

WOLTERS ENGINEERING

ENGINEERING, DRAFTING, CONSULTING

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PRODUCT EVALUATION (FOR HVHZ APPROVED PRODUCT)

PRODUCT: **DM CLASS 1500 16 OZ COPPER 1½" MECHANICAL SEAM 16" WIDE
ROOF PANEL (FLPA# 27499.9)**

MANUFACTURER: DYNAMIC METALS, LLC
3201 SE DOMINICA TERRACE
STUART, FL 34997

To all concerned,

The DM Class 1500 Series 16 oz Copper 1½" Mechanical Seam 16" Wide Roof Panel, manufactured by Dynamic Metals LLC, is a non-structural 24 ga copper roof panel (42 ksi min) that meets the requirements of Sections 1507.4 and 1518.9 of the 7th Edition (2020) Florida Building Code. The panel has been tested per TAS100, TAS 125, and ASTM E2140 by Intertek B&C, with results shown in test reports G3443.42-450-44, H2687.02-450-44, and M1607.05-450-44. It has also been tested per TAS 110 by PRI Construction Materials Technologies, with results shown in test reports VLS-004-02-01 and VLS-005-02-01.

Technical Documentation:

1. Drawing "15MSC-HZ" dated 8/15/19, signed and sealed by Scott Wolters, PE.
2. Test Reports listed above by Architectural Testing, Inc. signed and sealed by Vinu Abraham, PE.
3. Test Reports listed above by PRI Construction Materials Technologies, signed and sealed by Zachary R Priest, PE.
4. Supplemental Calculations to support 15MSC-HZ, signed and sealed by Scott Wolters, PE.

I have reviewed this submittal per the requirements of FAC Product Approval Rule Chapter 61G20-3.005 (4). Based on the limitations listed below and those provided in the documents above, this product meets all the requirements of the 7th Edition (2020) Florida Building Code generally, and chapter 15 specifically, including the HVHZ provisions.

Limitations: **This panel is approved for use inside and outside of the HVHZ.**

<u>Overall Limitations:</u>	Maximum Panel Width:	16"
	Minimum Rib Height:	1 ½"
	Clip Anchors:	26 Ga stainless steel, 3" long
	Min. Slope:	HVHZ: 1"/12"
		Non-HVHZ: ½"/12"

	Option #1 Installation	Option #2 Installation
Max. Design Pressure:	-149 psf	-198.5 psf
Clip Anchor Spacing:	4" From Ends, 16" Max. O.C.	4" From Ends, 12" Max. O.C.
Min Panel Fasteners:	#10x1" Panclip Fasteners (2) Per Clip	#10x1" Panclip Fasteners (2) Per Clip
Panel Seam Sealant	Continuous bead of Bostik 915 on both sides of seam (at slopes < 2"/12" only)	Continuous bead of Bostik 915 on both sides of seam (at slopes < 2"/12" only)
	Panels are Seamed to 90°	Panels are Seamed to 90°

Fire Barrier: Where required by code, install an approved fire barrier. Refer to a current fire directory listing for fire ratings of this roofing system assembly as well as the location of the fire barrier within the assembly. (See note #2 below)

Note: Outside of the HVHZ, in areas with windspeeds < 170 mph, 1" round plastic caps meeting the requirements of FBC Section 1507.1.1.1, may be used to prevent galvanic reactions.

Underlayment: Minimum ASTM D 226 Type II, installed and anchored per FBC Section 1507.1.1.1 (min).

(or)

Any underlayment with a valid FLPA or Miami-Dade NOA

Note: Outside of the HVHZ, in areas with windspeeds < 170 mph, 1" round plastic caps meeting the requirements of FBC Section 1507.1.1.1 may be used to prevent galvanic reactions.

Minimum Substrate: ½' (15/32" min) 4-ply CDX Plywood or ¾" solid wood planks (S.G. = .42 min) nailed to 2x rafters spaced 24" max. on center with 8d ring-shank nails spaced 6" on center.

Note: The ¾" wood planking must be installed as a solid deck and must be nailed or fastened in a manner equal to the deck above, or as specified by a Florida licensed Architect/Engineer

Other Limitations:

1. Roof slope must meet requirements of FBC Sections 1507.4.2 or 1515.2.
2. Fire classification is not a part of this evaluation. Refer to a current Approved Roofing Materials Directory for fire ratings of this product.
3. Design of substrate is by others and is not a part of this evaluation.
4. All panel system perimeters, penetrations, and transitions to be flashed and sealed per the requirements of RAS 133.
5. Rational analysis, provided by a Florida licensed Architect/Engineer per FAS 61G20.3.005(e), may be used for project specific approval by the local authorities having jurisdiction.
6. Where required by the Florida Building Code, panels shall be permanently labeled with the manufacturer's name and/or logo, and the following statement, "Dynamic Metals FL #27499.9, DM Class 1500".

Panel Forming:

These panels may be jobsite roll formed with the following Dynamic Metals machines, per approval of 3rd party QA provider, to the dimensions shown on Drawing 15MSC-HZ:

SSQ-6800617	SSQ-5150216	SSQ-6810617
SSQ-6690517	SSQ-4560615	SSQ2-2310920
5VC-0490718	5VC-0360516	SSQ2-2320920

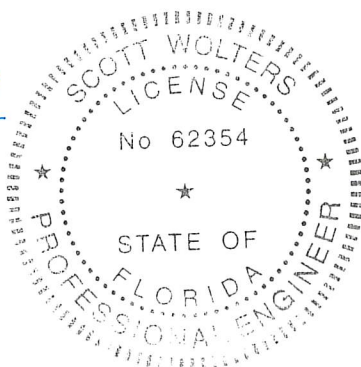
Re-Roofing:

The DM Class 1500 16 Oz. Copper 1-1/2" Mechanical Seam 16" Wide Roof Panel may be installed over a single layer of existing asphalt shingles, provide the existing roof meets the requirements of Section 1521 (HVHZ) or Section 1511 (outside of HVHZ) of the Florida Building Code.

If you have any questions or need more information concerning this approval, please contact me.

Thank you,

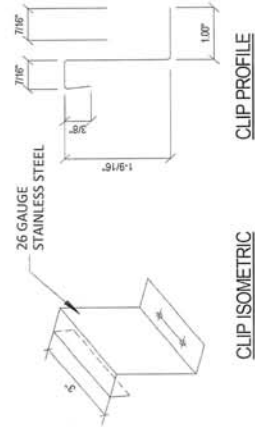

Scott Wolters
FL PE# 62354
APR 15 2021



DM CLASS 1500 1 1/2" MECHANICAL SEAM 16 OZ COPPER ROOF PANEL, 16" WIDE (HVHZ)



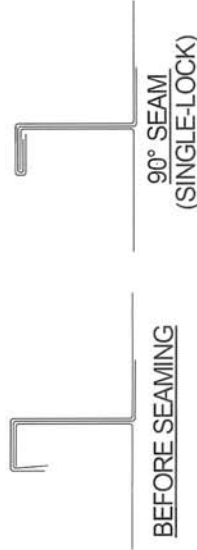
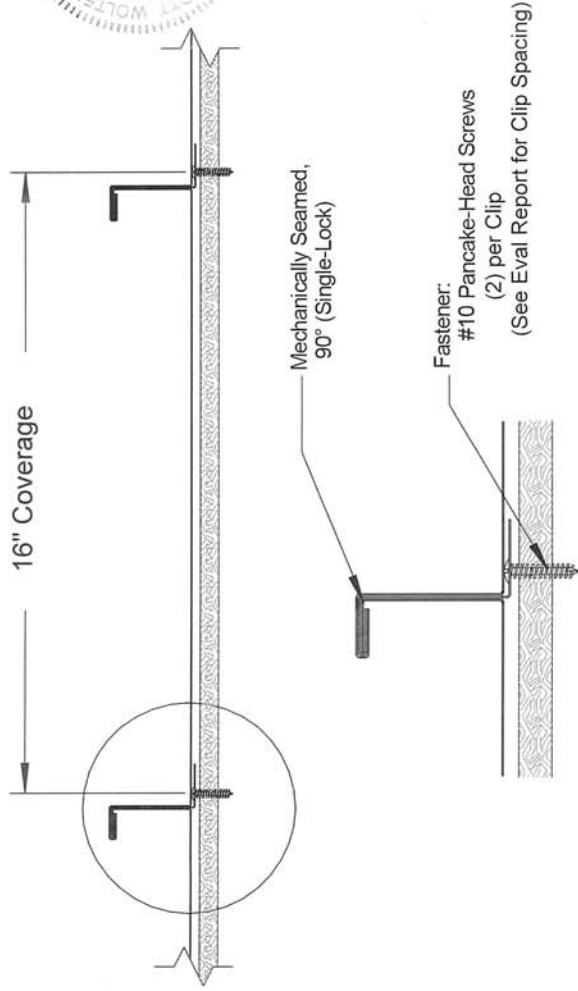
Panel Profile



CLIP ISOMETRIC

CLIP PROFILE

3" Panel Clip Profile



DATE	REV.#	PRINTS ISSUED FOR	NAME
6/18/18		1ST SUBMITTAL	
8/15/19		NAME CHANGE	



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DWG: 15MSC-HZ
 SHEET: 1/1