



EVALUATION REPORT

FLORIDA BUILDING CODE 5TH EDITION (2014)

Manufacturer: EAGLE ROOFING PRODUCTS FLORIDA LLC
1575 E CR 478
Sumterville, FL 33585
(800) 400-4235
<http://www.eagleroofing.com>

Issued July 6, 2015

Manufacturing Plants: Sumterville, FL

Quality Assurance: Architectural Testing, Inc. (QUA1844)

SCOPE

Category: Roofing
Subcategory: Roofing Tiles
Code Sections: 1507.3.5, 1507.3.7, 1523.6.5.2, 1523.6.5.2.2, 1523.6.5.2.3
Properties: Physical Properties, Attachment Requirements, Wind Driven Rain, Static Uplift Resistance

PRODUCT DESCRIPTION

Capistrano

Profile: ASTM C 1492, TAS 112, high profile, concrete roof tile
Description: TAS 112 type 1a, high profile, interlocking class III concrete tile
Dimensions: 17.0" x 12.25" x 3.0"

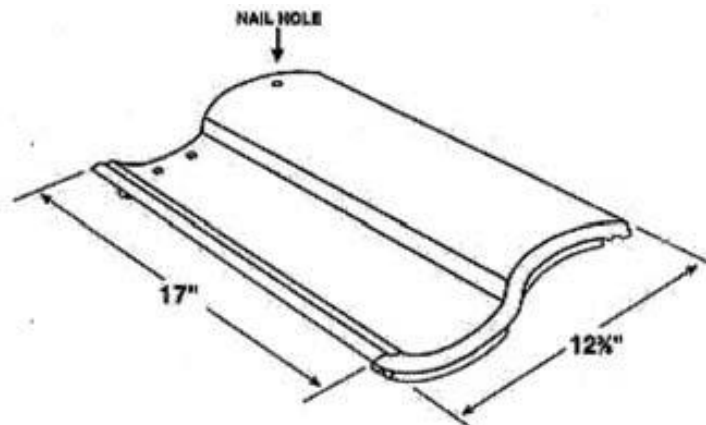


Figure 1. Capistrano

Malibu

Profile: ASTM C 1492, TAS 112, medium profile, concrete roof tile
Description: TAS 112 type 1b, low profile, interlocking class III concrete tile
Dimensions: 17.0" x 12.375" x 2.125"

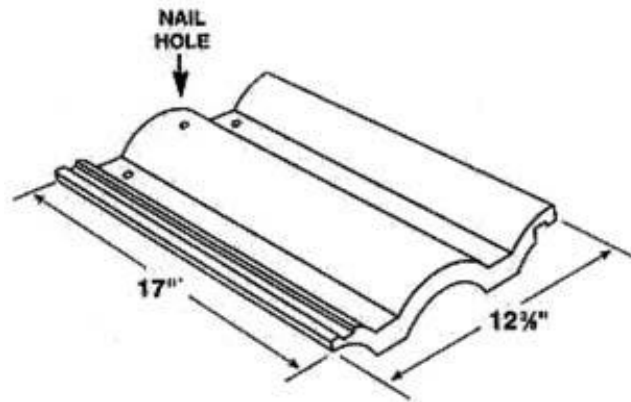


Figure 2. Malibu

Bel Air

Profile: ASTM C 1492, TAS 112, flat profile, concrete roof tile
Description: TAS 112 type 3a, flat profile, interlocking class III concrete tile
Dimensions: 17.0" x 12.375" x 1.25"

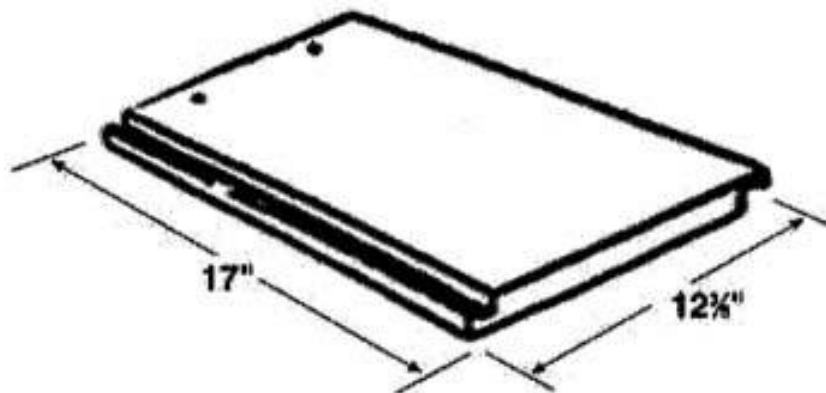


Figure 3. Bel Air

APPLICATION METHOD

Eagle Hybrid Installation for Capistrano, Malibu, and Bel Air Concrete Roof Tile	
Slope:	Limited to slopes 3:12 or greater in the HVHZ; Outside the HVHZ, shall be in accordance with the recommendations of the FRSA/TRI <i>Florida High Wind Concrete and Clay Roof Tile Installation Manual</i> , Fifth Edition Revised or RAS 118.
Roof Deck:	Solid or closely fitted min. 15/32-inch plywood sheathing for new and existing construction at max. 24 in. span; In the HVHZ, new construction shall be min. 19/32 in. plywood at max. 24 in. span; Designed by others in accordance with FBC requirements.
Underlayment:	Installed in accordance with FBC requirements. In the HVHZ, the minimum underlayment shall be Hot Mop 30/90 installed as described in RAS 118 Section 3.01.
Attachment:	A minimum 6-inch x1-inch x 1-inch paddy of Dow TILE BOND™ shall be placed within the 3-inch head lap as shown in Figure 4 thru Figure 6. The upper tile shall be set immediately into the adhesive paddy. All tiles shall be secured by two (2) #8 x min. 3-inch Simpson Strong-Tie Quik Drive WSCD Roof Tile Screws with sufficient length to penetrate through the plywood deck a minimum 1/2-inch and located into the factory located fastener holes. All penetrations in the underlayment shall be sealed in accordance with RAS 118 (HVHZ) and FRSA/TRI <i>Florida High Wind Concrete and Clay Roof Tile Installation Manual</i> , Fifth Edition Revised (non-HVHZ).



Figure 4. Adhesive Paddy Location for Capistrano

Location of adhesive paddy

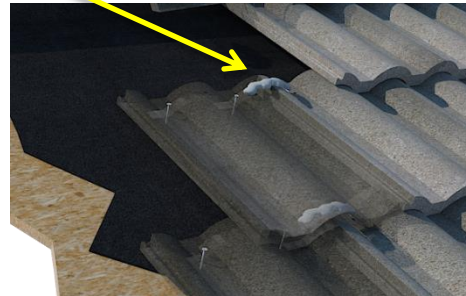


Figure 5. Adhesive Paddy Location for Malibu

Location of adhesive paddy

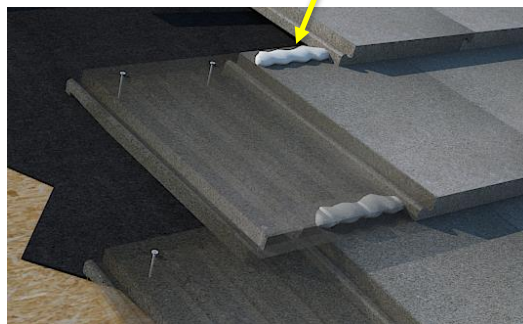


Figure 6. Adhesive Paddy Location for Bel Air

Data for Attachment Calculations									
Roof Tile	Nominal Weight (W) and Dimensions (l x w)			Aerodynamic Multipliers λ (ft ³)	Restoring Moments due to Gravity - M _g (ft-lbf) Direct Deck				
	W (lbf)	L (ft)	w (ft)	Direct Deck Application	3":12"	4":12"	5":12"	6":12"	≥7":12"
Capistrano	9.7	1.42	1.02	0.30	6.83	6.75	6.65	6.52	6.38
Malibu	9.2	1.42	1.03	0.31	6.47	6.37	6.24	6.09	5.93
Bel Air	11.8	1.42	1.03	0.29	8.27	8.15	8.00	7.81	7.61

Attachment Resistance Expressed as a Moment							
Hybrid installation system							
Roof Tile	Fastener ¹			Adhesive			M _f (ft-lbf)
	Type	Count	Size	Adhesive	Paddy Size ²	Paddy Weight ²	
Capistrano	Screw	2	#8	Dow TILE BOND™	6"x1"x1"	13.7g	47
Malibu	Screw	2	#8	Dow TILE BOND™	6"x1"x1"	10.4g	73
Bel Air	Screw	2	#8	Dow TILE BOND™	6"x1"x1"	10.4g	66

Notes: 1) Simpson Strong-Tie Quik Drive WSCD Roof Tile Screw shall be min. 3-inch with sufficient length to penetrate through the plywood deck a min. 1/2-inch
2) Minimum dimensions and weight for adhesive application

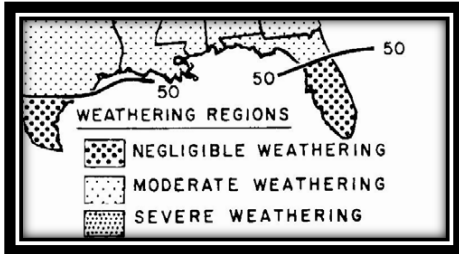
LABELING

- 1) All tiles shall bear the identifiable marking of the manufacturer's name or logo as follows:



LIMITATIONS

- 1) Fire Classification is not within the scope of this evaluation.
- 2) Installation of the evaluated products shall comply with FBC Section 1507.3, FRSA/TRI *Florida High Wind Concrete and Clay Roof Tile Installation Manual*, Fifth Edition Revised and the manufacturer's published application instructions. Installations in the HVHZ shall comply with RAS 118.
- 3) All products listed in this report shall be manufactured under a quality assurance program in compliance with Rule 61G20-3.
- 4) Installation of the evaluated products shall be limited to projects in areas subjected to weathering indices of 50 or greater as illustrated in ASTM C 1492-03, figure 1 (see below).

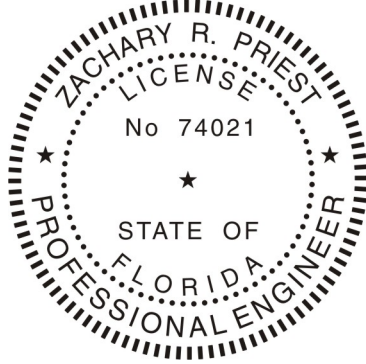


REFERENCES

<u>Entity</u>	<u>Report No.</u>	<u>Standard</u>	<u>Year</u>
American Test Lab of South Florida Inc (TST3782)	RT0610.01-14	TAS 112	1995
American Test Lab of South Florida Inc (TST3782)	RT0610.01-14	ASTM C 1492	2003
American Test Lab of South Florida Inc (TST3782)	RT0610.02-14	TAS 112	1995
American Test Lab of South Florida Inc (TST3782)	RT0610.02-14	ASTM C 1492	2003
American Test Lab of South Florida Inc (TST3782)	RT0610.03-14	TAS 112	1995
American Test Lab of South Florida Inc (TST3782)	RT0610.03-14	ASTM C 1492	2003
American Test Lab of South Florida Inc (TST3782)	RT0603.01-13	TAS 101/TAS 102	1995
PRI Construction Materials Technologies	ERPF-057-02-01	TAS 101/TAS 102	1995
PRI Construction Materials Technologies	ERPF-058-02-01	TAS 101/TAS 102	1995
PRI Construction Materials Technologies	ERPF-059-02-01	TAS 100	1995
PRI Construction Materials Technologies	ERPF-060-02-01	TAS 100	1995
PRI Construction Materials Technologies	ERPF-061-02-01	TAS 100	1995

COMPLIANCE STATEMENT

The products evaluated herein by Zachary R Priest P.E. have demonstrated compliance with the Florida Building Code 5th Edition (2014) as evidenced in the referenced documents submitted by the named manufacturer.



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CERTIFICATION OF INDEPENDENCE

CREEK Technical Services, LLC does not have, nor will it acquire, a financial interest in any company manufacturing or distributing products under this evaluation.

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END OF REPORT