



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

MIAMI-DADE COUNTY  
PRODUCT CONTROL SECTION  
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## NOTICE OF ACCEPTANCE (NOA)

**Ceramica Ouro Branco Ltda**  
**Rod BR101, km 359**  
**Morro Grande – Sangao**  
**Santa Catarina, Brazil, 88717-000**

### 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: Tettogres Ceramic Flat 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 consists of pages 1 through 5.

The submitted documentation was reviewed by Juan E. Collao, R.A.



NOA No.: 13-1119.04  
Expiration Date: 02/13/19  
Approval Date: 02/13/14  
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## ROOFING ASSEMBLY APPROVAL

**Category:** Roofing  
**Sub-Category:** Roofing Tiles  
**Material:** Clay

### 1. SCOPE

This approves a roofing system using **Tettogres Ceramic Flat Tile** Clay Roof Tile, as manufactured **Ceramica Ouro Branco Ltda.** and distributed by **Camilla Pagnan** as 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>
Tettogres Ceramic Flat Tile	L = 17.9" W = 11" Thickness = 0.39"	ASTM C 1167	Flat profile, interlocking clay roof tile equipped with two nail holes. For direct deck, nail-on, or adhesive set applications.
Trim Pieces	l = varies w = varies varying thickness	ASTM C 1167	Accessory trim, clay roof pieces for use at hips, rakes, ridges and valley terminations. Manufactured for each tile profile.

#### 2.1 MANUFACTURING LOCATION

1. Sangao / Santa Catarina, Brazil

#### 2.2 SUBMITTED EVIDENCE:

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Test Name/Report</u>	<u>Date</u>
Fenestration Testing Laboratory Inc.	7537	TAS 100	01/28/14
	7527	TAS 102	01/28/14
American Test Lab of South Florida	RT0726.01-13	ASTM C 1167	11/05/13
	RT0802.02-13	TAS 101	08/09/13



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### 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 Building Code Compliance 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 manufacturer's published literature.
- 3.6 This acceptance is for wood deck applications. Minimum deck requirements shall be in compliance with applicable building code.

### 4. INSTALLATION

- 4.1 Tettogres Ceramic Flat 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)
Tettogres Ceramic Flat	6.1	1.49	0.91

**Table 2: Aerodynamic Multipliers -  $\lambda$  (ft<sup>3</sup>)**

Tile Profile	$\lambda$ (ft <sup>3</sup> ) Direct Deck Application
Tettogres Ceramic Flat	0.29

**Table 3: Restoring Moments due to Gravity - M<sub>g</sub> (ft-lbf)**

Tile Profile	2":12"	3":12"	4":12"	5":12"	6":12"	7":12" or greater
	Direct Deck	Direct Deck	Direct Deck	Direct Deck	Direct Deck	Direct Deck
Tettogres Ceramic Flat	4.47	4.40	4.30	4.19	4.05	3.91



Table 4: Attachment Resistance Expressed as a Moment - $M_f$ (ft-lbf) for Nail-On Systems			
Tile Profile	Fastener Type	Direct Deck (min 15/32" plywood)	Direct Deck (min. 19/32" plywood)
Tettogres Ceramic Flat	(2) #8 x 2" Screw	55.0	55.0

Table 6: Attachment Resistance Expressed as a Moment - $M_f$ (ft-lbf) for Single Patty Adhesive Set Systems		
Tile Profile	Tile Application	Minimum Attachment Resistance
Tettogres Ceramic Flat	3M™ 2-Component Foam Roof Tile Adhesive AH-160	34.4 <sup>1</sup>
1 Large patty placement (2" x 10") of 3M™ 2-Component Foam Roof Tile Adhesive AH-160, average weight per patty of 25.1 grams		

## 5. LABELING

All tiles shall bear the imprint or identifiable marking of the manufacturer's name or logo (See **Detail Below**), or following statement: "Miami-Dade County Product Control Approved".



**IDENTIFICATION MARK FOR TETTOGRES CERAMIC FLAT ROOF TILE  
(LOCATED ON UNDERSIDE OF TILE)**

## 6. BUILDING PERMIT REQUIREMENTS

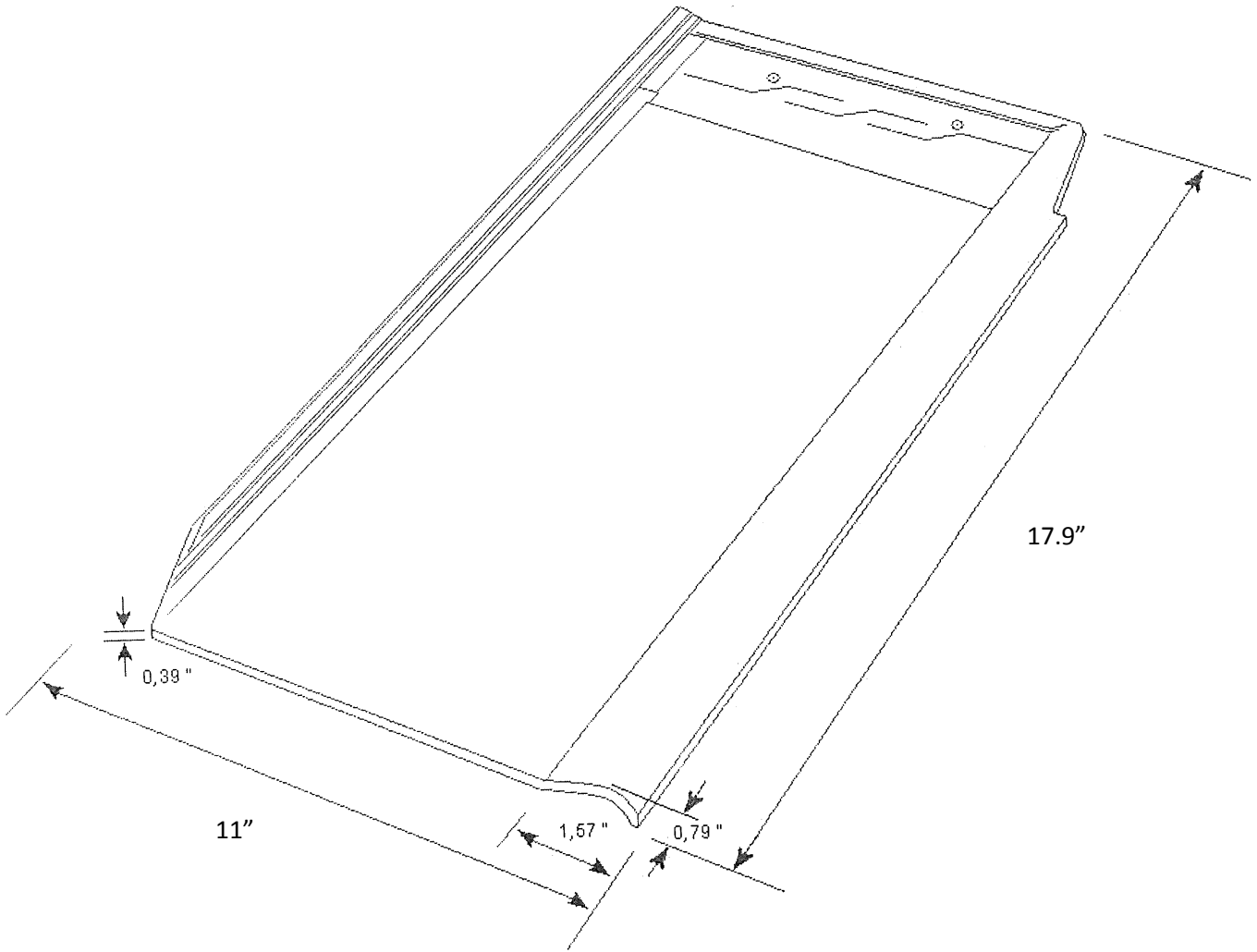
6.1 Application for building permit shall be accompanied by copies of the following:

6.1.1 This Notice of Acceptance.

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



# PROFILE DRAWINGS



**TETTOGRES CERAMIC FLAT ROOF TILE**

**END OF THIS ACCEPTANCE**



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