



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

**MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION**

11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
T (786)315-2590 F (786) 315-2599

www.miamidade.gov/economy

Crown Building Products of Florida, LLC.
6018 HWY. 72
Arcadia, FL. 34266

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER -Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code including the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: Sanibel Concrete Roof Tile

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA 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 NOA revises NOA# 20-1105.09 and consists of pages 1 through 7.
The submitted documentation was reviewed by Alex Tigera.



NOA No.: 21-0420.12
Expiration Date: 02/13/24
Approval Date: 09/02/21
Page 1 of 7

ROOFING ASSEMBLY APPROVAL

Category: Roofing
Sub-Category: Roofing Tiles
Material: Concrete
Deck Type: Wood

1. SCOPE

This approves a system using **Sanibel Concrete Roof Tile**, as manufactured by **Crown Building Products of Florida, LLC.**, and described in Section 2 of this Notice of Acceptance. For locations where the pressure requirements, as determined by applicable Building Code does not exceed the design pressure values obtained by calculations in compliance with RAS 127 using the values listed in section 4 herein. The attachment calculations shall be done as a moment based system.

2. PRODUCT DESCRIPTION

<u>Manufactured by Applicant</u>	<u>Dimensions</u>	<u>Test Specifications</u>	<u>Product Description</u>
Sanibel Concrete Roof Tile	L = 17" W = 13.25" H = 3.1" Thickness: 0.56"	TAS 112	High profile, interlocking, one-piece, 'S' shaped concrete roof tile (Type 1a Class III), equipped with two nail holes. For direct deck or battened nail-on (4/12 min slope), mortar set or adhesive set applications.
Trim Pieces	L = varies W = varies varying thickness	TAS 112	Accessory trim, concrete roof pieces for use at hips, rakes, ridges and valley terminations. Manufactured for each tile profile.

2.1 PRODUCTS MANUFACTURED BY OTHERS

<u>Product Name</u>	<u>Product Description</u>	<u>Manufacturer (With Current NOA)</u>
ICP Adhesives Polyset® AH-160	Two component polyurethane foam adhesive.	ICP Adhesives and Sealants, Inc.
TILE BOND™ Roof Tile Adhesive	Single component polyurethane foam roof tile adhesive.	DuPont de Nemours, Inc.
Touch 'N Seal StormBond® One Component Polyurethane Roof Tile Adhesive	One component polyurethane foam adhesive.	DAP Foam, Inc.

2.2 MANUFACTURING LOCATION

2.2.1 Arcadia, FL



NOA No.: 21-0420.12
Expiration Date: 02/13/24
Approval Date: 09/02/21
Page 2 of 7

2.3 EVIDENCE SUBMITTED

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Test Name/Report</u>	<u>Date</u>
PRI Construction Materials	ACTI-002-02-01	TAS-112	Sept. 2006
	ACTI-002-02-04	TAS-100	Sept. 2006
Redland Technologies	7161-03	Static Uplift Testing	Dec. 1991
	Appendix III	TAS 102 & TAS 102(A)	
	7161-03	Wind Tunnel Testing	Dec. 1991
	Appendix II	TAS 108(Nail-On)	
	P0402	Withdrawal Resistance Testing of screw vs. smooth shank nails	Sept. 1993
	Letter Dated Aug. 1, 1994	Wind Tunnel Testing	Aug. 1994
		TAS 108 (Nail-On)	
	P0631-01	Wind Tunnel Testing	July 1994
		TAS 108 (Mortar Set)	
Nutting Engineering	13343.1	Physical Properties	June 2006
		TAS 112	
The Center for Applied Engineering, Inc.	25-7688-3	Static Uplift Testing	June 1996
	25-7688-10	TAS 101 (Adhesive Set)	July 1996
		TAS 101 (Mortar Set)	
.	25-7688-5	Static Uplift Testing	June 1996
		TAS 102	
		(3"Headlap, Nails, Direct Deck, New Construction)	
	25-7688-4	Static Uplift Testing	June 1996
		TAS 102	
		(4"Headlap, Nails, Clips)	
Celotex Corporation	520111-3	Static Uplift Testing	Dec. 1998
Testing Services	520191-2-1	TAS 101	March 1999
Trinity/ERD	Calculations	Aerodynamic Multiplier & Restoring Moment Due to Gravity	Sept. 2006
American Test Lab of South Florida	RT1028.01-13	TAS 112	11/13/13
	RT1206.01-13	Aerodynamic Multiplier & Restoring Moment Due to Gravity	02/05/14
	RT1203.01-18	TAS 112	12/11/18
NEMO ETC, LLC	4c-DPBS-20-LSOTM-01.A-R1	TAS 101	12/17/20
PRI Construction Materials Technologies	2002T0003.08	TAS 101	10/06/20

3. LIMITATIONS

- 3.1 Fire classification is not part of this acceptance.
- 3.2 For mortar or adhesive set tile applications, a static field uplift test shall be performed in accordance with TAS 106.
- 3.3 Applicant shall retain the services of a Miami-Dade County Certified Laboratory to perform quarterly test in accordance with TAS 112, appendix 'A'. Such testing shall be submitted to the Miami-Dade Product Control office for review.
- 3.4 Minimum underlayment shall be in compliance with the applicable Roofing Applications Standards listed section 4.1 herein.
- 3.5 30/90 hot mopped underlayment applications may be installed perpendicular to the roof slope unless stated otherwise by the underlayment material manufacturers published literature.
- 3.6 This acceptance is for wood deck applications. Minimum deck requirements shall be in compliance with applicable building code.
- 3.7 Mechanically attached tile minimum slope 4/12.
- 3.8 All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 61G20-3 of the Florida Administrative Code.

4. INSTALLATION

- 4.1 Crown Building Products of Florida, LLC.'s Sanibel Concrete Roof Tile and its components shall be installed in strict compliance with Roofing Application Standard RAS 118, RAS 119, and RAS 120.
- 4.2 Data For Attachment Calculations

Table 1: Average Weight (W) and Dimensions (l x w)

Tile Profile	Weight-W (lbf)	Length-l (ft.)	Width-w (ft.)
Sanibel Concrete Roof Tile	11.33	1.417	1.104

Table 2: Aerodynamic Multipliers - λ (ft³)

Tile Profile	λ (ft ³) Batten Application	λ (ft ³) Direct Deck Application
Sanibel Concrete Roof Tile	0.289	0.313

Table 3: Restoring Moments due to Gravity - M_g (ft.-lbf)

Tile Profile	2":12		3":12"		4":12"		5":12"		6":12"		7":12" or greater	
Sanibel Concrete Roof Tile	Battens	Direct Deck	Battens	Direct Deck	Battens	Direct Deck	Battens	Direct Deck	Battens	Direct Deck	Battens	Direct Deck
	N/A	9.05	N/A	8.96	8.79	8.81	8.60	8.62	8.38	8.40	8.13	8.16

**Table 4: Attachment Resistance Expressed as a Moment - M_r (ft.-lbf)
for Nail-On Systems**

Tile Profile	Fastener Type	Direct Deck (min 15/32" plywood)	Direct Deck (min. 19/32" plywood)	Battens
Sanibel Concrete Roof Tile	2-10d Ring Shank Nails	28.6	41.2	19.4
	1-10d Smooth or Screw Shank Nail	5.1	6.8	2.8
	2-10d Smooth or Screw Shank Nails	6.9	9.2	7.3
	1 #8 Screw	20.7	20.7	18.1
	2 #8 Screws	43.2	43.2	29.8
	1-10d Smooth or Screw Shank Nail (Field Clip)	23.1	23.1	19.0
	1-10d Smooth or Screw Shank Nail (Eave Clip)	29.3	29.3	24.0
	2-10d Smooth or Screw Shank Nails (Field Clip)	27.6	27.6	38.6
	2-10d Smooth or Screw Shank Nails (Eave Clip)	38.1	38.1	41.8

**Table 5: Attachment Resistance Expressed as a Moment M_r (ft.-lbf)
for Two Patty Adhesive¹ Set Systems**

Tile Profile	Tile Application	Minimum Attachment Resistance
Sanibel Concrete Roof Tile	TILE BOND™ Roof Tile Adhesive	19 ²
	TILE BOND™ Roof Tile Adhesive	58 ³
	ICP Adhesives Polyset® AH-160	29.3 ⁴
	Touch 'N Seal StormBond® (one component)	59 ⁵

1 See manufacturer component approval for installation requirements.

2 Medium paddy weight of 8 grams between tile and underlayment, paddy weight of 8 grams on overlap of tile of TILE BOND™ Roof Tile Adhesive

3 Medium paddy weight of 10 grams installed on the center of the back of the tile, second paddy weight of 20 grams on the underlayment. Place tile so that both paddys combine.

4 Medium paddy weight of 8 grams per paddy of Polyset® AH-160

5 Medium paddy weight of 8 grams between tile and underlayment, paddy weight of 4 grams on overlap of tile of Touch 'N Seal StormBond® (one component)

**Table 6: Attachment Resistance Expressed as a Moment - M_r (ft.-lbf)
for Single Patty Adhesive⁶ Set Systems**

Tile Profile	Tile Application	Minimum Attachment Resistance
Sanibel Concrete Roof Tile	ICP Adhesives Polyset® AH-160	66.5 ⁷
	ICP Adhesives Polyset® AH-160	38.7 ⁸

6 See manufactures component approval for installation requirements

7 Large paddy weight of 63 grams of Polyset® AH-160.

8 Medium paddy weight of 24 grams of Polyset® AH-160.

Table 7: Attachment Resistance Expressed as a Moment - M_f (ft.-lbf) for Mortar Set Systems		
Tile Profile	Tile Application	Attachment Resistance
Sanibel Concrete Roof Tile	Mortar Set ⁹	24.5
9 Tile-Tite Roof Tile Mortar.		

5. LABELING

All tiles shall bear the imprint or identifiable marking of the manufacturer's name or logo as seen below or following statement: "Miami-Dade County Product Control Approved".

ACT

**LABEL FOR SANIBEL CONCRETE ROOF TILE
(LOCATED UNDERNEATH OF TILE)**

6. BUILDING PERMIT REQUIREMENTS:

6.1 Application for building permit shall be accompanied by copies of the following:

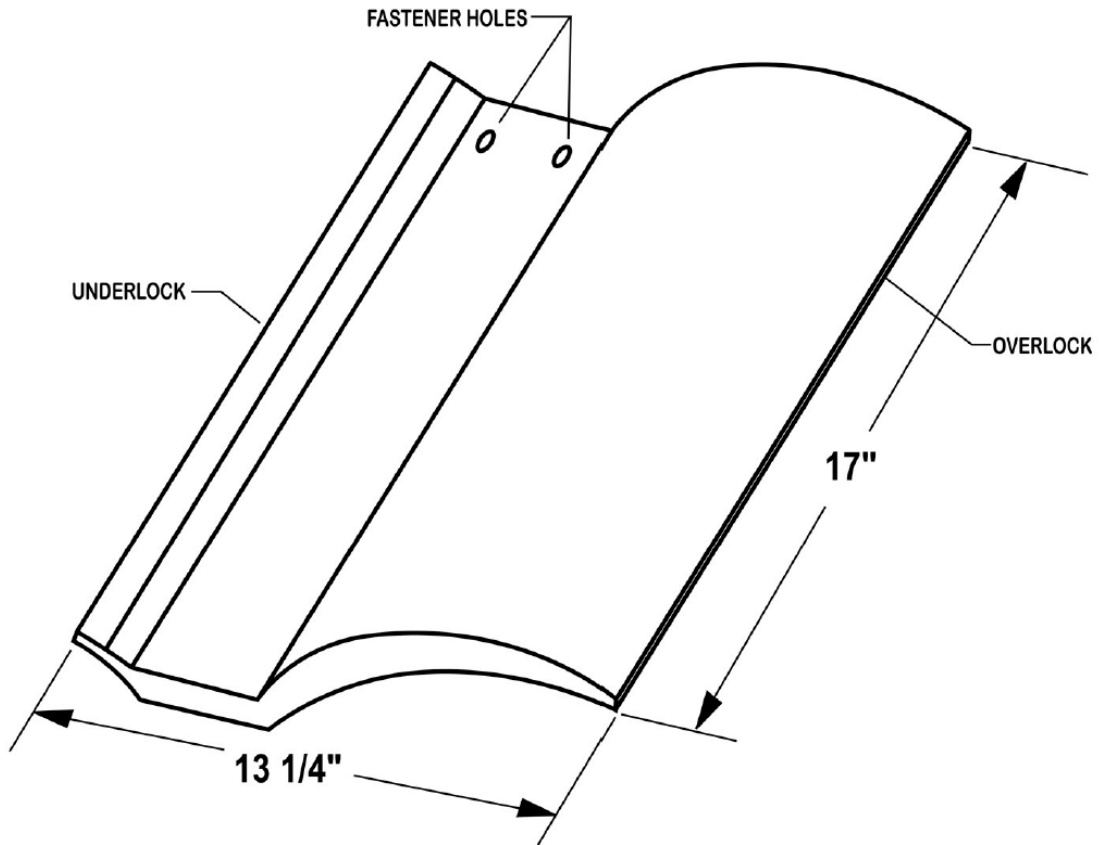
6.1.1 This Notice of Acceptance.

6.1.2 Any other documents required by Building Official or Applicable building code in order to properly evaluate the installation of this system.



NOA No.: 21-0420.12
Expiration Date: 02/13/24
Approval Date: 09/02/21
Page 6 of 7

PROFILE DRAWING



SANIBEL CONCRETE ROOF TILE

END OF THIS ACCEPTANCE