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)

DAP Foam, Inc.
1645 Manufacturers Dr.
Fenton, MO. 63026

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: Touch 'N Seal® Storm Bond™ 2 Two-Component Polyurethane Roof Tile Adhesive

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 14.
The submitted documentation was reviewed by Alex Tigera.

ROOFING COMPONENT APPROVAL:

Category: Roofing
Sub Category: Roof tile adhesive
Materials: Polyurethane

SCOPE:

This approves **Touch 'N Seal® Storm Bond™ 2 Two-Component Polyurethane Roof Tile Adhesive** as manufactured by **DAP Foam, Inc.** as described in this Notice of Acceptance. For the locations where the design pressure requirements, as determined by applicable building code, do not exceed the design pressure values obtained by calculations in compliance with Roofing Application Standard RAS 127. For use with approved flat, low, medium and high profile roof tile systems using Touch N' Seal Storm Bond 2 Two-Component Polyurethane Roof Tile Adhesive.

PRODUCTS MANUFACTURED BY APPLICANT:

Product	Dimensions	Test Specifications	Product Description
Touch 'N Seal® Storm Bond™ 2 Two-Component Polyurethane Roof Tile Adhesive	N/A	TAS 101	Two component polyurethane foam adhesive

PRODUCTS MANUFACTURED BY OTHERS:

Any Miami-Dade County Product Control Accepted Roof Tile Assembly having a current NOA which list attachment resistance values with the use of Touch 'N Seal® Storm Bond™ 2 Two-Component Polyurethane Roof Tile Adhesive.

MANUFACTURING LOCATION:

1. Pacific, MO

PHYSICAL PROPERTIES:

Property	Test	Results
Density	ASTM D 1622	1.89 lbs./ft.^{3}
Compressive Strength	ASTM D 1621	20.26 psi Parallel to rise 13.88 psi Perpendicular to rise
Tensile Strength	ASTM D 1623	30.05 psi Parallel to rise
Water Absorption	ASTM D 2842	0.75%
Moisture Vapor Transmission	ASTM E 96	3.1 perms
Dimensional Stability	ASTM D 2126	+0.35% Volume Change @ -40° F., 2 weeks +4.7% Volume Change @158°F., 95% Humidity, 2 weeks
Closed Cell Content	ASTM D 6226	92.2%

Note: The physical properties listed above are presented as typical average values as determined by accepted ASTM test methods and are subject to normal manufacturing variation.

EVIDENCE SUBMITTED:

Test Agency	Test Identifier	Test Name/Report	Date
RCMA Americas, Inc.	CX30H6A	Various	10/03/16
R & D Services, Inc.	RD16599	ASTM D 2842	10/12/16
	RD16600	ASTM D 2126	10/12/16
	RD16598	ASTM D6226	10/12/16
PRI Construction Materials Technologies, LLC	COPO-002-02-01	TAS 101	10/11/16
	COPO-002-02-02	TAS 101	10/11/16
	COPO-002-02-03	TAS 101	10/11/16
	COPO-002-02-04	TAS 101	10/11/16
	COPO-002-02-05	TAS 101	10/11/16
	COPO-002-02-06	TAS 101	10/11/16
	COPO-002-02-07	TAS 101	09/01/16
	COPO-002-02-08	TAS 101	10/11/16
	COPO-002-02-09	TAS 101	10/11/16
	COPO-002-02-10	TAS 101	10/11/16
	COPO-002-02-11	TAS 101	10/11/16
	COPO-002-02-12	TAS 101	10/11/16
	COPO-003-02-01	SSTD 11	10/17/16
	COPO-003-02-02	SSTD 11	10/17/16
	COPO-003-02-03	SSTD 11	10/17/16
	COPO-003-02-04	SSTD 11	10/17/16
	COPO-003-02-05	SSTD 11	10/17/16
	COPO-003-02-06	SSTD 11	10/17/16
	COPO-003-02-07	SSTD 11	10/17/16
	COPO-005-02-01	ASTM E 96	11/10/16

LIMITATIONS:

1. Fire classification is not part of this acceptance. Refer to the Prepared Roof Tile Assembly for fire rating.
2. Touch 'N Seal® Storm Bond™ 2 Two-Component Polyurethane Roof Tile Adhesive shall solely be used with flat, low, medium and high tile profiles.
3. Minimum underlayment shall be in compliance with the Roofing Application Standard RAS 120.
4. Roof Tile manufactures acquiring acceptance for the use of Touch 'N Seal® Storm Bond™ 2 Two-Component Polyurethane Roof Tile Adhesive with their tile assemblies shall test in accordance with TAS 101.
5. 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.

INSTALLATION:

1. Touch 'N Seal® Storm Bond™ 2 Two-Component Polyurethane Roof Tile Adhesive may be used with any roof tile assembly having a current NOA that lists attachment resistance values with the use of Touch 'N Seal® Storm Bond™ 2 Two-Component Polyurethane Roof Tile Adhesive.
2. Touch 'N Seal® Storm Bond™ 2 Two-Component Polyurethane Roof Tile Adhesive shall be applied in compliance with the Component Application section and the corresponding Placement Details noted herein. The roof tile assembly's adhesive attachment with the use of Touch 'N Seal® Storm Bond™ 2 Two-Component Polyurethane Roof Tile Adhesive shall provide sufficient attachment resistance to meet or exceed the resistance value determined in compliance with Miami-Dade County Roofing Application Standards RAS 127. The adhesive attachment data is noted in the roof tile assembly NOA.
3. Touch 'N Seal® Storm Bond™ 2 Two-Component Polyurethane Roof Tile Adhesive and its components shall be installed in accordance with Roofing Application Standard RAS 120, and DAP Foam, Inc.'s Operating Instruction and Maintenance Booklet.
4. Installation must be by a Factory Trained 'Qualified Applicator' approved and licensed by DAP Foam, Inc. DAP Foam, Inc. shall supply a list of approved applicators to the authority having jurisdiction.
5. Touch 'N Seal® Storm Bond™ 2 Two-Component Polyurethane Roof Tile Adhesive shall not be exposed permanently to sunlight.
6. The mix between the "A" component and the "B" component shall be maintained between 1.05-1.20 "A": 1.0 "B".
7. Tiles must be adhered in freshly applied adhesive. Tile must be set within 1 to 2 minutes after Touch 'N Seal® Storm Bond™ 2 Two-Component Polyurethane Roof Tile Adhesive has been dispensed.
8. Touch 'N Seal® Storm Bond™ 2 Two-Component Polyurethane Roof Tile Adhesive placement and minimum patty weight shall be in accordance with the 'Placement Details' herein. Each generic tile profile requires the specific placement noted herein.

Table 1: Adhesive Placement For Each Generic Tile Profile			
Tile Profile	**Minimum Paddy Contact Area (Square Inches)**	**Minimum Paddy Weight per tile (grams)**	**Placement Detail**
Flat/Low Profile – Large Paddy	40-50	45	#1
Flat/Low Profile – Medium Paddy	40-50 21-28	First Course (45); Second Course (30)	
Flat/Low Profile – Small Paddys	40-50 7-9 at head of tile; 7-9 at head of overlap	First Course (45); Second Course (8 grams per paddy)	
Low/Medium Profile – Large Paddy	56-66	60	#2
Low/Medium Profile – Medium Paddy	56-66 28-36	First Course (60); Second Course (30)	
Low/Medium Profile – Small Paddys	56-66 7-9 at head of tile; 7-9 at head of overlap	First Course (60); Second Course (8 grams per paddy)	
High Profile – Large Paddy Clay	56-66	60	#3
High Profile – Large Paddy Concrete	56-66	60	
High Profile – Medium Paddy	56-66 21-28	First Course (60); Second Course (30)	
High Profile – Small Paddys	56-66 7-9 at head of tile; 7-9 at head of overlap	First Course (60); Second Course (8 grams per paddy)	
Two Piece Barrel (Cap and Pan)	34-41 at underside of each pan tile; 15-21 each side of the cap	34 grams per paddy	Two Piece Barrel

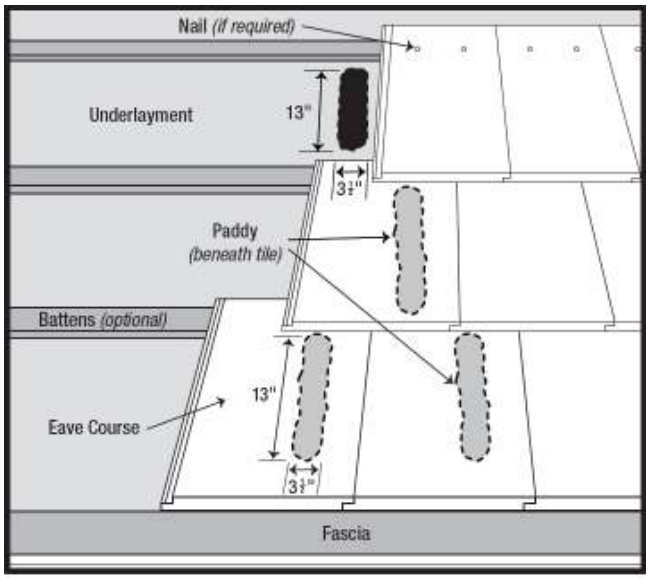
LABELING:

All approved products listed herein shall be labeled and shall bear the imprint or identifiable marking of the manufacturer's name or logo and following statement: "Miami-Dade County Product Control Approved" or the Miami-Dade County Product Control Seal as shown below.

BUILDING PERMIT REQUIREMENTS:

As required by the Building Official or applicable building code in order to properly evaluate the installation of this system.

ADHESIVE PLACEMENT DETAIL # 1

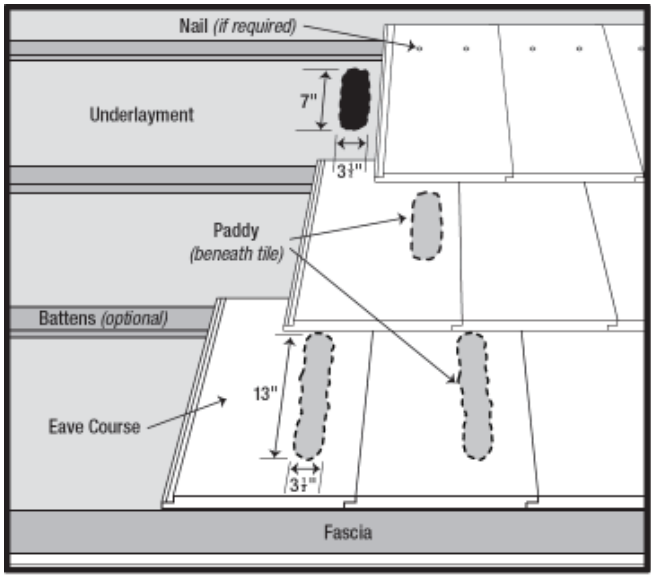


Flat Profile Tile – Large Paddy

Flat/Low Profile Tile – Large Paddy

1. Start at the eave. Apply onto the underlayment at least a 3-$^1/_2$" x 13" (89 mm x 330 mm) strip of foam paddy (foam weight: 45 grams) directly beneath the strengthening rib closest to the overlock of the tile you are setting.

2. Repeat this process along the eave and other courses, taking care to maintain about 40-50 square inches (258-320 cm^2) of adhesive contact with the underside of the tile.



Flat Profile Tile – Medium Paddy

Flat/Low Profile Tile – Medium Paddy

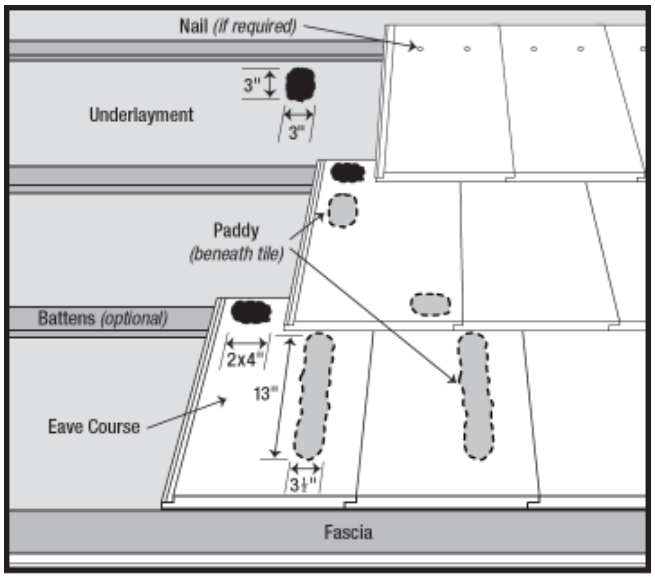
1. Start at the eave. Apply onto the underlayment at least a 3-$^1/_2$" x 13" (89 mm x 330 mm) strip of foam paddy (foam weight: 45 grams) directly beneath the strengthening rib closest to the overlock of the tile you are setting.

2. For the second course, apply to the underlayment at least a 3-1/2" x 7" (89 mm x 178 mm) strip of foam paddy (foam weight: 30 grams) directly beneath (see illustration) the strengthening rib closest to the overlock of the tile you are setting.

3. Repeat this process, taking care to maintain about 21-28 square inches (135-180 cm^2) of adhesive contact with the underside of the tile.

(Instructions continued on next page)

ADHESIVE PLACEMENT DETAIL # 1 (CONTINUED)



Flat Profile Tile – Small Paddy

Flat/Low Profile Tile – Small Paddy

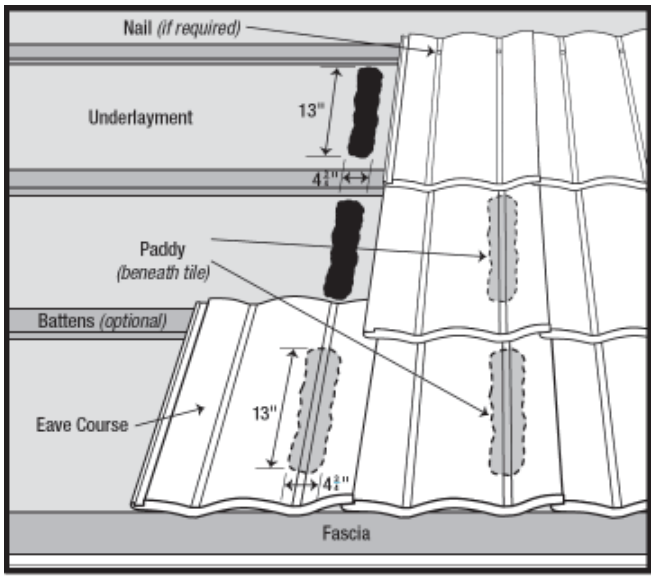
1. Start at the eave. Apply onto the underlayment at least a 3-$^1/_2$" x 13" (89 mm x 330 mm) strip of foam paddy (foam weight: 45 grams) directly beneath the strengthening rib closest to the overlock of the tile you are setting.

2. Next, just below the second course line, apply to the underlayment a 3" x 3" (76 mm x 76 mm) patch of foam paddy (foam weight: 8 grams). For flat tile, position it directly under the strengthening rib. Otherwise, position it directly under the pan portion of the tile closest to the underlock of the second course tile you will be setting. Take care to maintain about 7-11 square inches (45-71 cm^2) of adhesive contact with the underside of the tile.

3. You should also apply a 4" x 2" (102 mm x 51 mm) strip of foam paddy (foam weight: 8 grams) on top of the eave course tile surface, closest to the underlock of the first course of tiles (see illustration). For flat tile, apply it on top of the strengthening rib of the first course of tile. Otherwise, position it on top of the pan portion of the tile closest to the underlock of the first course of tile. Now install the second course of tiles, maintaining about 8 square inches (52 cm^2) of adhesive contact with the underside of the tile at the overlap. Maintain about 8 square inches (52 cm^2) of adhesive contact with the underside of the tile at the head of the tile.

4. Continue, repeating steps 2 and 3.

ADHESIVE PLACEMENT DETAIL # 2

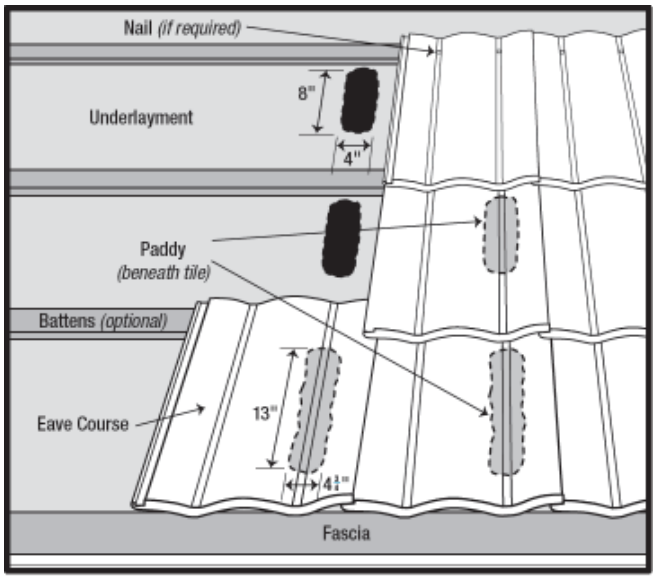


Medium Profile Tile – Large Paddy

Low/Medium Profile Tile – Large Paddy

1. Start of the eave. Apply onto the underlayment at least a 4-$^{3}/_{4}$" x 13" (121 mm x 330 mm) strip of foam paddy (foam weight: 60 grams) directly beneath the strengthening rib closest to the overlock of the tile you are setting.

2. Repeat this process along the eave and other courses, taking care to maintain about 56-66 square inches (360-425 cm^2) of adhesive contact with the underside of the tile.



Medium Profile Tile – Medium Paddy

Low/Medium Profile Tile – Medium Paddy

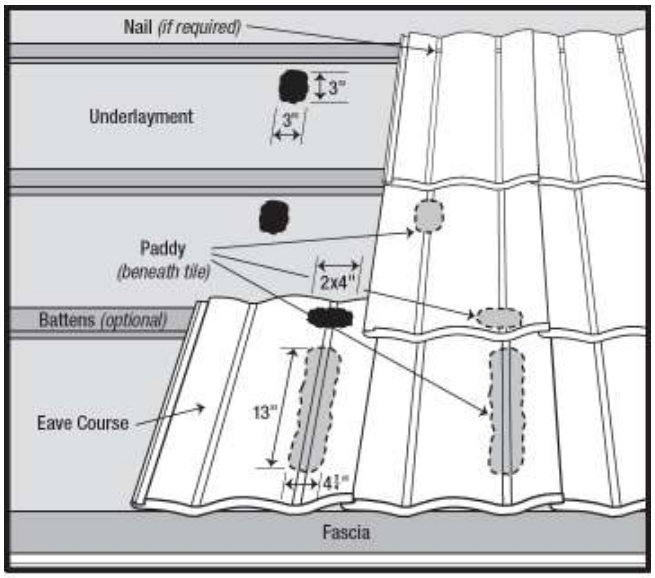
1. Start at the eave. Apply onto the underlayment at least 4-$^{3}/_{4}$" x 13" (121 mm x 330 mm) strip of foam paddy (foam weight: 60 grams) directly beneath the strengthening rib closest to the overlock of the tile you are setting.

2. For the second course, apply to the underlayment at least 4" x 8" (102 mm x 203 mm) strip of foam paddy (foam weight: 30 grams), positioning it under the pan portion of the tile closest to the overlock of the tile you are setting (see illustration).

3. Repeat this process along the second course, taking care to maintain about 28-36 square inches (180-232 cm^2) of adhesive contact with the underside of the tile.

(Instructions continued on next page)

ADHESIVE PLACEMENT DETAIL # 2 (CONTINUED)



Medium Profile Tile – Small Paddy

Low/Medium Profile Tile – Small Paddy

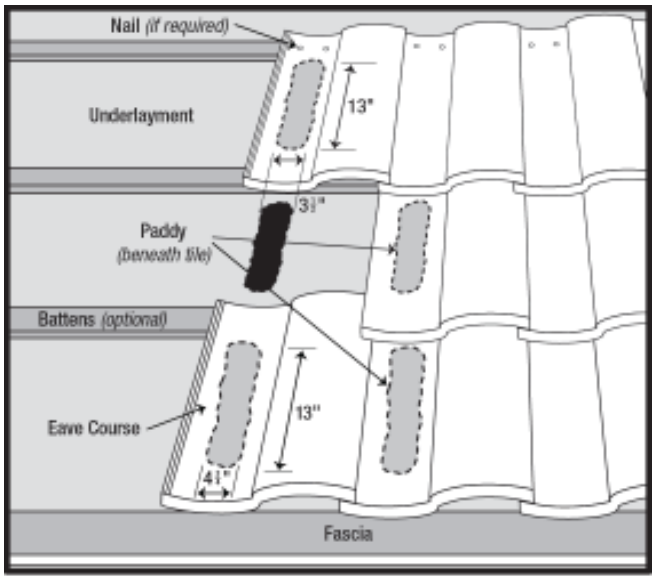
1. Start at the eave. Apply onto the underlayment at least a 4-$^{3}/_{4}$" x 13" (121 mm x 330 mm) strip of foam paddy (foam weight: 60 grams) directly beneath the strengthening rib closest to the overlock of the tile you are setting.

2. Next, just below the second course line, apply to the underlayment a 3" x 3" (76 mm x 76 mm) patch of foam paddy (foam weight: 8 grams). For flat tile, position it directly beneath the strengthening rib. Otherwise, position it under the pan portion of the tile closest to the underlock for the second course tile you will be setting. Take care to maintain about 9 square inches (58 cm^2) of adhesive contact with the underside of the tile.

3. You should also apply a 4" x 2" (102 mm x 51 mm) strip of foam paddy (foam weight: 8 grams) on top of the eave course tile surface closest to the underlock of the first course tiles (see illustration). For flat tile, apply it on top of the strengthening rib. Otherwise, position it on top of the pan portion of the tile closest to the underlock of the first course of tile. Now install the second course of tiles. Maintain about 7-9 square inches (45-58 cm^2) of adhesive contact with the underside of the tile at the overlap. Maintain about 7-9 square inches (45-58 cm^2) of adhesive contact with the underside of the tile at the head of the tile.

4. Continue, repeating steps 2 and 3.

ADHESIVE PLACEMENT DETAIL # 3

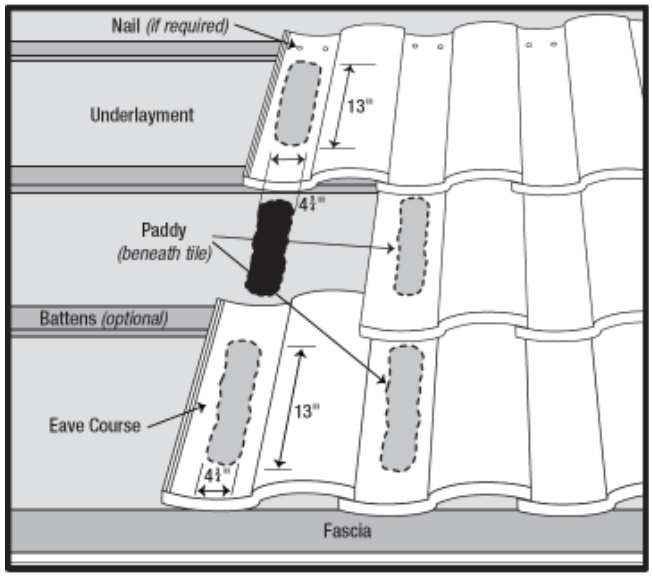


High Profile Tile – Large Paddy Clay Tile

High Profile Tiles – Large Paddy Clay Tile

1. Start at the eave. Apply onto the underlayment at least a 3-$^1/_2$" x 13" (89 mm x 330 mm) strip of foam paddy (foam weight: 60 grams) beneath the strengthening rib closest to the overlock of the tile you are setting.

2. Repeat this process along the eave and other courses, taking care to maintain about 56-66 square inches (360-425 cm^2) of adhesive contact with the underside of the tile.



High Profile Tile – Large Paddy Concrete Tile

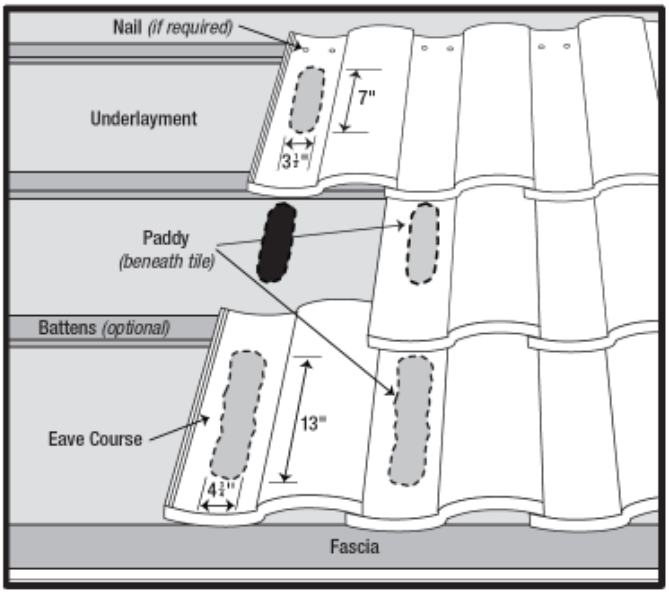
High Profile Tiles – Large Paddy Concrete Tile

1. Start at the eave. Apply onto the underlayment at least a 4-$^3/_4$" x 13" (121 mm x 330 mm) strip of foam paddy (foam weight: 60 grams) beneath the strengthening rib closest to the overlock of the tile you are setting.

2. Repeat this process along the eave and other courses, taking care to maintain about 56-66 square inches (360-425 cm^2) of adhesive contact with the underside of the tile.

(Instructions continued on next page)

ADHESIVE PLACEMENT DETAIL # 3 (CONTINUED)



High Profile Tile – Medium Paddy

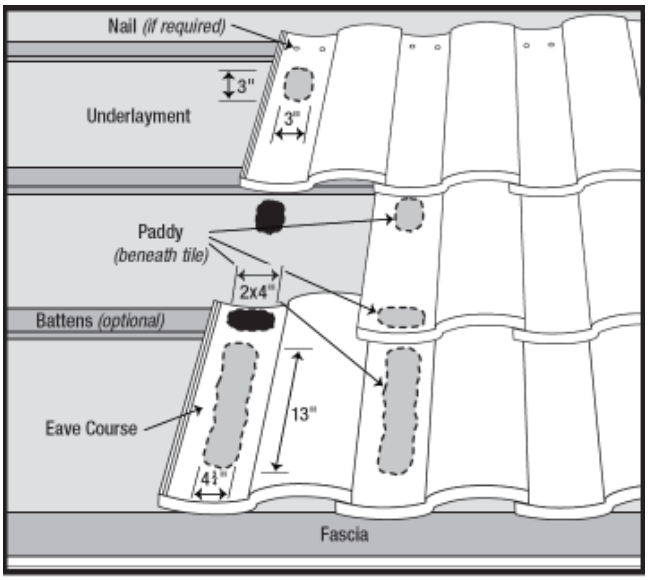
High Profile Tiles – Medium Paddy

1. Start at the eave. Apply onto the underlayment at least a 4-$^{3}/_{4}$" x 13" (121 mm x 330 mm) strip of foam paddy (foam weight: 60 grams) directly beneath the strengthening rib closest to the overlock of the tile you are setting.

2. For the second course, apply to the underlayment at least a 3-$^{1}/_{2}$" x 7" (89 mm x 178 mm) strip of foam paddy (foam weight: 30 grams) directly underneath the pan portion of the tile closest to the overlock of the tile you are setting.

3. Repeat this process along the second course, taking care to maintain about 21-28 square inches (135-180 cm^2) of adhesive contact with the underside of the tile.

ADHESIVE PLACEMENT DETAIL # 3 (CONTINUED)



High Profile Tile – Small Paddy

High Profile Tiles – Small Paddy

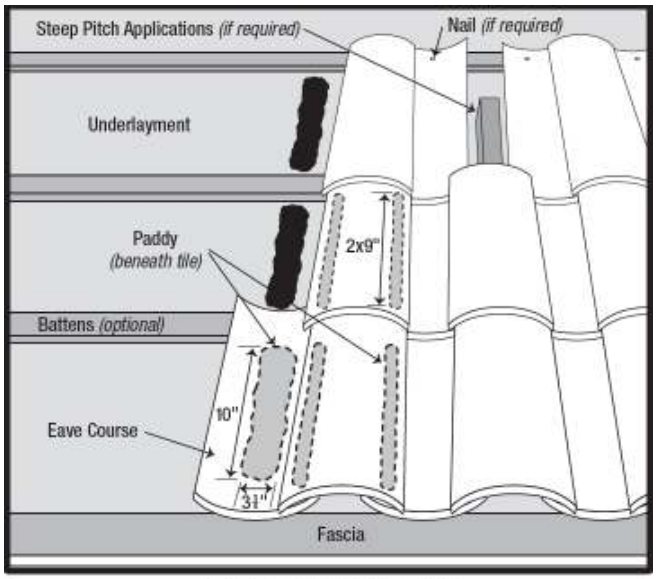
1. Start at the eave. Apply onto the underlayment at least a 4-$^{3}/_{4}$" x 13" (121 mm x 330 mm) strip of foam paddy (foam weight: 60 grams) directly beneath the strengthening rib closest to the overlock of the tile you are setting.

2. Next, just below the second course line, apply to the underlayment a 3" x 3" (76 mm x 76 mm) patch of foam paddy (foam weight: 8 grams). For flat tile, position it directly beneath the strengthening rib. Otherwise, position it directly beneath the pan portion of the tile closest to the underlock for the second course tile you will be setting. Take care to maintain about 9 square inches (58 cm^2) of adhesive contact with the underside of the tile.

3. You should also apply a 4" x 2" (102 mm x 51 mm) strip of foam paddy (foam weight: 7-9 grams) on top of the eave course tile surface closest to the underlock of the first course of tiles (see illustration). For flat tile, apply it on top of the strengthening rib. Otherwise, position it on top of the pan portion of the tile. Now install the second course of tiles. Maintain about 7-9 square inches (45-71 cm^2) of adhesive contact with the underside of the tile at the overlap. Maintain about 7-9 square inches (45-71 cm^2) of adhesive contact with the underside of the tile at the head of the tile.

4. Continue, repeating steps 2 and 3.

ADHESIVE PLACEMENT DETAIL
TWO PIECE BARREL



High Profile Tile – Two-Piece Barrel

Two Piece Barrel (Cap and Pan) Tiles

1. Start at the eave. Apply onto the underlayment at least a 3-¾" x 10" (95 mm x 254 mm) strip of foam paddy (foam weight: 34 grams) directly underneath two adjacent pan tiles. Support eave tiles to prevent rocking until adhesive is fully cured.

2. Repeat until you have completed two pan courses, being careful to maintain about 34-41 square inches (219-264 cm^2) of adhesive contact with the underside of each pan tile.

3. Next, invert the covers to expose the underside of the tile. To the inner edge of each cover tile, apply at least a 2" x 9" (50 mm x 229 mm) bead of adhesive directly on the inner edge of each cover tile. To allow for expansion, leave a foam-free border about ¾" to 1" (19 mm to 25 mm) wide along the outer edge of the tile.

4. Once foam is applied, turn over the cover tile and place it onto the pan tile course. Make sure there's at least 15-21 square inches (97-135 cm^2) of contact area (per side) adhering the cover tile and pan tile.

5. Repeat steps 2 through 4. As you progress, trim away any exposed foam adhesive that has cured. (Pointing of longitudinal cover tiles is purely optional).

6. Should additional nailing be required, we recommend using 2" x 4" (51 mm x 102 mm) nailers. Or you may use the tie wire system using galvanized steel or copper wire with compatible nails.

END OF THIS ACCEPTANCE