# **WOLTERS ENGINEERING**

ENGINEERING, DRAFTING, CONSULTING

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## PRODUCT EVALUATION (FOR HVHZ APPROVED PRODUCT)

PRODUCT:

DM CLASS 1500 .032" ALUMINUM 11/2" MECHANICAL SEAM 20" WIDE

**ROOF PANEL** (FLPA# 27499.8)

MANUFACTURER:

DYNAMIC METALS, LLC

3201 SE DOMINICA TERRACE

STUART, FL 34997

To all concerned,

The DM Class 1500 Series .032" Aluminum 1½" Mechanical Seam 20" Roof Panel, manufactured by Dynamic Metals LLC, is a non-structural Fluropon painted aluminum roof panel (25 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 TAS 100, TAS 125, and ASTM E2140 by Intertek B&C, with results shown in test reports G3443.43-450-44, H2687.02-450-44, and M1607.5-450-44. 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 "15MSA20-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 15MSA20-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.

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

Overall Limitations:

Maximum Panel Width:

20"

Minimum Rib Height:

1 1/3"

Clip Anchors:

26 Ga galvanized steel, 2" long HVHZ: 1"/12"

Min. Slope:

Non-HVHZ: 1/2"/12"

	Option #1	Option #2	
	Installation	Installation	
Max. Design Pressure:	-156 psf	-198.5 psf	
Clip Anchor Spacing:	4" From Ends, 13" Max. O.C.	4" From Ends, 10 1/2" Max. O.C.	
Min Panel Fasteners:	#10x1" Panclip Fasteners	#10x1" Panclip Fasteners	
	(2) Per Clip	(2) Per Clip	
Panel Seam Sealant	Continuous bead of Bostik 915 on	Continuous bead of Bostik 915 on	
	both sides of seam	both sides of seam	
	(at slopes < 2"/12" only)	(at slopes < 2"/12" only)	
	Panels are Seamed to 90°	Panels are Seamed to 90°	

<u>Fire Barrier:</u> 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.
- 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 #27499.8, DM Class 1500".

#### Panel Forming:

These panels may be jobsite roll formed with the following Dynamic Metals machines, per approval of 3<sup>rd</sup> party QA provider, to the dimensions shown on Drawing 15MSA20-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 Series .032" Aluminum 1-1/2" Mechanical Seam 20" 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.



