



NEMO EVALUATION REPORT



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SUBJECT: FT Synthetics Roof Underlayments

- SCOPE:** This Evaluation Report is issued under F.A.C. [Rule 61G20-3](#) and the applicable rules and regulations governing Product Approval of construction materials in the State of Florida. NEMO Evaluations has evaluated the product described herein for compliance with the [Code sections noted herein](#).
- CODE:** 2020 Florida Building Code, 7th Edition
2020 Florida Building Code, Residential, 7th Edition
- JURISDICTION:** Non-HVHZ
- NEMO CATEGORY:** Underlayments
- FBC CATEGORY:** Roofing
- FBC SUB-CATEGORY:** Underlayment
- CSI DIVISION:** 07 00 00 Thermal and Moisture Protection
07 30 05 Roofing Felt and Underlayment
- METHOD:** Method 1, Option C – Codified Material, Evaluation by Evaluation Entity
- COMPLIANCE STATEMENT:** **FT Synthetics Roof Underlayments**, as produced by **FT Synthetics, Inc.**, have demonstrated compliance with the Code sections noted herein through testing in accordance with the referenced Standards, rational analysis and an ongoing quality assurance program. Compliance is subject to the Installation Requirements and Limitations of Use set forth herein.
- QUALITY ASSURANCE:** Evidence of current quality assurance shall be listing and labeling in accordance with the requirements of [NEMO|cert.](#), and the minimum provisions of **FBC 1709.10**.
- CONTINUED COMPLIANCE:** This Evaluation Report is valid until such time the named product(s) change, the referenced Quality Assurance changes, or the evaluated Code provisions change. NEMO Evaluations requires, at minimum, a complete review of this Evaluation Report with each 3-year Code Cycle.
- BUILDING PERMIT REQUIREMENTS:** As required by the Building Official or Authority Having Jurisdiction to evaluate the installation of this product.
- ADVERTISEMENT:** The Florida Product Approval Number (FL#) preceded by the words “NEMO Evaluated” may be displayed in advertising literature. If any portion of the Evaluation Report is displayed, it shall be displayed in its entirety.
- 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.
 - ✓ NEMO ETC, LLC is not owned, operated or controlled by any company manufacturing or distributing products it evaluates.
 - ✓ This is a building code evaluation. NEMO ETC, LLC is not, 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.



1. CODES, PROPERTIES AND STANDARDS:

Code	Section	Property	Standard	Year
2020 Florida Building Code, 7 th Edition,	1504.3.1	Wind resistance	UL 1897	2015
2020 Florida Building Code, Residential, 7 th Edition	1507.1.1, 1507.2.4, 1507.2.9.2, R905.1.1, R905.2.8.2	Material standard	ASTM D1970	2015
	1507.3.3, R905.3.3	Material standard	FRSA/TRI, Sixth Edition	2018
	TAS 110	Accelerated Weathering	ASTM D4798	2011

2. PRODUCTS:

TABLE 1: EVALUATED UNDERLAYMENTS			
PRODUCT	MATERIAL STANDARD	PLANT(S)	DESCRIPTION
EavePro 44	ASTM D1970	Langley, BC Canada	Self-adhering, black butyl rubber, fiberglass reinforced, embossed polyester fabric surfaced roof underlayment available in 44-inch-wide x 61.3-ft long rolls
FT Butyl MP	ASTM D1970 and FRSA/TRI 09-18	Langley, BC Canada	Self-adhering, butyl-rubber, fiberglass reinforced, embossed polyester reinforced fabric surfaced roof underlayment available in 36-inch wide x 67-ft long rolls
KOMODO BSA	ASTM D1970 and FRSA/TRI 09-18	Langley, BC Canada	Self-adhering, butyl-rubber, embossed fibrous surfaced roof underlayment available in 36-inch wide x 67-ft long rolls
PLATINUM HT-B	ASTM D1970 and FRSA/TRI 09-18	Langley, BC Canada	Self-adhering, butyl-rubber, embossed fibrous surfaced roof underlayment available in 36-inch wide x 67-ft long rolls

3. INSTALLATION:

- 3.1 **FT Synthetics Roof Underlayments** shall be installed in accordance with **FT Synthetics, Inc.** published installation instructions, subject to the [Limitations of Use](#) noted herein. In case of conflict between published installation instructions and this evaluation report, this report governs.
- 3.2 Roof decks shall be in accordance with codified requirements to the satisfaction of the Authority Having Jurisdiction. 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, and prime the substrate (if applicable).

3.3 **EavePro 44**

- 3.3.1 **Non-Tile Applications:**
Shall be installed in compliance with requirements for an approved self-adhering underlayment (ASTM D1970) in **FBC 1507.1.1.1** or **1507.1.1.3** or **FBC Residential R905.1.1.1** or **R905.1.1.3** for the type of prepared roof covering to be installed, and the manufacturer’s installation instructions.

3.4 **KOMODO BSA and PLATINUM HT-B:**

- 3.4.1 **Non-Tile Applications:**
Shall be installed in compliance with requirements for an approved self-adhering underlayment (ASTM D1970) in **FBC 1507.1.1.1** or **1507.1.1.3** or **FBC Residential R905.1.1.1** or **R905.1.1.3** for the type of prepared roof covering to be installed, and the manufacturer’s installation instructions.
- 3.4.2 **Mechanically Attached Tile Applications:**
Shall be installed in compliance with the requirements for Self-Adhered Membrane set forth in [FRSA/TRI Florida High Wind Concrete and Clay Roof Tile Installation Manual](#), Sixth Edition and the manufacturer’s installation instructions.
Refer to [Table 4](#) herein for attachment limitations.
Refer to [Table 6](#) herein for tile staging limitations.



3.5 FT Butyl MP:

3.5.1 Non-Tile Applications:

Shall be installed in compliance with requirements for an approved self-adhering underlayment (ASTM D1970) in **FBC 1507.1.1.1** or **1507.1.1.3** or **FBC Residential R905.1.1.1** or **R905.1.1.3** for the type of prepared roof covering to be installed, and the manufacturer’s installation instructions.

3.5.2 Mechanically Attached or Adhesive-Set Tile Applications:

Shall be installed in compliance with the requirements for Self-Adhered Membrane set forth in **FRSA/TRI Florida High Wind Concrete and Clay Roof Tile Installation Manual**, Sixth Edition and the manufacturer’s installation instructions.

Refer to [Table 2A](#) herein for allowable tile-adhesives.

Refer to [Table 4](#) herein for attachment limitations.

Refer to [Table 6](#) herein for tile staging limitations.

4. LIMITATIONS OF USE:

4.1 This is a building code evaluation. NEMO ETC, LLC is not, 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. NEMO Evaluation Reports are not to be construed as representing any attributes not specifically listed, nor are NEMO Evaluation Reports to be construed as an endorsement of the subject of the report or a recommendation for its use. There is no warranty by NEMO ETC, LLC, express or implied, as to any finding or other matter in this report, or as to any product covered by the report.

4.2 This Evaluation Report pertains to above-deck roof components. Roof decks and structural members shall be in accordance with FBC requirements to the satisfaction of the Authority Having Jurisdiction.

4.3 This Evaluation Report does not include evaluation of fire classification. Refer to **FBC 1505** for requirements and limitations regarding roof assembly fire classification. Refer to **FBC 2603** for requirements and limitations concerning the use of foam plastic insulation.

4.4 **FT Synthetics Roof Underlayments** 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.

4.5 Allowable Roof Covers:

TABLE 2: ROOF COVER OPTIONS						
FBC SECTION ⇨	1507.2	1507.3		1507.4 AND 1507.5	1507.7	1507.8 AND 1507.9
UNDERLAYMENT	ASPHALT SHINGLES	CLAY AND CONCRETE TILE		METAL PANELS AND SHINGLES	SLATE OR SLATE-TYPE SHINGLES	WOOD SHINGLES AND SHAKES
		MECHANICAL ATTACH	ADHESIVE-SET			
EavePro 44	Yes	No	No	No	No	No
FT Butyl MP	Yes	Yes	Yes (Table 2A)	Yes	Yes	Yes (joint strips, 1507.1.1.3 / R905.1.1.3)
KOMODO BSA	Yes	Yes	No	Yes	Yes	Yes (joint strips, 1507.1.1.3 / R905.1.1.3)
PLATINUM HT-B	Yes	Yes	No	Yes	Yes	Yes (joint strips, 1507.1.1.3 / R905.1.1.3)

4.5.1 Adhesive-set tile is limited to use of the following Approved underlayment / tile-adhesive combinations.

TABLE 2A: ALLOWABLE TILE ADHESIVE / UNDERLAYMENT COMBINATIONS ¹		
UNDERLAYMENT	ADHESIVE	FBC FILE
FT Butyl MP	Dupont “TILE BOND™ Roof Tile Adhesive”	FL22525
	ICP “Polyset® AH-160”	FL6332

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



4.6 Allowable Substrates:

TABLE 3: SUBSTRATE OPTIONS FOR ADHERED UNDERLAYMENTS				
UNDERLAYMENT	APPLICATION	SUBSTRATES (DESIGNED TO MEET WIND LOADS FOR PROJECT)		
		TYPE	PRIMER	MATERIAL(S)
EavePro 44	self-adhering	Deck / sheathing	None	Plywood
FT Butyl MP	self-adhering	Deck / sheathing	None	Plywood
KOMODO BSA	self-adhering	Deck / sheathing	None	Plywood
PLATINUM HT-B	self-adhering	Deck / sheathing	None	Plywood

4.7 Attachment Limitations:

4.7.1 For use under mechanically attached NON-TILE prepared roof coverings, attachment shall be in accordance with the manufacturer’s installation instructions, but – for mechanically attached underlayments or base sheets - not less than **FBC 1507.1.1** or **R905.1.1**.

4.7.2 For use under tile roof systems, attachment shall be in accordance with the manufacturer’s installation instructions, but not less than Section 4.7.3 herein.

4.7.3 Wind Resistance for Underlayment Systems in Tile Roof Applications:

The following wind uplift limitations apply to underlayment systems that are not prescriptive in the [FRSA/TRI Florida High Wind Concrete and Clay Roof Tile Installation Manual](#), Sixth Edition. The Maximum Design Pressure is the result of testing for wind load resistance based on allowable wind loads, and reflects the ultimate passing pressure divided by 2 (the 2 to 1 margin of safety per **FBC 1504.9** has already been applied).

4.7.3.1 Direct-to-Deck:

The maximum design pressure for the selected assembly shall meet or exceed that required under [FRSA/TRI Florida High Wind Concrete and Clay Roof Tile Installation Manual](#), Sixth Edition, Appendix A, Table 1A or the critical (highest) design pressure determined in accordance with **FBC 1609** or **FBC Residential Chapter 3**.

TABLE 4: ALLOWABLE DESIGN PRESSURES, UNDERLAYMENT IN TILE ROOF APPLICATIONS				
SYSTEM NO.	DECK	PRIMER	UNDERLAYMENT	DESIGN PRESSURE (PSF)
1	Min. 15/32-inch PS 1-09, CDX plywood	None	KOMODO BSA or PLATINUM HT-B, self-adhered and back-nailed within the selvedge-edge side laps using corrosion resistant 12 ga. x 1¼” ring shank nails through 32 ga., 1-5/8” diameter tin caps or corrosion resistant 1-inch diameter metal cap nails spaced max. 12-inch o.c.	-45.0
2	Min. 15/32-inch PS 1-09, CDX plywood	None	FT Butyl MP, self-adhered and back-nailed within the selvedge-edge side laps using corrosion resistant 12 ga. x 1¼” ring shank nails through 32 ga., 1-5/8” diameter tin caps or corrosion resistant 1-inch diameter metal cap nails spaced max. 12-inch o.c. 6-inch wide, self-adhering end laps are blind-nailed with 1-inch diameter metal cap nails spaced 6-inch o.c.	-75.0

4.8 Exposure Limitations:

TABLE 5: EXPOSURE LIMITATIONS		
UNDERLAYMENT	PREPARED ROOF COVER INSTALLATION TYPE (OVERTOP OF UNDERLAYMENT)	MAXIMUM EXPOSURE (DAYS)
EavePro 44	Mechanically attached	90
FT Butyl MP	Mechanically attached or adhesive-set tile roof system	180
KOMODO BSA	Mechanically attached	180
PLATINUM HT-B	Mechanically attached	180



4.9 **Tile Slippage Limitations:**

When loading roof tiles on the underlayment in direct-deck tile assemblies, the maximum roof slope shall be as follows. Slopes in excess of these limitations require the use of battens or loading boards during loading of the roof tiles, in which case the maximum staging method is a 10-tile stack.

TABLE 6: TILE SLIPPAGE LIMITATIONS FOR DIRECT-DECK TILE INSTALLATIONS			
UNDERLAYMENT	TILE PROFILE	STAGING METHOD	MAXIMUM SLOPE
KOMODO BSA or PLATINUM HT-B	Flat or Lugged	10-tile stack	4:12
	Flat or Lugged	6-tile stack (4 over 2)	7:12
FT Butyl MP	Flat	10-tile stack	4:12
	Lugged	10-tilestack	7:12

4.10 All components in the roof assembly shall have quality assurance audit in accordance with **F.A.C. Rule 61G20-3**. Refer to the Product Approval of the component manufacturer for components mentioned herein that are produced by a Product Manufacturer other than this report holder.

- END OF EVALUATION -