CBUCK Engineering

Specialty Structural Engineering

CBUCK, Inc. Certificate of Authorization #8064

Evaluation Report

"STSTM"

Roof Underlayment

Manufacturer:

MFM Building Products Corp.

525 Orange Street Coshocton, Ohio 43812

(740) 622-2645

for

Florida Product Approval

FL 11842.5 R6

Florida Building Code 6th Edition (2017)

Method: 1 - D

Category: Roofing

Sub - Category: Underlayment

Product: "STS™"

Description: Self-Adhered Underlayment

Prepared by:

James L. Buckner, P.E., SECB Florida Professional Engineer # 31242 Florida Evaluation ANE ID: 1916 Project Manager: Diana Galloway

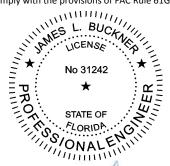
Report No. 19-116-STS-ER (Revises 15-115-STS-ER, FL11842.4 R3)

Date: 2 / 19 / 2019

Contents:

Evaluation Report Pages 1 – 5

Facsimile of digital copy signed by
James L. Buckner, P.E.
Electronically signed and sealed documents shall
comply with the provisions of FAC Rule 61G15-23.



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Page 2 of 5

Specialty Structural Engineering

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Manufacturer: MFM Building Products Corp.

525 Orange Street Coshocton, Ohio 43812

(740) 622-2645 www.mfmbp.com

Product Name: "STS™"

Product Category: Roofing

Product Sub-Category Underlayment

Compliance Method: State Product Approval Rule 61G20-3.005 (1) (d)

Product Description: "ST™" is a self-adhering membrane composed of fiberglass reinforced with

rubberized asphalt adhesive, with a release liner and a 3" selvedge edge.

Product Material /

Standards:

Material Type: Styrene Butadiene Styrene (SBS)

Material shall comply with ASTM D 1970 per Florida Building Code FBC 6th Edition

(2017), Chapter 15.

Product Dimension(s) Roll size: 38" wide x various lengths

Thickness: 75-mils (nominal)

Color: White

Substrate(s): "STS™" has been evaluated for application to the following substrates

(Design of support is outside the scope of this evaluation):

Plywood Deck

Installation: General Installation Instructions:

"Premium HT Tile and Metal™" shall be installed in accordance with the attached installation method and in compliance with applicable code sections of the FBC 6th Edition (2017), subject to the Limitations and Conditions of Use listed in this

Evaluation Report.

Refer to installation details at the end of this report. Refer to manufacturer's

installation instructions as a supplemental guide for attachment.



Page 3 of 5

Specialty Structural Engineering

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Performance Standards:

The product described herein has demonstrated compliance with:

• **ASTM D 1970-15a** – Specification Self-adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roof Underlayment for Ice Dam Protection

Standards Equivalency:

The ASTM D 1970-01 standard version used to test the product meets the prescribed standards in ASTM D 1970-15a standard version adopted by the Florida Building Code 6th Edition (2017) for use as evaluated in this report.

Code Compliance:

The product(s) described herein have demonstrated compliance with the performance standards listed above as referenced in the current Florida Building Code.

Evaluation Report Scope:

This product has been evaluated in compliance with the building envelope requirements of the Florida Building Code, as related to the scope section to Florida Product Approval Rule 61G20-3.001.

Product Limitations and Conditions of Use:

- Deck shall be in compliance with applicable building code.
- Installation is limited to use with approved roof coverings that are mechanically fastened through the underlayment and is attached to the sheathing or rafters.
- Minimum slope shall be 3:12 or greater.
- Ensure that roof system provide adequate ventilation to prevent moisture buildup in interior structure.
- Not to be applied over EPDM rubber or TPO rubber roofing.
- Product is acceptable for use with any roof covering system which specifically
 references product in the FBC approval. If not listed, an application may be
 submitted to the local building jurisdiction for approval based on this
 evaluation combined with supporting data for the roof covering and its
 attachment to support.
- Do not expose product to direct sunlight for more than 90 days.

General Limitations and Conditions of Use:

• Scope of "Limitations and Conditions of Use" for this evaluation:

This evaluation report for "Optional Statewide Approval" contains technical documentation, specifications and installation method(s) which include "Limitations and Conditions of Use" throughout the report in accordance with Rule 61G20-3.005. Per Rule 61G20-3.004, the Florida Building Commission is the authority to approve products under "Optional Statewide Approval".

- Option for application outside "Limitations and Conditions of Use"
 Rule 61G20-3.005(1)(e) allows engineering analysis for "project specific approval by the local authorities having jurisdiction in accordance with the alternate methods and materials authorized in the Code". Any modification of the product as evaluated in this report and approved by the Florida Building Commission is outside the scope of this evaluation and will be the responsibility of others.
- This report is a building code product evaluation per FLPE rule (FAC) 61G15-36 to comply with Florida product approval rule (FAC) 61G20-3. This evaluation



Page 4 of 5

Specialty Structural Engineering

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report is part of the Florida Building Commission approval for the listed code related criteria. This report by James Buckner, P.E. and CBUCK Engineering is not a design certification of code compliance construction submittal documentation, per FBC section 107, for any individual structure, site specific or permit design.

- Design of support system is outside the scope of this report.
- Fire Classification is outside the scope of Rule 61G20-3, and is therefore not included in this evaluation.
- This evaluation report does not evaluate the use of this product for use in the High Velocity Hurricane Zone code section. (Dade & Broward Counties)

Quality Assurance:

The manufacturer has demonstrated compliance of roof panel products in accordance with the Florida Building Code and Rule 61G20-3.0005 (3) for manufacturing under a quality assurance program audited by an approved quality assurance entity through Keystone Certifications, Inc. (FBC Organization ID# QUA 1824).

Referenced Data:

1. ASTM D 1970-01 Test

By PRI Construction Materials Technologies, Inc. (FBC Organization ID# TST 1556) Report No. MFM-035-02-01, Date: 10/25/10

- Equivalency of Test Standard Certification
 By James L. Buckner, P.E. @ CBUCK Engineering
 (FBC Organization # ANE 1916)
- 3. Quality Assurance

Keystone Certifications, Inc. (FBC Organization ID# QUA 1824) MFM Building Products Corp. Licensee #335

4. Certification of Independence By James L. Buckner, P.E. @ CBUCK Engineering (FBC Organization # ANE 1916)



Page 5 of 5

Specialty Structural Engineering

CBUCK, Inc. Certificate of Authorization #8064

MFM Building Products Corp. STS

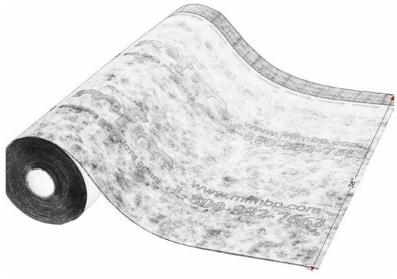
Self-Adhered Roofing Underlayment

General Installation Instructions:

- Product to be applied directly to a clean dry surface.
- Dust, dirt, oil, grease, moisture, debris and other loose materials or contaminants must be removed prior to application.
- Check that all nails in deck are not protruding and re-fasten any loose decking panels.
- Prime Substrate with asphalt base primer.
- Cut the membrane to appropriate length.
- Peel back the release sheet, align the membrane and press into place onto roof deck.
- Install in a shingle-like pattern so that water flows over seams.
- Overlap end laps a minimum of 6". Side laps must be a minimum of 3".
- Store product in the carton in a dry place until ready to use. Keep product out of direct sunlight.
- Cover within 90 days.
- Protect membrane from damage during construction.

Product Illustration





"STS™" Underlayment