

EXTERIOR RESEARCH & DESIGN, LLC.

Certificate of Authorization #9503 353 CHRISTIAN STREET, UNIT #13 OXFORD, CT 06478

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EVALUATION REPORT

Eagle Roofing Products Florida LLC. 1575 East Country Road 470 Sumterville, FL 33585

Evaluation Report E1322C.09.06-R3

FL7473-R6

Date of Issuance: 02/24/2009 Revision 3: 04/21/2015

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 and Florida Building Code, Residential Volume. The products described herein have been evaluated for compliance with the 5th Edition (2014) Florida Building Code sections noted herein.

DESCRIPTION: Eagle Roof Tiles

LABELING: Labeling shall be in accordance with the requirements 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 documentation changes, or provisions of the Code that relate to the product change. Acceptance of this Evaluation Report by the named client constitutes agreement to notify Robert Nieminen, P.E. if the product changes or the referenced Quality Assurance documentation changes. Trinity|ERD requires a complete review of this Evaluation Report relative to updated Code requirements with each Code Cycle.

ADVERTISEMENT: The Evaluation Report number preceded by the words "Trinity|ERD 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 4.

Prepared by:

Robert J.M. Nieminen, P.E. Florida Registration No. 59166, Florida DCA ANE1983

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The facsimile seal appearing was authorized by Robert Nieminen, P.E. on 04/21/2015. This does not serve as an electronically signed document. Signed, sealed hardcopies have been transmitted to the Product Approval Administrator and to the named client

CERTIFICATION OF INDEPENDENCE:

- Trinity|ERD 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. Trinity | ERD 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 Trinity|ERD 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.



ROOFING SYSTEM EVALUATION:

1. SCOPE:

Product Category: Roofing
Sub-Category: Roofing Tiles

Compliance Statement: Eagle Roof Tiles, as produced by Eagle Roofing Products Florida LLC, have demonstrated compliance with the following sections of the 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.

2. STANDARDS:

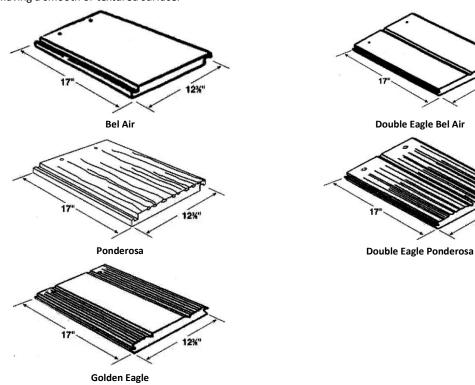
Section	Property	Standard	Year
1507.3.5, R905.3.5	Physical Properties	ASTM C1492	2003
1507.3.7, R905.3.7	Attachment Requirements	FRSA/TRI April 2012 (04-12)	2012
1711.2.1	Overturning Moment	SSTD 11	1997

3. REFERENCES:

<u>Entity</u>	Examination	<u>Reference</u>	<u>Date</u>
ATL (TST 3782)	ASTM C1492	RT0324.01-11	04/03/2011
ATL (TST 3782)	ASTM C1492	RT0324.02-11	04/03/2011
ATL (TST 3782)	ASTM C1492	RT0324.03-11	04/03/2011
Miami-Dade (CER1592)	HVHZ certification	11-0321.01	05/12/2011
Miami-Dade (CER1592)	HVHZ certification	11-0321.03	05/12/2011
Miami-Dade (CER1592)	HVHZ certification	12-0430.04	08/02/2012
TRI	SSTD 11	Membership Letter	11/29/2005
ATI (QUA 1844)	Quality Assurance	Service Confirmation	Exp. 12/31/2015

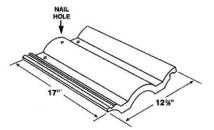
4. PRODUCT DESCRIPTION:

4.1 Bel Air, Double Eagle Bel Air, Ponderosa, Double Eagle Ponderosa and Golden Eagle are low (flat)-profile concrete roof tiles having a smooth or textured surface.

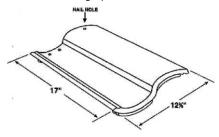




4.2 MALIBU are medium-profile concrete roof tiles.

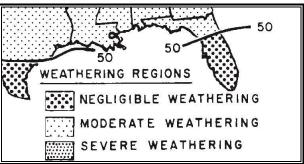


4.3 **CAPISTRANO** are high-profile concrete roof tiles.



5. LIMITATIONS:

- This is a building code evaluation. Neither Trinity|ERD 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 the HVHZ.
- 5.3 Fire classification is not part of this evaluation; refer to FBC Section 1505.2, Exception 2 or current Approved Roofing Materials Directory for fire rating of this product.
- Underlayment shall be that approved by Eagle Roofing Products, LLC, which holds 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 and/or adhesive-set) for use with the specific underlayment. For mortar-set or adhesive-set tile roofing applications, 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 April 2012 (04-12).
- 5.5 This Evaluation Report is limited to use on projects in areas subjected to weathering indices of 50 or less (negligible weathering), as outlined in Figure 1 of ASTM C1492-03ⁱ, reproduced below for reference.



5.6 All products in the roof assembly shall have quality assurance audit in accordance with the Florida Building Code and 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 Section 1507.3 and the FRSA/TRI Florida High Wind Concrete and Clay Tile Installation Manual, 5th Edition.
- 6.2 Attachment
- 6.2.1 Mechanically Attached Tile: Wind load resistance shall be in accordance with Table 3 of FRSA/TRI April 2012 (04-12) to resist the Uplift Moment determined in Table 2A or 2B of FRSA/TRI April 2012 (04-12) or FBC Section 1609.5.3.
- 6.2.2 Mortar-Set or Adhesive-Set Tile: Wind load resistance shall be in accordance with FBC Section 1609.5.3 in conjunction with the mortar or adhesive manufacturer's Product Approval.
- 6.2.3 Hip and Ridge Tile: Tile shall be installed in accordance with FRSA/TRI April 2012 (04-12). For hip and ridge tile installations atop hip and ridge metal, refer to the hip and ridge metal manufacturer's 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 April 2012 (04-12).

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.
- 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 in order to properly evaluate the installation of this product.

9. MANUFACTURING PLANTS:

Contact the noted QA agency for information on product locations covered for F.A.C. Rule 61G20-3 QA requirements.

10. QUALITY ASSURANCE ENTITY:

Architectural Testing, Inc. – QUA1844; (717) 764-7700

- END OF EVALUATION REPORT -

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