

Nemo etc.

Certificate of Authorization #32455 353 Christian Street, Unit #13 Oxford, CT 06478 (203) 262-9245

ENGINEER EVALUATE TEST CONSULT

EVALUATION REPORT

Tag & Stick, LLC. 3771 NW 126th Avenue Coral Springs, FL 33065 **(954) 255-3107** Evaluation Report E40580.02.12-R6

FL15218-R5

Date of Issuance: 02/17/2012

Revision 6: 06/02/2020

SCOPE:

This Evaluation Report is issued under **Rule 61G20-3** and the applicable rules and regulations governing the use of construction materials in the State of Florida. The documentation submitted has been reviewed by Robert Nieminen, P.E. for use of the product under the Florida Building Code and Florida Building Code, Residential Volume. The products described herein have been evaluated for compliance with the **6**th **Edition (2017) Florida Building Code** sections noted herein.

DESCRIPTION: Tag & Stick MTP

LABELING: Labeling shall be in accordance with the requirements of the Accredited Quality Assurance Agency noted herein.

CONTINUED COMPLIANCE: This Evaluation Report is valid until such time as the named product(s) changes, the referenced Quality Assurance documentation changes, or provisions of the Code that relate to the product change. Acceptance of this Evaluation Report by the named client constitutes agreement to notify Robert Nieminen, P.E. of any changes to the product(s), the Quality Assurance or the production facility location(s). NEMO|etc. requires a complete review of this Evaluation Report relative to updated Code requirements with each Code Cycle.

ADVERTISEMENT: The Evaluation Report number preceded by the words "NEMO|etc. Evaluated" may be displayed in advertising literature. If any portion of the Evaluation Report is displayed, then it shall be done in its entirety.

INSPECTION: Upon request, a copy of this entire Evaluation Report 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 Evaluation Report consists of pages 1 through 9.

Prepared by:

Robert J.M. Nieminen, P.E.

Florida Registration No. 59166, Florida DCA ANE1983



The facsimile seal appearing was authorized by Robert Nieminen, P.E. on 06/02/2020. This does not serve as an electronically signed document.

CERTIFICATION OF INDEPENDENCE:

- NEMO ETC, LLC does not have, nor does it intend to acquire or will it acquire, a financial interest in any company manufacturing or distributing products it evaluates.
- 2. NEMO ETC, LLC is not owned, operated or controlled by any company manufacturing or distributing products it evaluates.
- 3. Robert Nieminen, P.E. does not have nor will acquire, a financial interest in any company manufacturing or distributing products for which the evaluation reports are being issued.
- 4. Robert Nieminen, P.E. does not have, nor will acquire, a financial interest in any other entity involved in the approval process of the product.
- 5. This is a building code evaluation. Neither NEMO|etc. nor Robert Nieminen, P.E. are, in any way, the Designer of Record for any project on which this Evaluation Report, or previous versions thereof, is/was used for permitting or design guidance unless retained specifically for that purpose.



ROOFING COMPONENT EVALUATION:

1. SCOPE:

Product Category: Roofing
Sub-Category: Underlayment

Compliance Statement: Tag & Stick MTP, as produced by Tag & Stick, LLC., has demonstrated compliance with the following sections of the 6th Edition (2017) Florida Building Code through testing in accordance with the following Standards. Compliance is subject to the Installation Requirements and Limitations / Conditions of Use set forth herein.

2. STANDARDS:

<u>Section</u>	<u>Property</u>	<u>Standard</u>	<u>Year</u>
1504.3.1	Wind Uplift	FM 4474	2011
1507.1.1, R905.1.1	Physical Properties	ASTM D1970	2015
1507.3.3, R905.3.3	Physical Properties	FRSA/TRI April 2012	2012
1507.10.2	Physical Properties	ASTM D4601	2012
TAS 110	Accelerated Weathering	ASTM D4798	2011

3. REFERENCES:

Entity	<u>Examination</u>	Reference	<u>Date</u>
ERD (TST6049)	Wind Uplift	E40480.03.12-R1	02/25/2013
PRI (TST5878)	ASTM D1970 / D4798	TGSK-001-02-01	09/20/2012
PRI (TST5878)	FRSA/TRI April 2012	TGSK-001-02-01	09/20/2012
PRI (TST5878)	Wind Uplift	TGSK-003-02-01	09/06/2017
Miami-Dade (CER1592)	HVHZ compliance	19-1125.01	01/16/2020
NEMO (TST6049)	ASTM D4601	4q-TAG-19-SSMBB-01.A	10/03/2019
NEMO (TST6049)	ASTM D4798	4j-TAG-19-SSUDL-01.A	11/18/2019
NEMO (TST6049)	Tensile Adhesion / Aging	4p-DOW-19-SSLAP-01.A.R2	02/10/2020
UL LLC (QUA9625)	Quality Control	MLA, R27380	03/06/2012
UL LLC (QUA 9625)	Quality Control	Service Confirmation	04/22/2020

4. PRODUCT DESCRIPTION:

	1.102001.2.201111.10111						
	Product	Specification	Plant(s)	Description			
4.1	Tag & Stick MTP	ASTM D1970 and FRSA/TRI April 2012	Tuscaloosa, AL	fiberglass reinforced SBS modified bitumen underlayment with an 18-inch selvage edge, an 18-inch wide section of self-adhering modified bitumen with a removable silicone release film and woven fabric top surface. The product design allows for mechanical attachment of base-layer underlayment followed by a self-adhering top layer underlayment, resulting in a two-ply underlayment system, within in the same roll			

5. LIMITATIONS:

- 5.1 This is a building code evaluation. Neither NEMO ETC, LLC nor Robert Nieminen, P.E. are, in any way, the Designer of Record for any project on which this Evaluation Report, or previous versions thereof, is/was used for permitting or design guidance unless retained specifically for that purpose.
- 5.2 This Evaluation Report is not for use within HVHZ jurisdictions. For HVHZ, refer to current Miami-Dade NOA.
- 5.3 Fire Classification is not part of this report; refer to current Approved Roofing Materials Directory for fire ratings of this product.
- 5.4 **Tag & Stick MTP** may be used with any prepared roof cover where the product is specifically referenced within FBC approval documents. If not listed, a request may be made to the Authority Having Jurisdiction for approval based on this evaluation combined with supporting data for the prepared roof covering.



5.5 Allowable Roof Covers:

TABLE 1: ROOF COVER OPTIONS									
Made de la const	Asphalt	(1507.3)		Metal		Slate	Wood		Photovoltaic
Underlayment	Shingles (1507.2)	Mechanical Attach	Adhesive- Set	Panels (1507.4)	Shingles (1507.5)	Shingles (1507.7)	Shingles (1507.8)	Shakes (1507.9)	Shingles (1507.17)
Tag & Stick MTP	Yes	Yes	Yes See 5.5.1	Yes	Yes	Yes	Yes	Yes	Yes

"Adhesive-Set Tile" is limited to use of following Approved tile adhesives / underlayment combinations.

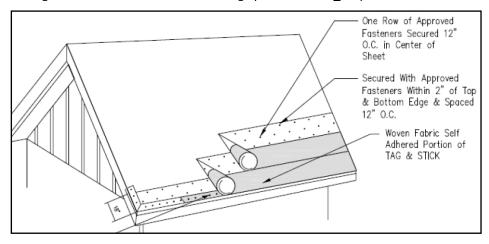
TABLE 1A: ALLOWABLE TILE ADHESIVE / UNDERLAYMENT COMBINATIONS ¹					
Underlayment Adhesive Florida Product Approval					
To a 9 Chiel NATO	Dupont TILE BOND™	FL22525			
Tag & Stick MTP	ICP Adhesives Polyset® AH-160	FL6332			

- 5.6 For installations under adhesive-set tile systems, attach the base layer of Tag & Stick MTP using 12 ga. annular ring shank nails with 15/8-inch diameter tin-caps spaced as follows to meet project design pressure requirements determined in accordance with Table 1A of FRSA/TRI April 2012 (04-12) or FBC 1609.
- <u>Deck</u>: Min. 15/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.

Tag & Stick MTP: Fasten the nailable portion as follows, where "Top Edge" reflects the row within 2-inches of the top edge of the sheet, "Bottom Edge" reflects the row within 2-inches of the lap-line (surface fabric), and "Center" reflects the row(s) between the edge rows. Fasten the 6-inch end (vertical) laps 6-inch o.c. Apply the self-adhering portion atop the nailed portion and walk-in / roll-in per Tag & Stick, LLC. published instructions.

TABLE 2: ATTACHMENT REQUIREMENTS					
Design Processor (not)	Top Edge	Bottom Edge	Center		
Design Pressure (psf)	(inch o.c.)	(inch o.c.)	# of rows	Spacing (inch o.c.)	
0 < P ≤ 45.0	12	12	1	12	
45.0 < P <u><</u> 52.5	11	11	1	11	
52.5 < P <u><</u> 70.0	6	6	1	6	
70.0 < P < 105.0	6	6	2	6	

The example drawing below reflects attachment for design pressure $0 < P \le 45$ psf.



¹ Refer to Tile Manufacturer's or Adhesive Manufacturer's Florida Product Approval for Overturning Moment Resistance Performance.

6TH EDITION (2017) FBC NON-HVHZ EVALUATION



5.7 Exposure Limitations:

Tag & Stick MTP shall not be left exposed for longer than 180-days after installation.

5.8 <u>Tile Slippage Limitations (TAS 103 per FRSA/TRI April 2012 (04-12)):</u>

When loading roof tiles on the underlayment in direct-deck tile assemblies, the maximum roof slope shall be as follows. These slope limitations can only be exceeded by using battens or loading boards during loading of the roof tiles, in which case the maximum staging method is a 10-tile stack.

TABLE 2: TILE SLIPPAGE LIMITATIONS FOR DIRECT-DECK TILE INSTALLATIONS					
Underlayment Tile Profile Staging Method Maximum Slope					
Tag & Stick MTP	Flat or Lugged	Max. 5-tile stack	6:12		

6. INSTALLATION:

- Tag & Stick MTP shall be installed in accordance with Tag & Stick, LLC. published installation requirements subject to the Limitations set forth in Section 5 herein and the specifics noted below, and the attached Tag & Stick MTP published details. In the case of conflict, the more stringent requirement applies.
- 6.2 Re-fasten any loose decking panels, and check for protruding nail heads. Sweep the substrate thoroughly to remove any dust and debris prior to application.

6.3 Fasteners:

For use within mechanically attached prepared roof assemblies, corrosion resistant fasteners shall be 12 ga. annular ring shank nails with 1-5/8" diameter tin-caps or 1-inch diameter round cap nails.

For use within adhesive-set tile roof systems, corrosion resistant fasteners shall be 12 ga. annular ring shank nails with 1-5/8" diameter tin-caps.

6.4 Installation under mechanically fastened prepared roofing:

Starter Course: Apply 18-inch wide half-sheet (the nailable portion of **Tag & Stick MTP**) parallel to the eave and fasten 12-inch o.c. at a row within 2-inches of the top edge, 12-inch o.c. at a row 9-inches from the top edge and 6-inch o.c. at 6-inch wide end (vertical) laps. Tack-down the eave edge sufficiently to hold in place prior to installation of the edge metal detail.

<u>Subsequent Courses</u>: Align and apply subsequent courses overlapping the previous course or starter course with the 18-inch wide self-adhering portion of the sheet. Do not remove plastic release film until nailable portion is fastened. Fasten nailable portion 12-inch o.c. at a row within 2-inches of the top edge of the sheet, 12-inch o.c. at a row within 2-inches of the lap-line (surface fabric) and 12-inch o.c. at one row centered between the top and bottom rows. Fasten 6-inch end (vertical) laps 6-inch o.c. Remove plastic release film and step-in / roll-in in accordance with **Tag & Stick, LLC.** published instructions.

6.5 Installation under adhesive-set tile systems:

Refer to Section 5.6 for fastener spacing options using the instructions in Section 6.4 as a guideline.

6.6 Refer to Section 5.8 for tile staging limitations.

7. BUILDING PERMIT REQUIREMENTS:

As required by the Building Official or Authority Having Jurisdiction in order to properly evaluate the installation of this product.

8. MANUFACTURING PLANTS:

Contact the noted QA agency for information on product locations covered for **F.A.C. 61G20-3** QA requirements. Refer to Section 4 herein for product & production locations having met codified physical properties specifications

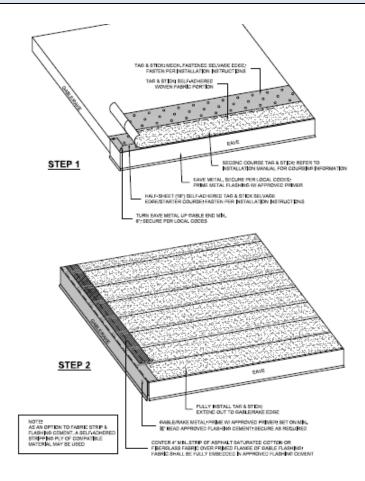
9. QUALITY ASSURANCE ENTITY:

UL LLC-QUA9625; (847) 664-3623; LeAnna.Gradeki@ul.com

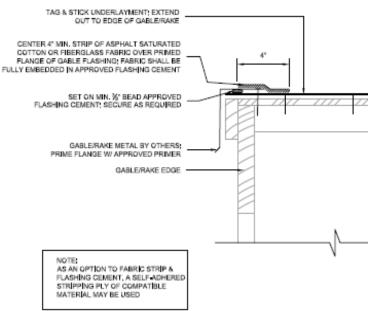


10. TAG & STICK, LLC. DETAIL DRAWINGS:

10.1 Gable / Eave Transition:

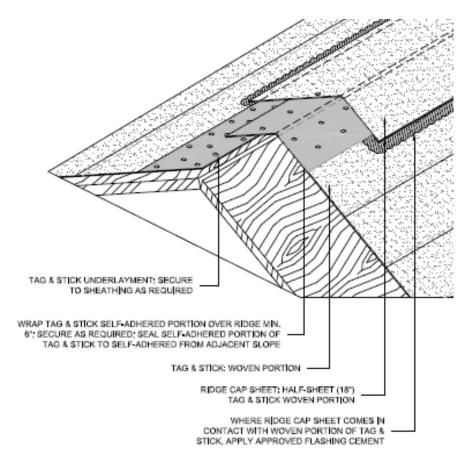


10.2 Gable Edge:



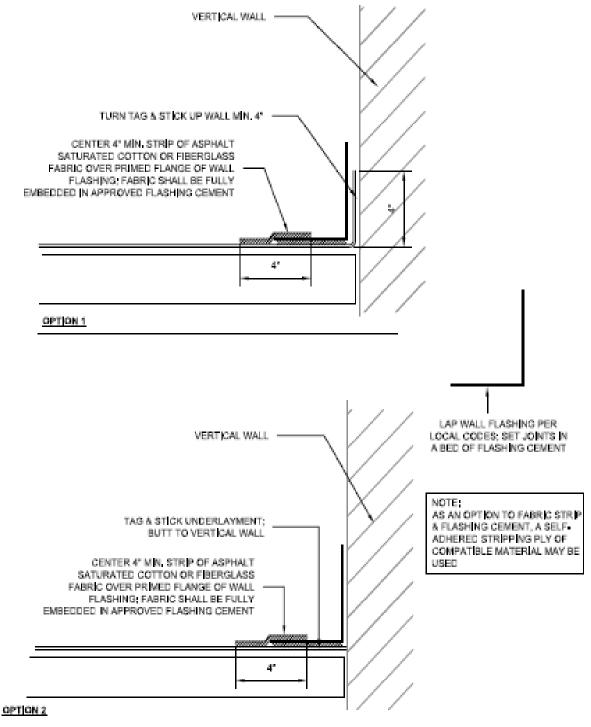


10.3 Ridge Detail:



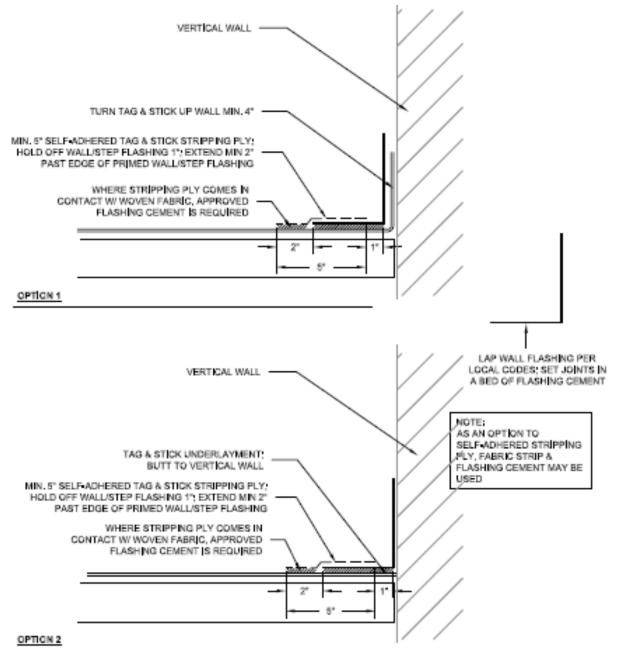


10.4 Wall Step Flashing (Options 1 and 2):



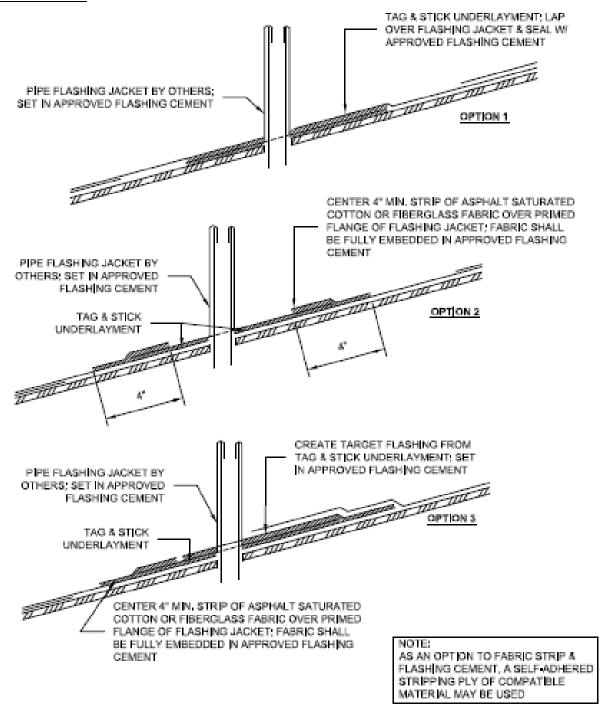


10.5 Wall Step Flashing Alternate (Options 1 and 2):





10.6 Roof Penetrations:



- END OF EVALUATION REPORT -