-358-8285
MMI2000.NET

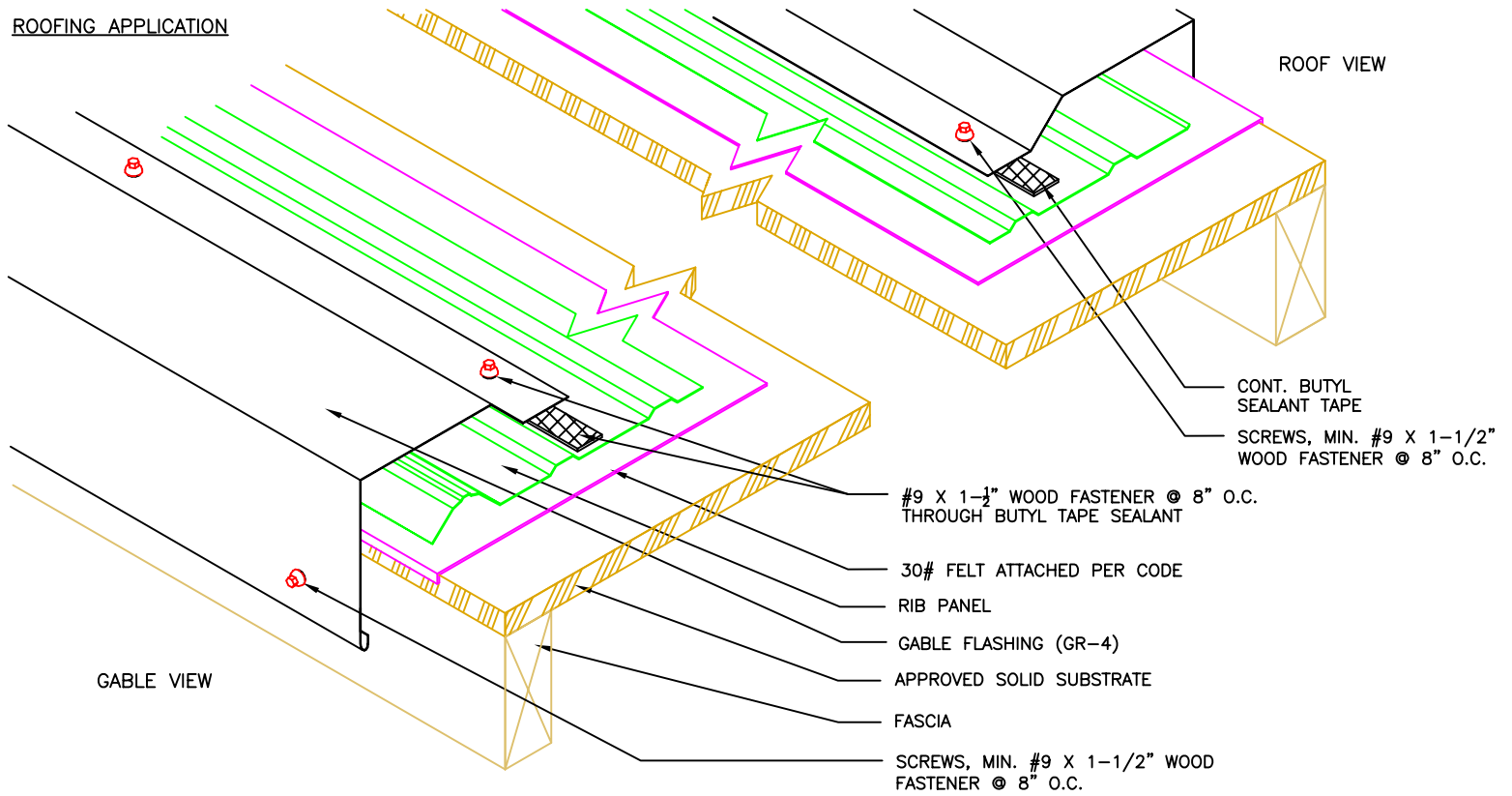
SUBJECT TO CHANGE WITHOUT NOTICE



MILLENNIUM METALS, INC.

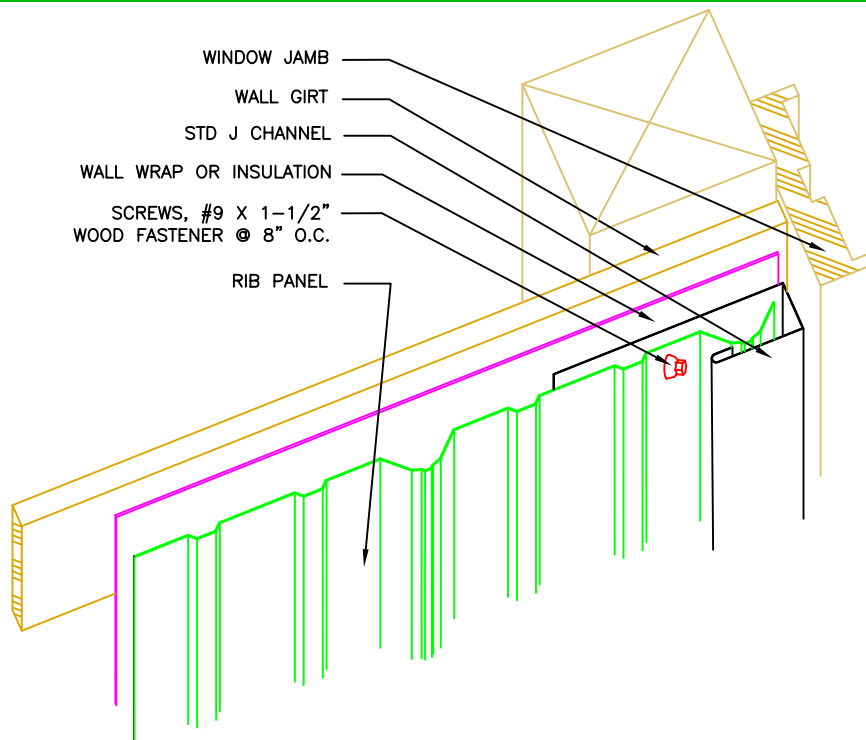
10200 EASTPORT ROAD JACKSONVILLE, FL 32218
 LOCAL 904-358-8366 WATTS 1-877-358-Roof (7663)
 FAX 904-358-8285 MMI2000.NET

ROOFING APPLICATION



STANDARD GABLE TRIM DETAIL GR-4

SIDING APPLICATION



STANDARD J-CHANNEL DETAIL JC-1

MILLENNIUM METALS INC.

TOLL FREE: 1-877-358-7663
 FAX: 904-358-8285
 MMI2000.NET

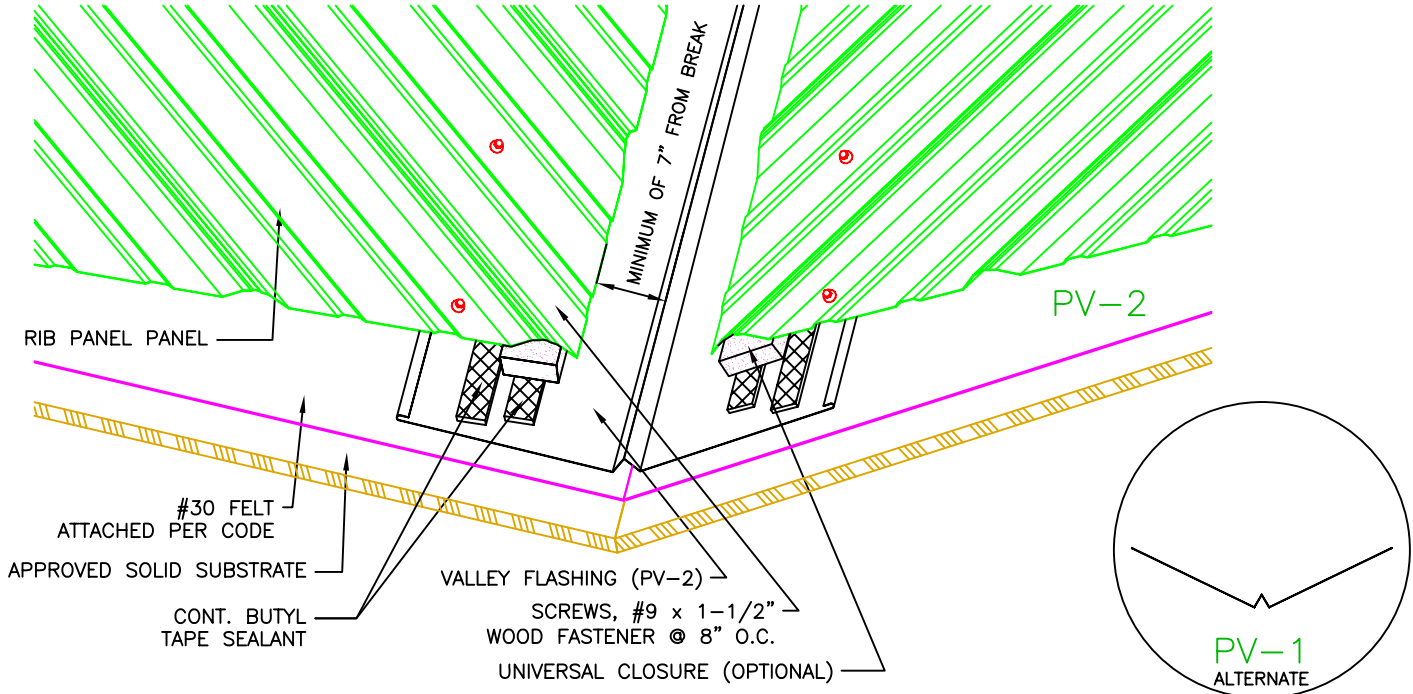
SUBJECT TO CHANGE WITHOUT NOTICE



MILLENNIUM METALS, INC.

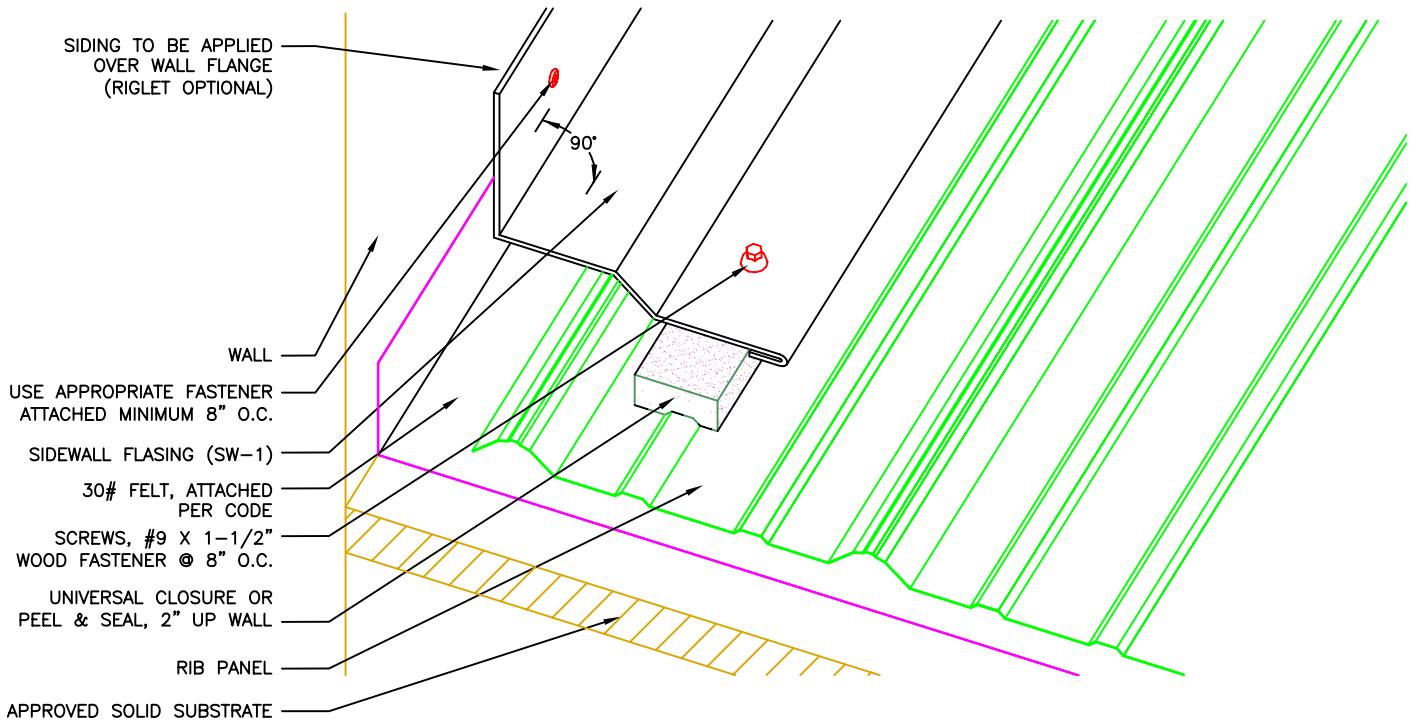
10200 EASTPORT ROAD JACKSONVILLE, FL 32218
LOCAL 904-358-8366 WATTS 1-877-358-Roof (7663)
FAX 904-358-8285 MMI2000.NET

ROOFING APPLICATION



PREFORMED VALLEY DETAIL PV-1/PV-2

ROOFING APPLICATION



SIDEWALL FLASHING DETAIL (SW-1)

MILLENNIUM METALS INC.

TOLL FREE: 1-877-358-7663
FAX: 904-358-8285
MMI2000.NET

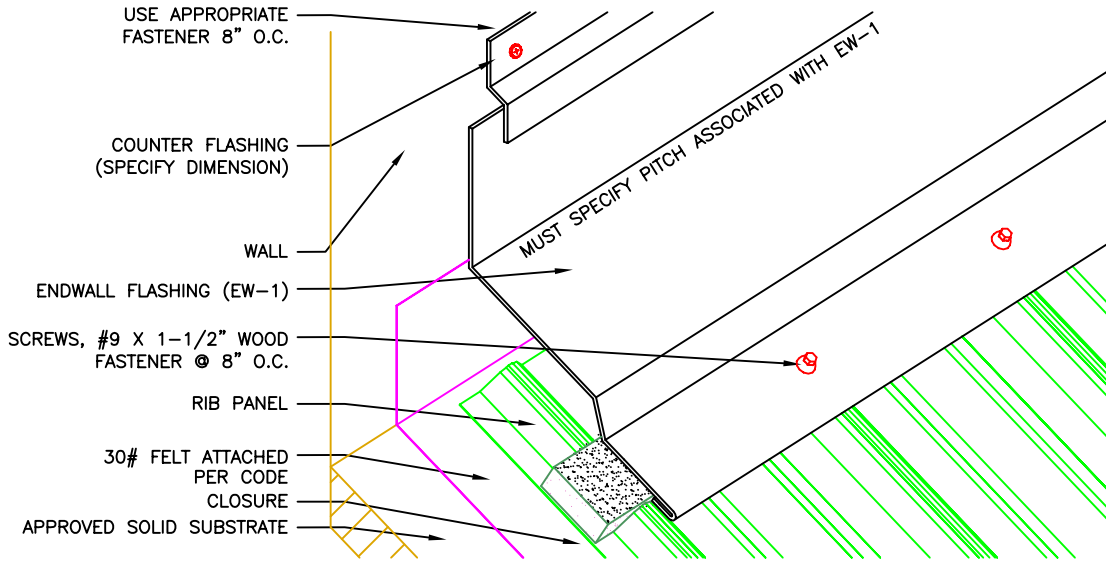
SUBJECT TO CHANGE WITHOUT NOTICE



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

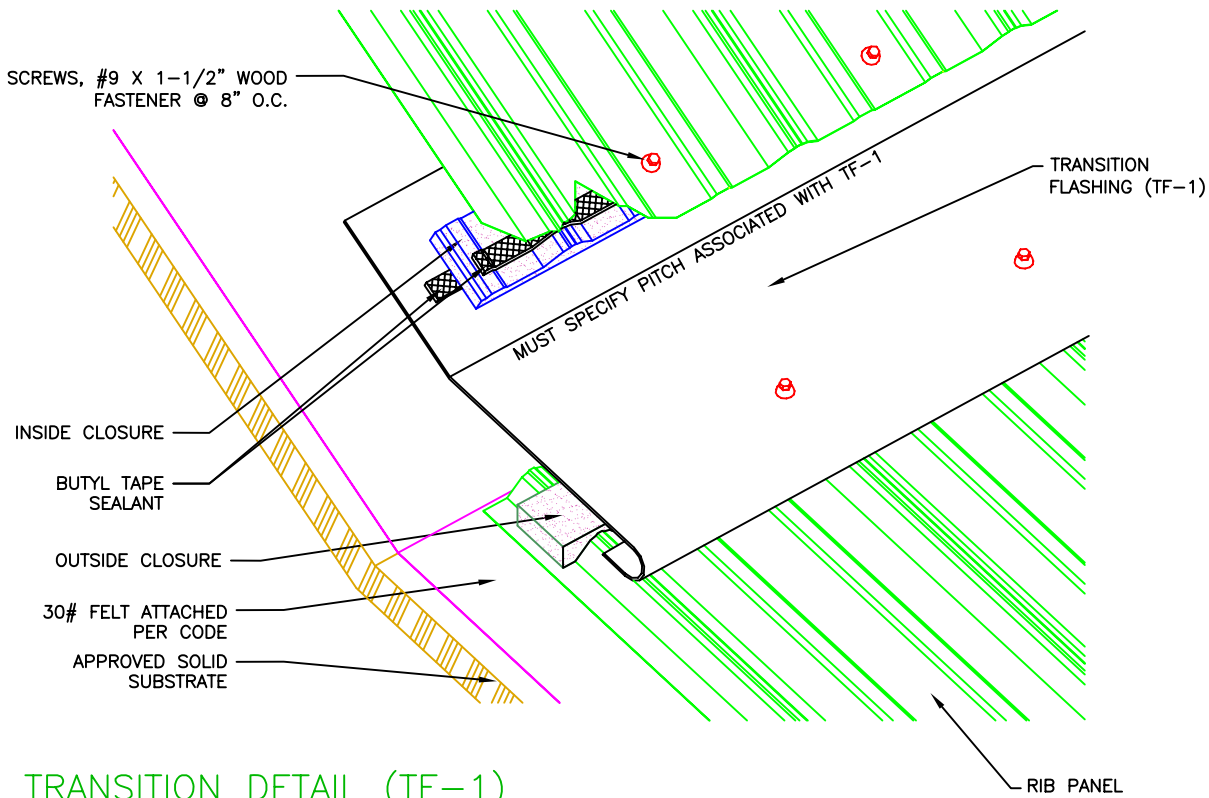
ROOFING APPLICATION



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

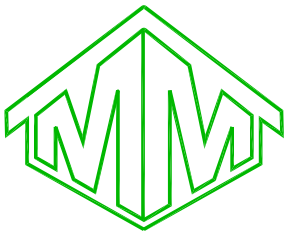


TRANSITION DETAIL (TF-1)

MILLENNIUM METALS INC.

TOLL FREE: 1-877-358-7663
 FAX: 904-358-8285
 MMI2000.NET

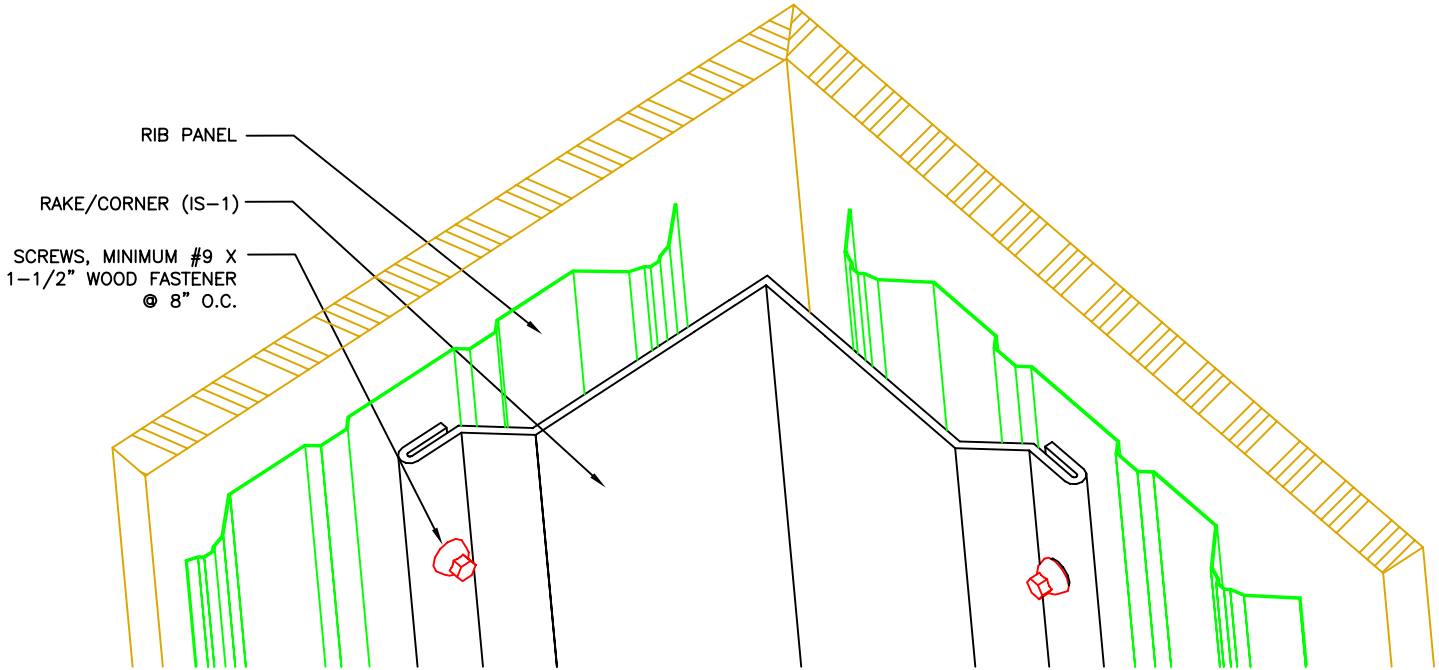
SUBJECT TO CHANGE WITHOUT NOTICE



MILLENNIUM METALS, INC.

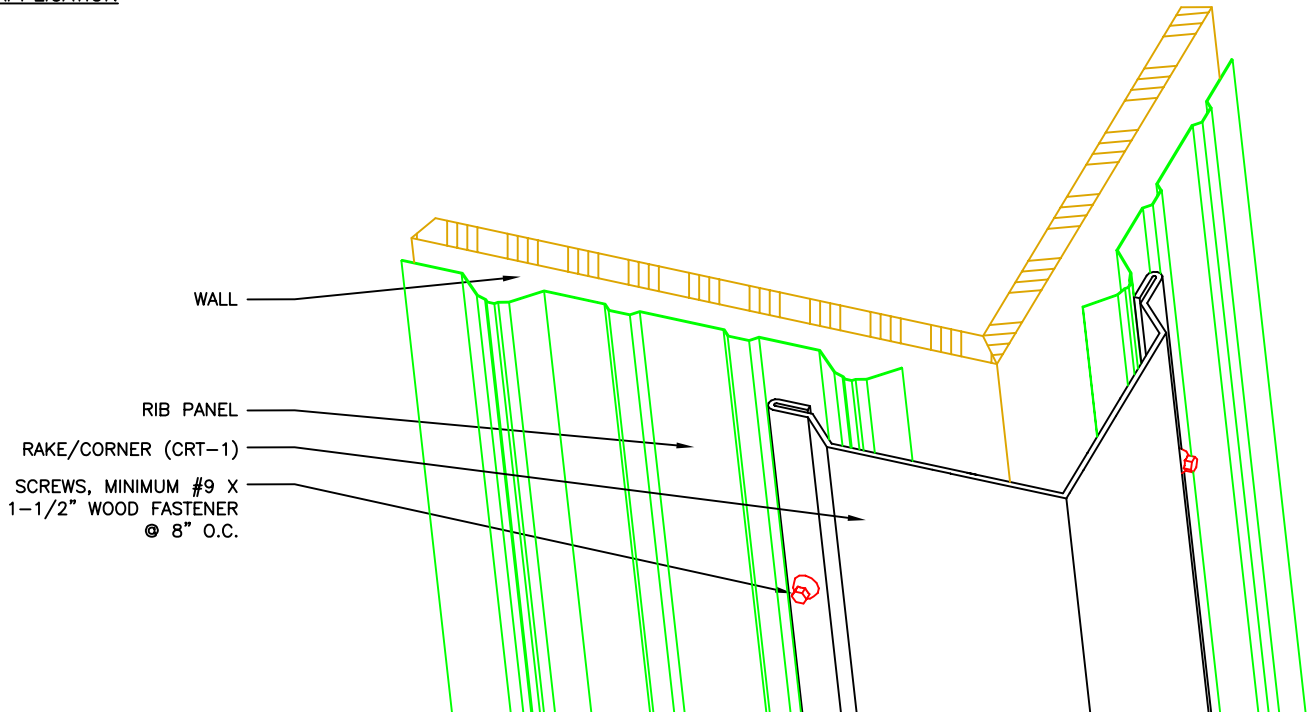
10200 EASTPORT ROAD JACKSONVILLE, FL 32218
LOCAL 904-358-8366 WATTS 1-877-358-Roof (7663)
FAX 904-358-8285 MMI2000.NET

SIDING APPLICATION



INSIDE CORNER IS-1

SIDING APPLICATION



RAKE / CORNER CRT-1 / CRT-2

MILLENNIUM METALS INC.

TOLL FREE: 1-877-358-7663
FAX: 904-358-8285
MMI2000.NET

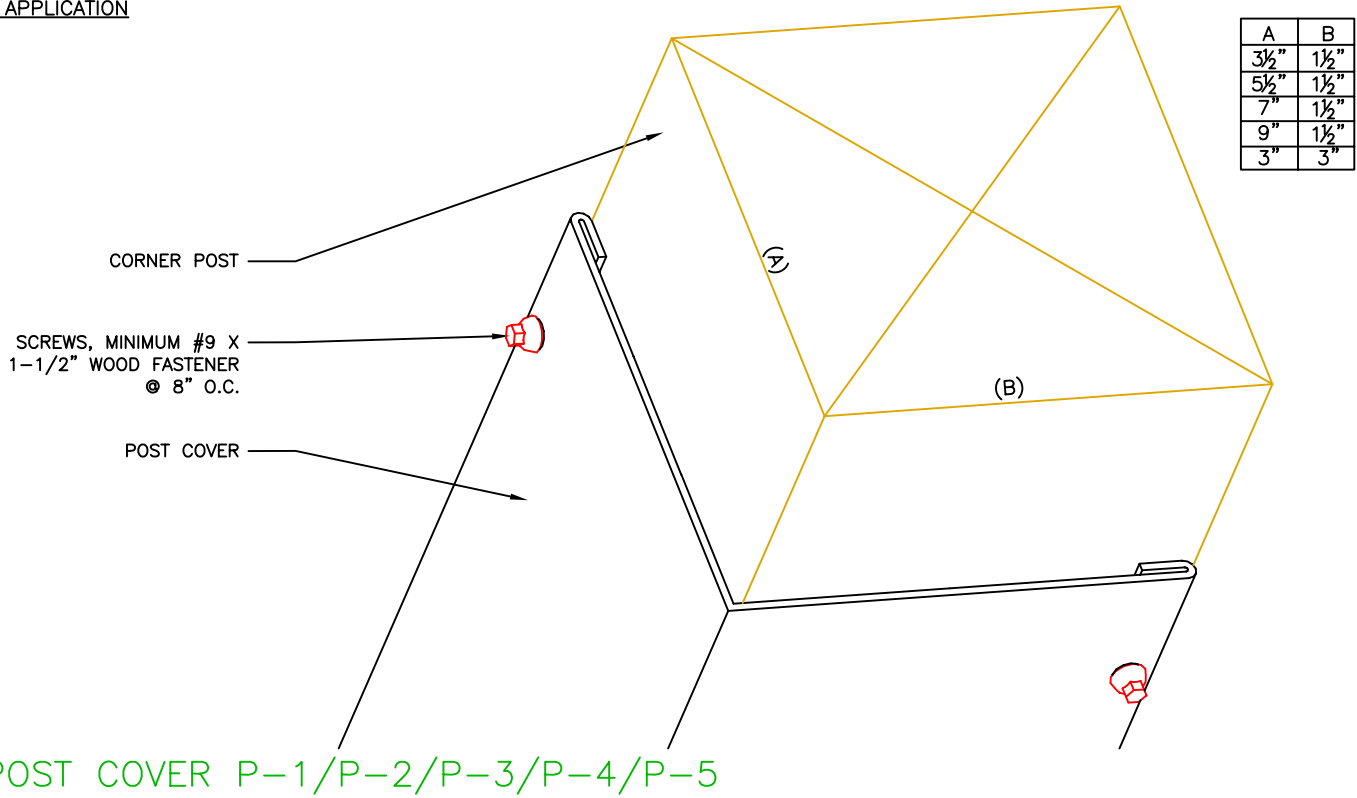
SUBJECT TO CHANGE WITHOUT NOTICE



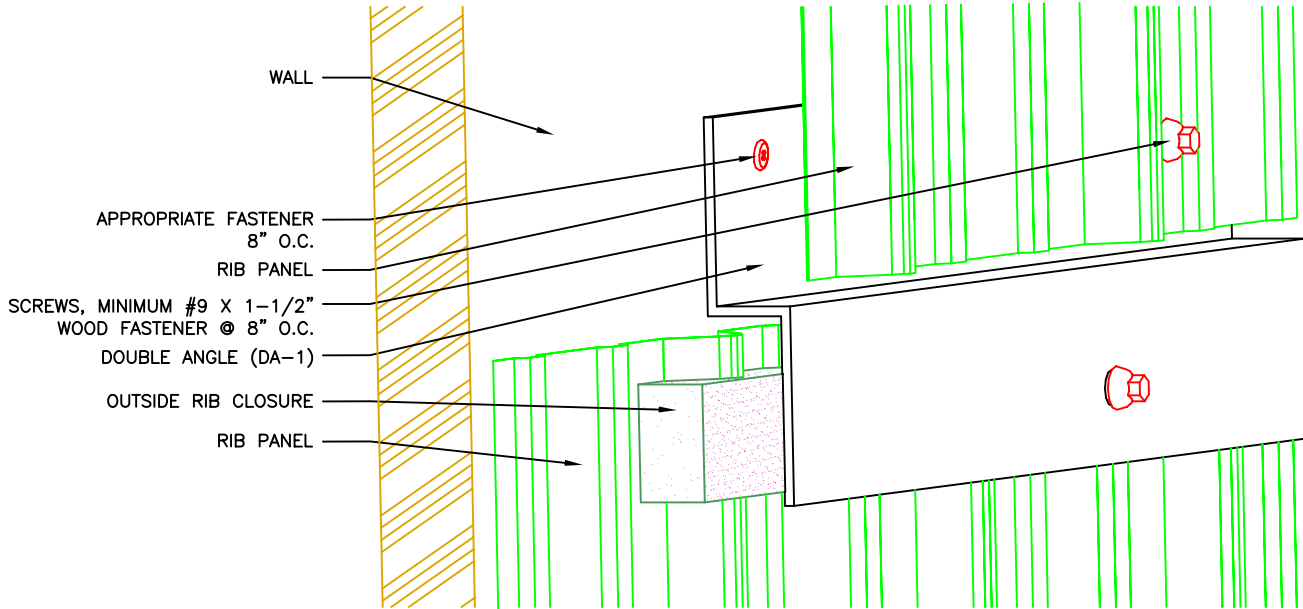
MILLENNIUM METALS, INC.

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

SIDING APPLICATION



SIDING APPLICATION



DOUBLE ANGLE (DA-1)

MILLENNIUM METALS INC.

TOLL FREE: 1-877-358-7663
 FAX: 904-358-8285
 MMI2000.NET

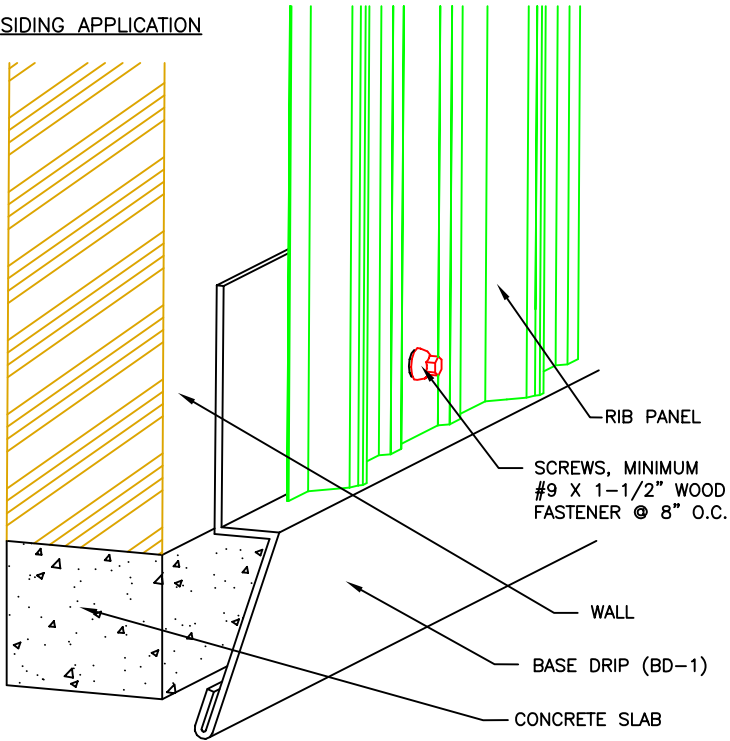
SUBJECT TO CHANGE WITHOUT NOTICE



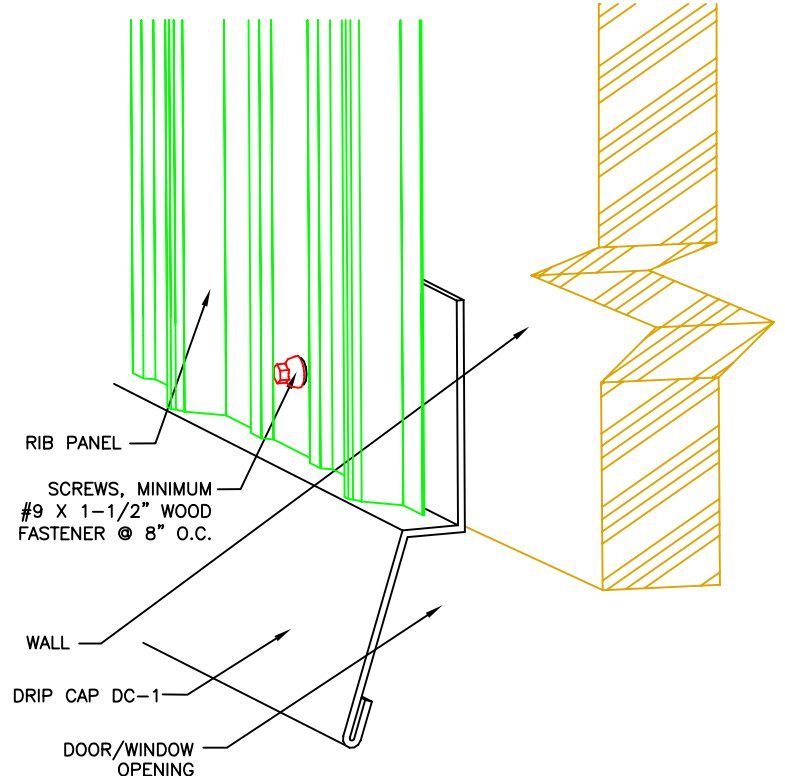
MILLENNIUM METALS, INC.

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

SIDING APPLICATION

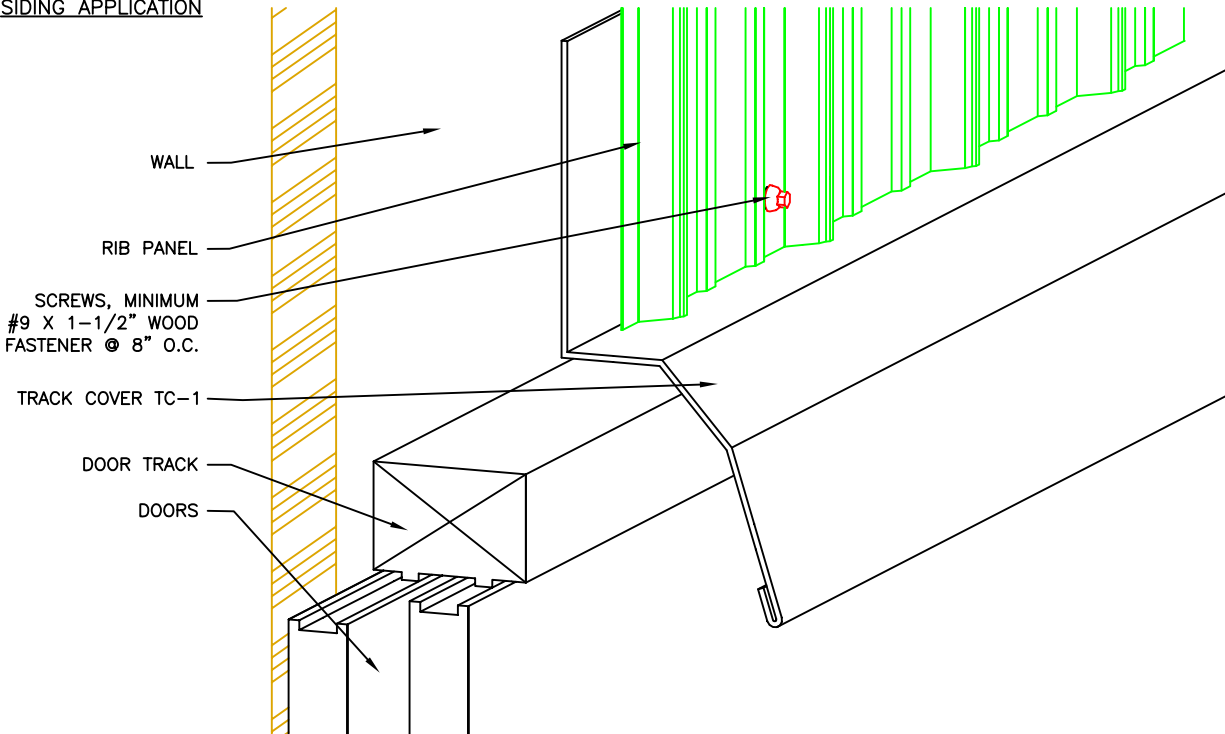


BASE DRIP DETAIL BD-1



DRIP CAP DETAIL DC-1

SIDING APPLICATION



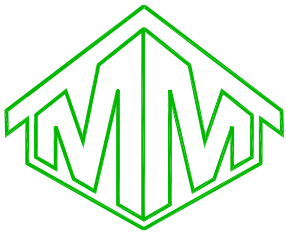
TRACK COVER DETAIL (TC-1)

*MILLENNIUM METALS DOES NOT SELL DOORS OR DOORMATS

MILLENNIUM METALS INC.

TOLL FREE: 1-877-358-7663
FAX: 904-358-8285
MMI2000.NET

SUBJECT TO CHANGE WITHOUT NOTICE



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

