



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

Eagle Roofing Products LLC
1575 East C.R. 470
Sumterville, FL 33585

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: Low Profile Concrete 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 renews NOA #19-1030.05 and consists of pages 1 through 11.
The submitted documentation was reviewed by Alex Tigera.

AT

NOA No. 21-0315.03
Expiration Date:
Approval Date:
Page 1 of 11

ROOFING ASSEMBLY APPROVAL

Category: Roofing
Sub Category: Roofing Tiles
Material: Concrete

1. SCOPE:

This approves a new roofing system using “**Low Profile Concrete Tile**” as manufactured by **Eagle Roofing Products LLC** in **Sumterville, FL** and described in Section 2 of this Notice of Acceptance. For use in locations where the pressure requirements, as determined by applicable Building Code, do 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>
Low Profile Concrete Tile	Length = 17" Width = 12 ¼" Thickness = ½"	TAS 112 Type 3a Class III	Flat profile concrete roof tile equipped with two nail holes. For adhesive set, direct deck or battened nail-on applications.
Trim Pieces	Length = varies Width = varies varying thickness	TAS 112	Accessory trim, concrete roof pieces for use at hips, rakes and ridges. 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.
DAP Foam Touch N Seal StormBond® 2 Roof Tile Adhesive	Two component polyurethane foam adhesive.	DAP Foam, Inc.

2.2 MANUFACTURING LOCATION

2.2.1. Sumterville, FL

2.3 EVIDENCE SUBMITTED:

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Test Name/Report</u>	<u>Date</u>
PRI Asphalt Technologies	ERPF-001-02-01	TAS 112	Aug. 2006
Redland Technologies	7161-03 Appendix III	Static Uplift Testing TAS 102	Dec. 1991
Redland Technologies	7161-03 Appendix III	Static Uplift Testing TAS 102(A)	Dec. 1991
Redland Technologies	7161-03 Appendix II	Wind Tunnel Testing TAS 108 (Nail-On)	Dec. 1991
Redland Technologies	P0402	Withdrawal Resistance Testing of screw vs. smooth shank nails	Sept. 1993
Redland Technologies	Letter Dated Aug. 1, 1994	Wind Tunnel Testing TAS 108 (Nail-On)	Aug. 1994
Redland Technologies	P09647-01	Wind Tunnel Testing TAS 108 (Mortar Set)	Aug. 1994
The Center for Applied Engineering, Inc.	94-084	Static Uplift Testing TAS 101 (Mortar Set)	May 1994
The Center for Applied Engineering, Inc.	25-7094-(2, 5, & 8)	Static Uplift Testing TAS 102	Oct. 1994
The Center for Applied Engineering, Inc.	25-7183-(5 thru 6)	Static Uplift Testing TAS 102	Feb. 1995
The Center for Applied Engineering, Inc.	25-7214-(1, 5, & 8)	Static Uplift Testing TAS 102	March, 1995
The Center for Applied Engineering, Inc.	25-7487-2	Static Uplift Testing TAS 102	Dec. 1995
The Center for Applied Engineering, Inc.	25-7496-(1 & 4)	Static Uplift Testing TAS 102	Dec. 1995
The Center for Applied Engineering, Inc.	25-7804-6	Static Uplift Testing TAS 102	Sep. 1996
Celotex Corporation Testing Service	520109-1 520111-4	Static Uplift Testing TAS 101	Dec. 1998
Celotex Corporation Testing Service	520191-1	Static Uplift Testing TAS 101	March 1999
Walker Engineering, Inc.	Calculations	Aerodynamic Multiplier	Sep. 2006
Walker Engineering, Inc.	Calculations	Restoring Moments Due to Gravity	Sep. 2006
ATL of South Florida	RT0317.02-21	TAS-112	03/27/21
PRI Construction Materials Technologies	DAPF-001-02-13 DAPF-004-02-01 DAPF-004-02-02	Static Uplift Resistance Testing TAS 101 (Adhesive)	11/30/17 07/09/18 07/09/18
NEMO ETC, LLC	4c-DPBS-20- LSOTM01.D.R1	TAS 101	12/17/20

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 in accordance with TAS 106 shall be required, refer to applicable Building Code.
- 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 County Product Control Section 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 All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code Rule 61G20-3 of the Florida Administrative Code.

4 INSTALLATION:

- 4.1 Eagle Roofing Products LLC Low Profile Flat Concrete Roof Tiles 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)
Low Profile Concrete Tile	11.4	1.42	1.03

Table 2: Aerodynamic Multipliers - λ (ft ³)		
Tile Profile	λ (ft ³) Batten Application	λ (ft ³) Direct Deck Application
Low Profile Concrete Tile	0.301	0.278

Table 3: Restoring Moments due to Gravity - M_g (ft-lbf)										
Tile Profile	2" & 3":12		4":12"		5":12"		6":12"		7":12" or greater	
	Battens	Direct Deck	Battens	Direct Deck	Battens	Direct Deck	Battens	Direct Deck	Battens	Direct Deck
Low Profile Concrete Tile	N/A	7.71	7.37	7.59	7.22	7.44	7.05	7.27	6.86	7.07

**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
Low Profile Concrete Tile	2-10d Ring Shank Nails	30.9	38.1	17.2
	1-10d Smooth or Screw Shank Nail	7.3	9.8	4.9
	2-10d Smooth or Screw Shank Nails	14.0	18.8	7.4
	1 #8 Screw	30.8	30.8	18.2
	2 #8 Screw	51.7	51.7	24.4
	1-10d Smooth or Screw Shank Nail (Field Clip)	24.3	24.3	24.2
	1-10d Smooth or Screw Shank Nail (Eave Clip)	19.0	19.0	22.1
	2-10d Smooth or Screw Shank Nails (Field Clip)	35.5	35.5	34.8
	2-10d Smooth or Screw Shank Nails (Eave Clip)	31.9	31.9	32.2
	2-10d Ring Shank Nails ¹	50.3	65.5	48.3

1. Installation with a 4" tile headlap and fasteners are located a min. of 2½" from head of tile.

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

Tile Profile	Tile Application ¹	Minimum Attachment Resistance
Low Profile Concrete Tile	Dupont De Nemours TILE BOND™ Roof Tile Adhesive	63 ²
	Dupont De Nemours TILE BOND™ Roof Tile Adhesive	65 ³
	ICP Adhesives Polyset® AH-160	31.3 ⁴
	DAP Foam Touch N Seal StormBond® 2 Roof Tile Adhesive	109 ⁵

1 See manufactures component approval for installation requirements.
 2 Dupont De Nemours TILE BOND™ Roof Tile Adhesive weight per patty 8 grams.
 3 Dupont De Nemours TILE BOND™ Roof Tile Adhesive weight per patty 16 grams.
 4 ICP Adhesives Polyset® AH-160 weight per patty 8 grams.
 5 DAP Foam Touch N Seal StormBond® 2 Roof Tile Adhesive weight per patty 8 grams.

***NOTE ***
 For # 2 placement see Detail 1 A on page 10 of 11
 For # 3 placement see Detail 1 B on page 11 of 11

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

Tile Profile	Tile Application ⁶	Minimum Attachment Resistance
Low Profile Concrete Tile	ICP Adhesives Polyset® AH-160	118.9 ⁷
	ICP Adhesives Polyset® AH-160	40.4 ⁸
	DAP Foam Touch N Seal StormBond® 2 Roof Tile Adhesive	73 ⁹
	DAP Foam Touch N Seal StormBond® 2 Roof Tile Adhesive	44 ¹⁰

- 6 See manufactures component approval for installation requirements.
- 7 ICP Adhesives Polyset · AH-160 Large paddy placement of 45 grams.
- 8 ICP Adhesives Polyset · AH-160 Medium paddy placement of 24 grams.
- 9 DAP Foam Touch N Seal StormBond® 2 Roof Tile Adhesive weight per paddy 45 grams.
- 10 DAP Foam Touch N Seal StormBond® 2 Roof Tile Adhesive weight per paddy 24 grams.

**Table 7: Attachment Resistance Expressed as a Moment - M_f (ft-lbf)
for Mortar Set Systems**

Tile Profile	Tile Application	Attachment Resistance
Low Profile Concrete Tile	Mortar Set ¹¹	43.9

11 Tile-Tite Roof Tile Mortar.

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".



(LOCATED ON UNDERSIDE OF TILE)

OR

EAGLE FL

(LOCATED ON FRONTSIDE OF TILE)

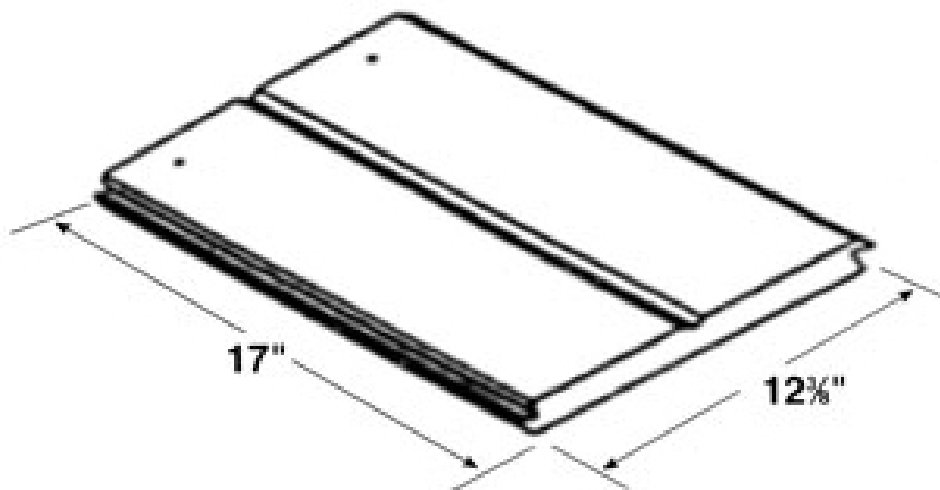
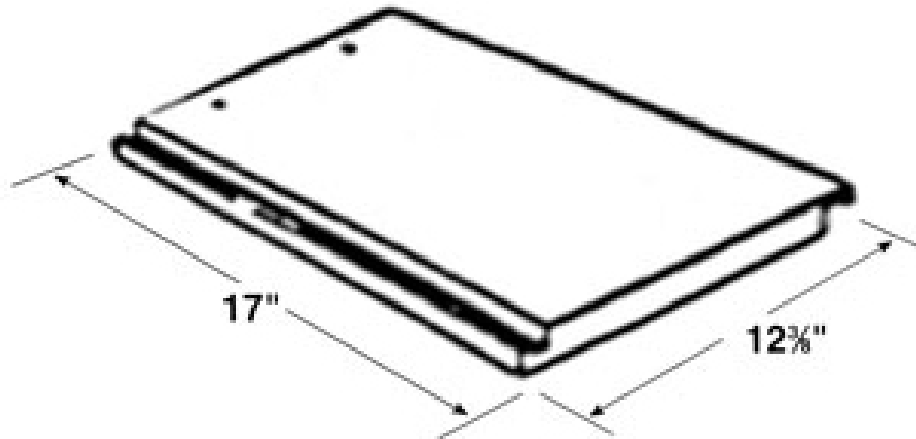
6. BUILDING PERMIT REQUIREMENTS:

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

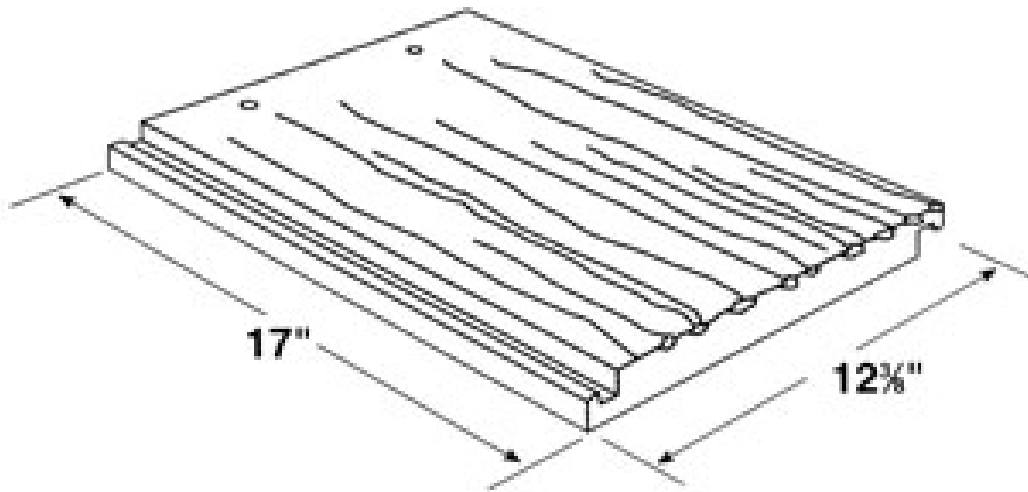
6.1.1 This Notice of Acceptance.

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

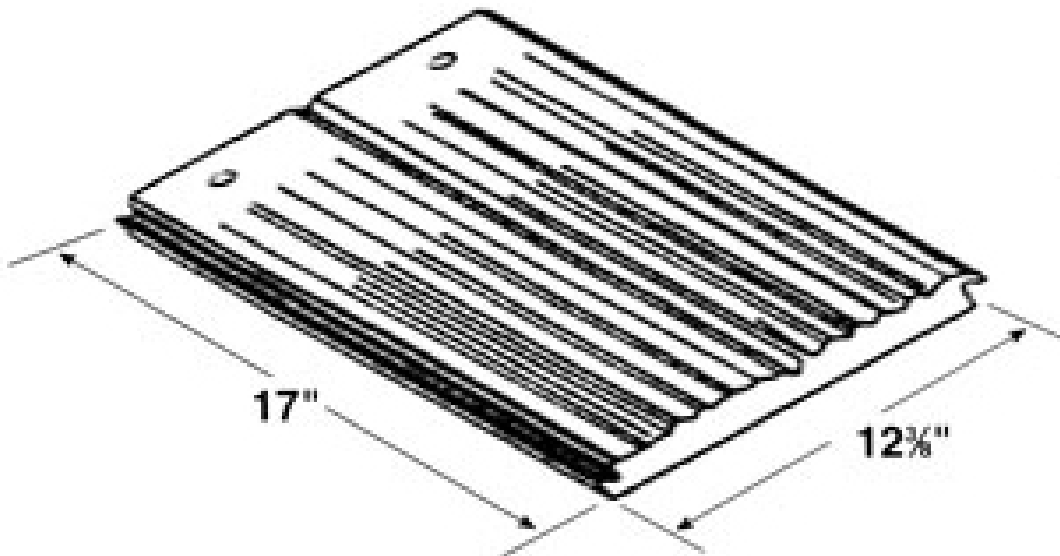
PROFILE DRAWING



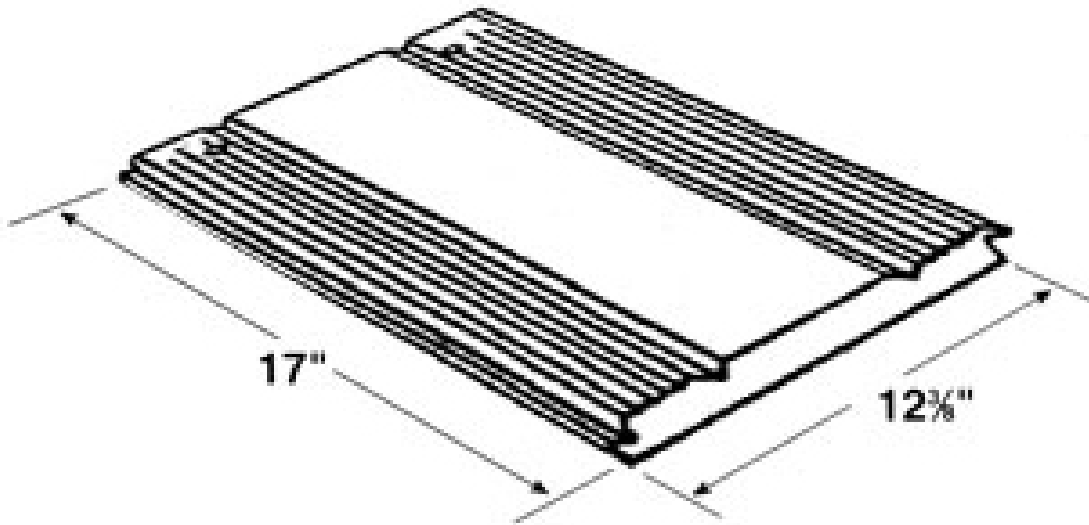
LOW PROFILE ROOF TILE



LOW PROFILE ROOF TILE

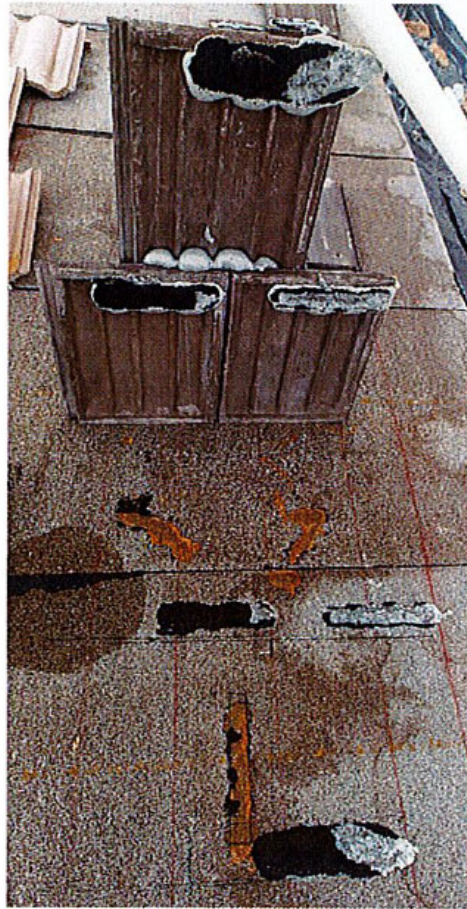


LOW PROFILE ROOF TILE



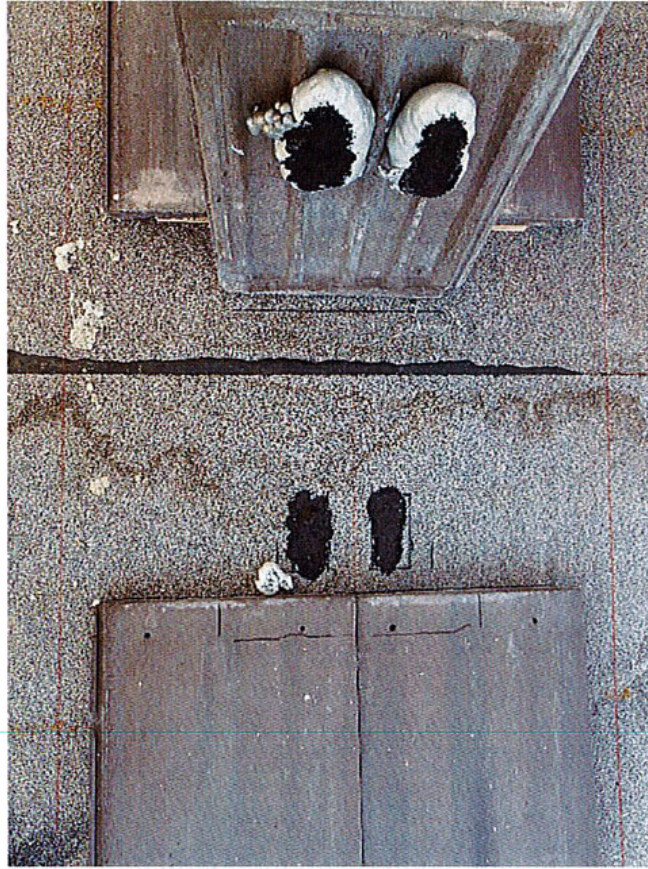
LOW PROFILE ROOF TILE

DETAIL 1 A



Type	Placement	Min. Tile Contact Area, in ² per Tile
Interdependent	Attachment: Two (2) beads/paddys, minimum 1-in. x 1-in. x 8-in. Adhesive Rates: 8 gram/paddy	32

DETAIL 1B



Placement	Min. Tile Contact Area, in ² per Tile
Attachment: Two (2) beads/paddys, minimum 2-in. x 2-in. x 4-in., starting 1" back from head of underlying tile Adhesive Rates: 16 gram/paddy	16

END OF THIS ACCEPTANCE