

Nemo etc.

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ENGINEER EVALUATE TEST CONSULT

EVALUATION REPORT

Eagle Roofing Products, LLC 1575 East Country Road 470 Sumterville, FL 33585 (800) 400-3245 Evaluation Report E1322.09.06-R6

FL7473-R9

Date of Issuance: 02/24/2009 Revision 6: 09/28/2020

SCOPE:

This Evaluation Report is issued under **Rule 61G20-3** and the applicable rules and regulations governing the use of construction materials in the State of Florida. The documentation submitted has been reviewed by Robert Nieminen, P.E. for use of the product under the Florida Building Code. The product described herein has been evaluated for compliance with the **7**th **Edition (2020) Florida Building Code** sections noted herein.

DESCRIPTION: Eagle Roof Tiles

LABELING: Labeling shall be in accordance with the requirements of the Accredited Quality Assurance Agency noted herein.

CONTINUED COMPLIANCE: This Evaluation Report is valid until such time as the named product(s) changes, the referenced Quality Assurance or production facility location(s) changes, or Code provisions that relate to the product(s) change. Acceptance of our Evaluation Reports by the named client constitutes agreement to notify NEMO ETC, LLC of any changes to the product(s), the Quality Assurance or the production facility location(s). NEMO ETC, LLC requires a complete review of its Evaluation Report relative to updated Code requirements with each Code Cycle.

ADVERTISEMENT: The Florida Product Approval Number (FL#) preceded by the words "NEMO|etc. Evaluated" may be displayed in advertising literature. If any portion of the Evaluation Report is displayed, then it shall be done in its entirety.

INSPECTION: Upon request, a copy of this entire Evaluation Report shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This Evaluation Report consists of pages 1 through 5.

Prepared by:

Robert J.M. Nieminen, P.E.

Florida Registration No. 59166, Florida DCA ANE1983



The facsimile seal appearing was authorized by Robert Nieminen, P.E. on 09/28/2020. This does not serve as an electronically signed document.

CERTIFICATION OF INDEPENDENCE:

- 1. NEMO ETC, LLC does not have, nor does it intend to acquire or will it acquire, a financial interest in any company manufacturing or distributing products it evaluates.
- 2. NEMO ETC, LLC is not owned, operated or controlled by any company manufacturing or distributing products it evaluates.
- 3. Robert Nieminen, P.E. does not have nor will acquire, a financial interest in any company manufacturing or distributing products for which the evaluation reports are being issued.
- 4. Robert Nieminen, P.E. does not have, nor will acquire, a financial interest in any other entity involved in the approval process of the product.
- 5. This is a building code evaluation. Neither NEMO ETC, LLC nor Robert Nieminen, P.E. are, in any way, the Designer of Record for any project on which this Evaluation Report, or previous versions thereof, is/was used for permitting or design guidance unless retained specifically for that purpose.

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ROOFING SYSTEM EVALUATION:

1. SCOPE:

Product Category: Roofing
Sub-Category: Roofing Tiles

Compliance Statement: Eagle Roof Tiles, as produced by **Eagle Roofing Products**, **LLC**, have demonstrated compliance with the following sections of the **7**th **Edition (2020) Florida Building Code** through testing in accordance with the following Standards. Compliance is subject to the Installation Requirements and Limitations / Conditions of Use set forth herein.

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7)	СТЛ	NDA	DDC:
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Section	<u>Property</u>	<u>Standard</u>	<u>Year</u>
1507.3.5, R905.3.5	Material standard	ASTM C1492	2003(2009)
1507.3.7, R905.3.7	Application	FRSA/TRI (09-18)	2018
1504.2.1.1	Overturning Moment	SSTD 11	1997

3. REFERENCES:

<u>Entity</u>	Examination	<u>Reference</u>	<u>Date</u>
ATL (TST3782)	ASTM C1492	RT0310.01-17, 02-17, 03-17	03/15/2017
ATL (TST3782)	ASTM C1492 – Freeze/thaw	RT0706.01-17, 02-17, 03-17	09/25/2017
Tile Roof Industry Alliance	SSTD 11	Membership Letter	11/29/2005
Tile Roof Industry Alliance	Membership confirmation	tileroofing.org	Current
Intertek/ATI (QUA1844)	Quality Assurance	Inspection Report	05/28/2020
Intertek/ATI (QUA1844)	Quality Assurance	Florida BCIS	Current

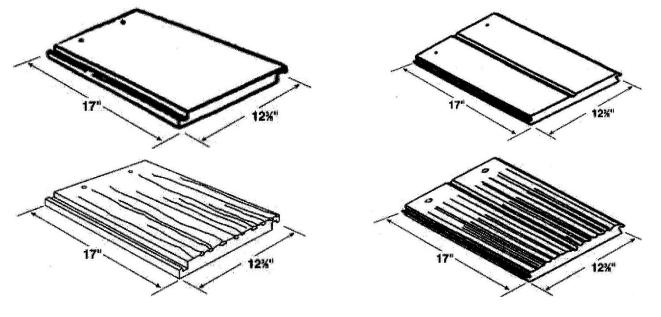
4. PRODUCT DESCRIPTION:

	Product	Material Standard	Plant(s)

4.1 Low Profile Concrete Tile

ASTM C1492, Type III







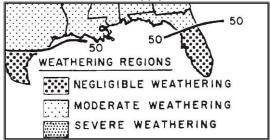
Product **Material Standard** Plant(s) Low Profile Concrete Tile ASTM C1492, Type III Sumterville, FL 4.1 4.2 Medium Profile Concrete Tile ASTM C1492, Type II Sumterville, FL High Profile Concrete Tile ASTM C1492, Type II Sumterville, FL

5. LIMITATIONS:

- 5.1 This is a building code evaluation. Neither NEMO ETC, LLC nor Robert Nieminen, P.E. are, in any way, the Designer of Record for any project on which this Evaluation Report, or previous versions thereof, is/was used for permitting or design guidance unless retained specifically for that purpose.
- 5.2 This Evaluation Report is not for use in FBC High Velocity Hurricane Zone jurisdictions (i.e., Broward and Miami-Dade Counties).
- 5.3 This Evaluation Report pertains to above-deck roof components. Roof decks and structural members shall be in accordance with FBC requirements to the satisfaction of the Authority Having Jurisdiction.
- 5.4 This Evaluation Report does not include evaluation of fire classification. Refer to **FBC 1505** or **R902** for requirements and limitations regarding roof assembly fire classification. Refer to **FBC 2603** for requirements and limitations concerning the use of foam plastic insulation.
- 5.5 This Evaluation Report does not include evaluation of roof edge termination.
- 5.6 Refer to FBC 1511 or R908 for requirements and limitations regarding recover installations.



- 5.6.1 For mechanically attached components over existing roof decks, fasteners shall be tested in the existing deck for withdrawal resistance. A qualified design professional shall review the data for comparison to the minimum requirements for the system. Testing shall be in accordance with ANSI/SPRI FX-1 or Testing Application Standard TAS 105.
- 5.7 "Color-Bonded" or "Slurry-Coated" tiles are limited to use on projects in areas subjected to weathering indices of 50 or less (negligible weathering), as outlined in **Figure 1 of ASTM C1492-03(2009)**, reproduced below for reference. This limitation does not apply to the "Color-Through" product offering.



5.8 All components in the roof assembly shall have quality assurance audit in accordance with F.A.C. Rule 61G20-3.

6. INSTALLATION:

6.1 **Eagle Roof Tiles** may be mechanically fastened, mortar-set or adhesive-set. Installation shall comply with manufacturer's current published instructions, but not less than the requirements of **FBC 1507.3** and the **FRSA/TRI** Florida High Wind Concrete and Clay Roof Tile Installation Manual, Sixth Edition.

6.2 Underlayment:

Underlayment shall hold current Florida Product Approval for use with tile roofing systems. The underlayment Product Approval shall specify allowable method(s) of tile installation (mechanical attachment, mortar-set or adhesive-set) for use with the specific underlayment. The underlayment Product Approval shall specify attachment methods for the underlayment system to resist wind uplift design loads in accordance with Table 1A of FRSA/TRI Florida High Wind Concrete and Clay Roof Tile Installation Manual, Sixth Edition or the critical (highest) design pressure determined in accordance with FBC 1609 or FBC Residential Chapter 3.

6.3 <u>Tile Attachment:</u>

6.3.1 Mechanically Attached Tile:

Wind load resistance shall be in accordance with Table 3 of **FRSA/TRI** Florida High Wind Concrete and Clay Roof Tile Installation Manual, Sixth Edition to resist the Uplift Moment determined in Table 2HB, 2HC, 2HD, 2GB, 2GC or 2GD of **FRSA/TRI** Florida High Wind Concrete and Clay Roof Tile Installation Manual, Sixth Edition or **FBC 1609.5.3**.

6.3.2 Mortar-Set Tile:

Wind load resistance shall be in accordance with Table 2HB, 2HC, 2HD, 2GB, 2GC or 2GD of **FRSA/TRI** Florida High Wind Concrete and Clay Roof Tile Installation Manual, Sixth Edition or **FBC 1609.5.3** in conjunction with the mortar manufacturer's Product Approval.

6.3.3 Adhesive-Set Tile:

Wind load resistance shall be in accordance with Table 2HB, 2HC, 2HD, 2GB, 2GC or 2GD of **FRSA/TRI** *Florida High Wind Concrete and Clay Roof Tile Installation Manual*, Sixth Edition or **FBC 1609.5.3** in conjunction with the adhesive manufacturer's current Product Approval. Refer to the <u>current version</u> of the referenced Florida Product Approval for paddy-placement details and performance data.



	TILE ADHESIVES FOR ADHESIVE-SET TILE SYSTEMS		
Manufacturer Product(s)		Florida Product Approval	
	"Touch N' Seal Storm Bond Roof Tile Adhesive"	FL14506	
DAP Foam, Inc.	"Touch N' Seal Storm Bond 2 Two-Component Roof Tile Adhesive"	FL21374	
DuPont de Nemours, Inc.	"TILE BOND™ Roof Tile Adhesive"	FL22525	
ICD Adhasivas & Caplants Inc	"POLYSET® AH-160"	FL6332	
ICP Adhesives & Sealants, Inc.	"POLYSET® RTA-1"	FL6276	

6.3.4 <u>Hip and Ridge Tile</u>:

Tile shall be installed in accordance with FRSA/TRI Florida High Wind Concrete and Clay Roof Tile Installation Manual, Sixth Edition. For hip and ridge tile installations atop hip and ridge metal, refer to the hip and ridge metal manufacturer's current Product Approval (e.g., FL5374) or test report in accordance with SSTD 11 for allowable loads to resist those determined in accordance with Table 1A of FRSA/TRI Florida High Wind Concrete and Clay Roof Tile Installation Manual, Sixth Edition.

7. LABELING:

7.1 Each unit shall bear the imprint or identifiable marking of the manufacturer's name or logo. Tile lots shall be labeled in accordance with the requirements of the Accredited Quality Assurance Agency noted herein.



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(LOCATED ON UNDERSIDE OF TILE)

(LOCATED ON FRONTSIDE OF TILE)

7.2 Tile not tested for freeze-thaw shall state clearly that the lot has not been tested for freeze-thaw acceptance on all lot tags or certification.

8. BUILDING PERMIT REQUIREMENTS:

As required by the Building Official or Authority Having Jurisdiction to properly evaluate the installation of this product.

9. MANUFACTURING PLANTS:

Contact the named QA entity for manufacturing facilities covered by **F.A.C. Rule 61G20-3** QA requirements. Refer to Section 4 herein for products and production locations having met codified material standards.

10. QUALITY ASSURANCE ENTITY:

Architectural Testing, Inc., and Intertek Company – QUA1844; (847) 718-6307; naura.alcheikh@intertek.com

- END OF EVALUATION REPORT -

¹ ASTM C1492-03(2009), Standard Specification for Concrete Roof Tile, © ASTM International