



BUILDING CODE COMPLIANCE OFFICE (BCCO)  
PRODUCT CONTROL DIVISION

MIAMI-DADE COUNTY, FLORIDA  
METRO-DADE FLAGLER BUILDING  
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**NOTICE OF ACCEPTANCE (NOA)**  
**Hercules of Florida, Inc.**  
**1609 N. Hercules Ave.**  
**Clearwater, FL 33765**

**SCOPE:**

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) 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 Division (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. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division 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.

**DESCRIPTION: Duntex Concrete 'S' 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 4.

The submitted documentation was reviewed by Jorge L. Acebo.



NOA No. 05-0621.01  
Expiration Date:12/01/10  
Approval Date:12/01/05  
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## ROOFING ASSEMBLY APPROVAL

**Category:** Roofing  
**Sub Category:** Roofing Tiles  
**Material:** Cement

### SCOPE

This new roofing system using Duntex Concrete 'S' Tile, as manufactured Hercules of Florida, Inc. described in the Product Description Section 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.

### PRODUCT DESCRIPTION

| <u>Manufactured by Applicant</u> | <u>Dimensions (nominal)</u>                   | <u>Test Specifications</u> | <u>Product Description</u>   |
|----------------------------------|---|----------------------------|--|
| Duntex Concrete 'S'              | l= 15.25"<br>w = 9.9"<br>ht.=2.5"             | TAS 112                    | High profile concrete roof tile. For direct deck adhesive set applications.                  |
| Trim Pieces                      | l = varies<br>w = varies<br>varying thickness | TAS 112                    | Accessory trim, concrete roof pieces for use at hips, rakes, ridges and valley terminations. |

### EVIDENCE SUBMITTED:

| <u>Test Agency</u>       | <u>Test Identifier</u> | <u>Test Name/Report</u> | <u>Date</u> |
|--------------------------|------------------------|-------------------------|-------------|
| PRI Asphalt Technologies | HFI-001-02-01          | TAS 112                 | 02/28/05    |
|                          | HFI-001-02-03          | TAS 101                 | 04/05/05    |



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## LIMITATIONS

1. Fire classification is not part of this acceptance.
2. For mortar or adhesive set tile applications, a static field uplift test maybe performed in accordance with RAS 106.
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.
4. Minimum underlayment shall be in compliance with the applicable Roofing Applications Standards listed in the Installation Section #1. herein.
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.
6. This acceptance is for wood deck applications. Minimum deck requirements shall be in compliance with applicable building code.

## INSTALLATION

1. Duntex Concrete 'S' Roof Tile and its components shall be installed in strict compliance with Roofing Application Standard RAS 120 utilizing one 30.0 gram patty, (1"x 2"x 10") minimum 14 in<sup>2</sup> contact area, of Dow Chemical "Tile Bond Foam Adhesive" only.
2. Data For Attachment Calculations

| <b>Table 1: Average Weight (W) and Dimensions (l x w )</b> |                       |                      |                     |
|--|-----------------------|----------------------|---------------------|
| <b>Tile Profile</b>  | <b>Weight-W (lbf)</b> | <b>Length-l (in)</b> | <b>Width-w (in)</b> |
| Duntex Concrete 'S'  | 7.2                   | 15.25                | 9.9                 |

| <b>Table 2: Aerodynamic Multipliers - <math>\lambda</math>(ft<sup>3</sup>)</b> |  |
|--|--|
| <b>Tile Profile</b>  | <b><math>\lambda</math> (ft<sup>3</sup>)<br/>Direct Deck Application</b> |
| Duntex Concrete 'S'  | 0.179  |

| <b>Table 3: Restoring Moments due to Gravity - M<sub>g</sub> (ft-lbf)</b><br><b>For one, 30.0 gram Patty of Dow Chemical Tile Bond Foam Adhesive(1"x 2"x 10")</b> |               |               |               |               |               |                          |
|---|---------------|---------------|---------------|---------------|---------------|--------------------------|
| <b>Tile Profile</b>   | <b>2":12"</b> | <b>3":12"</b> | <b>4":12"</b> | <b>5":12"</b> | <b>6":12"</b> | <b>7":12" or greater</b> |
|   | Direct Deck              |
| Duntex Concrete 'S'   | 5.23          | 5.19          | 5.12          | 5.01          | 4.86          | 4.68                     |

| <b>Table 4: Attachment Resistance Expressed as a Moment - M<sub>f</sub> (ft-lbf)</b><br><b>for Mortar or Adhesive Set Systems</b> |                         |                              |
|---|-------------------------|------------------------------|
| <b>Tile Profile</b>   | <b>Tile Application</b> | <b>Attachment Resistance</b> |
| Duntex Concrete 'S'   | Adhesive Set            | 36.2 <sup>1</sup>            |

1. Avg. paddy weight 30.0 grams



**LABELING:**

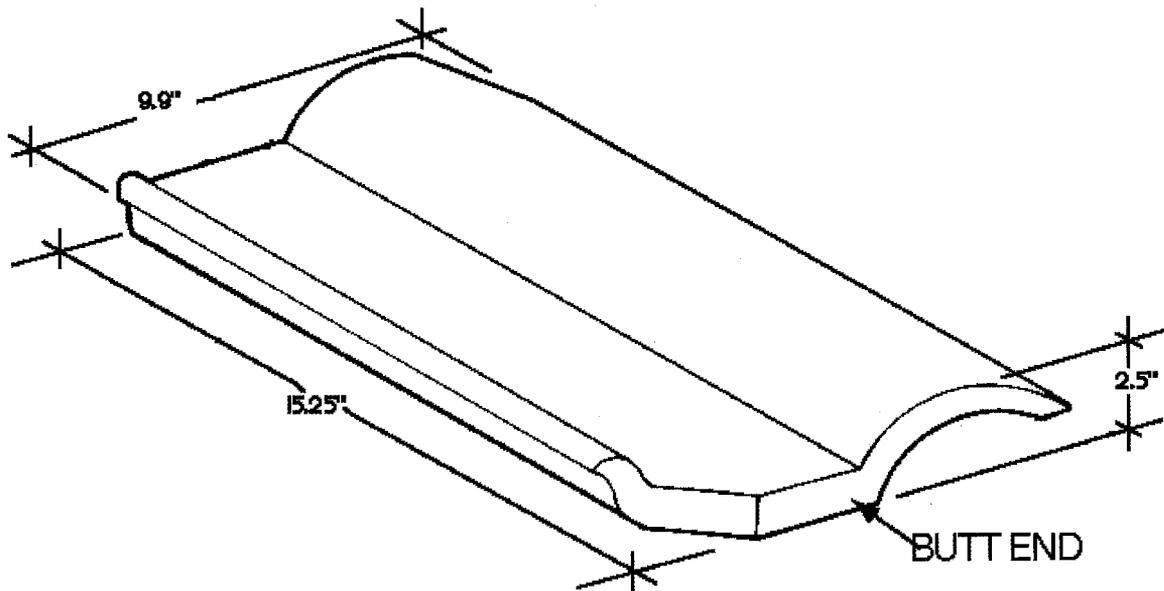
All tiles shall bear the imprint or identifiable marking of the manufacturer's name or logo, or following statement: "Miami-Dade County Product Control Approved".

**BUILDING PERMIT REQUIREMENTS:**

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

1. This Notice of Acceptance.
2. Any other documents required by the Building Official or applicable building code in order to properly evaluate the installation of this system.

**DUNTEX CONCRETE 'S' TILE  
PROFILE DRAWINGS**



**END OF THIS ACCEPTANCE**



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