

## SECTION 07550

### MODIFIED BITUMINOUS MEMBRANE ROOFING – Peel & Seal®

This section is based on the products of MFM Building Products Corp., which is located at:

525 Orange St.  
P. O. Box 340  
Coshocton, OH 43812  
Toll Free Tel: (800) 882-7663  
Tel: (740) 622-2645  
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Web: <http://www.mfmbsp.com>

MFM Building Products was founded in 1961 and has been a leader in manufacturing waterproofing barriers and sealing systems for the construction industry. MFM offers customers a complete “envelope” of waterproofing solutions from the rooftop to the foundation.

MFM product advantages include: self-adhering or “self-stick” properties; self-sealing around fasteners; unique adhesive systems that will not crack or dry out; membranes that are compatible with most building materials; fast and easy installation to save time and money; competitively priced; rugged and reliable performance; and all products are made in the USA.

Whether your project is new construction, an addition or repair, you can rely on MFM Building Products for the best waterproofing and sealing solutions available. Contact 800-882-7663 or email [customerservice@mfmbsp.com](mailto:customerservice@mfmbsp.com) for more information or pricing.

## PART 1 GENERAL

### 1.1 SECTION INCLUDES

**\*\* NOTE TO SPECIFIER \*\*** Delete items below not required for project.

- A. Single ply membrane roofing.
- B. Roll roofing.
- C. Seaming tape.

### 1.2 RELATED SECTIONS

**\*\* NOTE TO SPECIFIER \*\*** Delete any sections below not relevant to this project; add others as required.

- A. Section 03300 - Cast-In-Place Concrete.
- B. Section 04800 - Masonry Assemblies.
- C. Section 06100 - Rough carpentry.
- D. Section 06112 - Framing and Sheathing.
- E. Section 07210 - Building Insulation.

### 1.3 REFERENCES

**\*\* NOTE TO SPECIFIER \*\*** Delete references from the list below that are not actually required by the text of the edited section.

- A. ASTM International:
  - 1. ASTM D 903 - Standard Test Method for Peel or Stripping Strength of Adhesive Bonds.
  - 2. ASTM D 1970 - Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection.
  - 3. ASTM D 2523 - Standard Practice for Testing Load-Strain Properties of Roofing Membranes.
  - 4. ASTM D 3767 - Standard Practice for Rubber - Measurement of Dimensions.
  - 5. ASTM E 96 - Standard Test Methods for Water Vapor Transmission of Materials.
  - 6. ASTM E 2112 - Standard Practice for Installation of Exterior Windows, Doors and Skylights.
  
- B. Florida Building Code (FBC): Miami-Dade County Product Approval System.
  - 1. FL No. 11842.2.
  - 2. FL No. 13025.1.
  - 3. FL No. 13025.2.
  
- C. Underwriters Laboratories, Inc. (UL).
  
- D. International Code Council: ICC-ES AC-75 - Acceptance Criteria for Membrane Roof-Covering Systems.

### 1.4 SUBMITTALS

- A. Submit under provisions of Section 01300.
  
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
  - 1. Preparation instructions and recommendations.
  - 2. Storage and handling requirements and recommendations.
  - 3. Installation methods.
  
- C. Shop Drawings: Submit shop drawings including details of construction and relationship with adjacent construction.
  
- D. Manufacturer's Certification: Submit manufacturer's certification that materials comply with specified requirements and are suitable for intended application.
  
- E. Warranty: Submit manufacturer's standard warranty.

**\*\* NOTE TO SPECIFIER \*\*** Delete selection samples if colors have already been selected.

- F. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns.
  
- G. Verification Samples: For each finish product specified, two samples, minimum size 3 inches (75 mm) x 4 inches (100 mm), representing actual product, color, and patterns.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: Experienced in installation of specified material type with working knowledge of specified products and Project specific application requirements.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store and handle materials and products in strict compliance with manufacturer's instructions and recommendations and industry standards.
- B. Store products indoors in manufacturer's or fabricator's original containers and packaging, with labels clearly identifying product name and manufacturer. Protect from damage.
- C. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

1.7 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.

1.8 WARRANTY

- A. Limited Warranty:
  - 1. Manufacturer warrants materials to be free from leaks caused by defects in material or manufacturing for a period of ten years from the date of purchase when applied according to published directions.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: MFM Building Products Corp.; 525 Orange St., Coshocton, OH 43812. ASD. Toll Free Tel: (800) 882-7663. Tel: (740) 622-2645. Fax: (740) 622-6161. Email: customerservice@mfm-bp.com. Web: <http://www.mfm-bp.com>.

**\*\* NOTE TO SPECIFIER \*\*** Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.

- B. Substitutions: Not permitted.
- C. Requests for substitutions will be considered in accordance with provisions of Section 01600.

**\*\* NOTE TO SPECIFIER \*\*** Delete if not required.

2.2 SINGLE PLY MEMBRANE ROOFING

**\*\* NOTE TO SPECIFIER \*\* Delete if not required.**

## 2.3 ROLL ROOFING

**Peel & Seal®** is the original, 45-mil self-stick roll roofing specifically designed for low slope residential and commercial roofing applications. Peel & Seal® may be used anywhere a fast, dependable waterproofing barrier is needed and is ideal for roofing, patching, gutter repair, flashing, and general waterproofing where the membrane will be exposed. It is also ideal for metal roof systems, mobile homes, trailers, RVs, and sun rooms. Peel & Seal® adheres to EPDM roofing systems when used with WeatherBond™ Multi-Purpose Primer. Product applies directly to the roof deck – no glues, torches, tapes or fasteners are required. Tools for installation include a utility knife, and hand or large push roller.

A. Product: Peel & Seal® as manufactured by MFM Building Products Corp.

**\*\* NOTE TO SPECIFIER \*\* Delete products not required.**

1. Product Model Numbers: Aluminum 36 inches (914 mm) wide: MFM 50036.
2. Product Model Numbers: White 36 inches (914 mm) wide: MFM 50W36.
3. Product Model Numbers: Gray 36 inches (914 mm) wide: MFM 50G36.
4. Product Model Numbers: Almond 36 inches (914 mm) wide: MFM 50A36.
5. Product Model Numbers: Aluminum 18 inches (457 mm) wide: MFM 50018.
6. Product Model Numbers: White 18 inches (457 mm) wide: MFM 50W18.
7. Product Model Numbers: Gray 18 inches (457 mm) wide: MFM 50G18.
8. Product Model Numbers: Almond 18 inches (457 mm) wide: MFM 50A18.
9. Product Model Numbers: Aluminum 12 inches (305 mm) wide: MFM 50012.
10. Product Model Numbers: White 12 inches (305 mm) wide: MFM 50W12.
11. Product Model Numbers: Gray 12 inches (305 mm) wide: MFM 50G12.
12. Product Model Numbers: Almond 12 inches (305 mm) wide: MFM 50A12.
13. Product Model Numbers: Aluminum 9 inches (229 mm) wide: MFM 50009.
14. Product Model Numbers: White 9 inches (229 mm) wide: MFM 50W09.
15. Product Model Numbers: Gray 9 inches (229 mm) wide: MFM 50G09.
16. Product Model Numbers: Almond 9 inches (229 mm) wide: MFM 50A09.
17. Product Model Numbers: Aluminum 6 inches (152 mm) wide: MFM 50006.
18. Product Model Numbers: White 6 inches (152 mm) wide: MFM 50W06.
19. Product Model Numbers: Gray 6 inches (152 mm) wide: MFM 50G06.
20. Product Model Numbers: Almond 6 inches (152 mm) wide: MFM 50A06.
21. Product Model Numbers: Aluminum 4 inches (102 mm) wide: MFM 50004.
22. Product Model Numbers: White 4 inches (102 mm) wide: MFM 50W04.
23. Product Model Numbers: Gray 4 inches (102 mm) wide: MFM 50G04.
24. Product Model Numbers: Almond 4 inches (102 mm) wide: MFM 50A04.
25. Product Model Numbers: Aluminum 3 inches (76 mm) wide: MFM 50003.
26. Product Model Numbers: White 3 inches (76 mm) wide: MFM 50W03.
27. Product Model Numbers: Gray 3 inches (76 mm) wide: MFM 50G03.
28. Product Model Numbers: Almond 3 inches (76 mm) wide: MFM 50A03.
29. Description: Patented laminate of reflective aluminum foil, rugged, cross-linked polymer films, and a thick layer of rubberized asphalt. Asphalt compound adheres to most surfaces, seals around most punctures, forms a protective waterproof barrier.
30. Release Liners: Applied to protect adhesive surface until Peel and Seal is installed.
31. Minimum Slope: Applicable for slopes greater than 1/2 inch per foot (42 mm per meter).

B. Technical Properties:

1. Material Thickness (ASTM D 3767): 45 Mils (1.14 mm) Nominal.
2. Flexibility at -20 degrees F (-29 degrees C) (ASTM D 1970): Pass.
3. Vapor Permeance (ASTM E 96): Less than 0.01.
4. Nail Sealability (ASTM D 1970): Pass.

5. Tensile MD (ASTM D 2523): 32 lbs/inch (0.57 Kg/mm).
6. Tensile CMD (ASTM D 2523): 33 lbs/inch (0.58 Kg/mm).
7. Elongation MD (ASTM D 2523): 788 percent.
8. Elongation CMD (ASTM D 2523): 779 percent.
9. Adhesion to Plywood at 75 degrees F (24 degrees C) (ASTM D 903/1970): 51 lbs/ft (75 Kg/meter).
10. Adhesion to Plywood at 40 degrees F (4.4 degrees C) (ASTM D 903/1970): 14 lbs/ft (21 Kg/meter).
11. Installation Temperature: Greater than 55 degrees F (13 degrees C).

C. Approvals:

1. Meets the requirements of: ICC-ES AC-75, Florida Building Code FL# 11842.2, FL# 13025.1, FL# 13025.2, has a UL Class "A" Fire Rating, and is Miami-Dade County Approved. Texas Dept. of Insurance RC38.

D. Accessories:

**\*\* NOTE TO SPECIFIER \*\* Delete accessories not required.**

1. Substrate Primer: As recommended by membrane manufacturer.
2. EPDM Substrate Primer: WeatherBond™ Multi-Purpose Primer as distributed by MFM Building Products Corp.
3. Membrane Adhesive: MFM Spray Adhesive™ as manufactured by MFM Building Products Corp.
4. Termination Bar: As recommended by membrane manufacturer.
5. Exterior Grade Caulk: As recommended by membrane manufacturer.

## PART 3 EXECUTION

### 3.1 EXAMINATION AND PREPARATION

- A. Inspect and prepare substrates using the methods recommended by the manufacturer for achieving best result for the substrates under project conditions.
- B. Clean surfaces thoroughly prior to installation. Do not proceed with installation until substrates have been prepared using the methods recommended by the manufacturer and deviations from manufacturer's recommended tolerances are corrected. Commencement of installation constitutes acceptance of conditions.
- C. If preparation is the responsibility of another installer, notify Architect in writing of deviations from manufacturer's recommended installation tolerances and conditions.

### 3.2 ROLL ROOFING INSTALLATION

Peel & Seal® will adhere directly to most surfaces including wood, metal, fully cured masonry and existing smooth asphalt roofs and to rigid insulation board with foil facers. When the product is applied over plywood, approved insulation boards or other rigid board materials, first tape the joints using 4 inch (102 mm) Peel & Seal®, duct or other plasticized, construction grade tape.

- A. Surface Preparation: The surface to receive roll roofing shall be clean, smooth, dry and free from oil, grease, solvents or debris. EPDM substrates shall be primed with WeatherBond Primer before applying roll roofing. Before applying roll roofing over caulks, sealants or petroleum-based materials, allow any solvents to evaporate fully. Prime plywood, OSB, composition board, masonry and other surfaces to obtain a smooth, clean surface.

1. A fiberglass base sheet shall be nailed or mopped in place as indicated, priming before application of roll roofing.
  2. Do not install roll roofing over tongue and groove, plank decks or organic base sheet.
  3. Do not install roll roofing over urethane or urethane composite insulations.
- B. Install in accordance with manufacturer's instructions.
1. Apply by removing the release liner and pressing the membrane into place. Cut to fit using scissors or razor knife.
  2. Overlap the product, 3 inch (76 mm) side laps and 6 inch (152 mm) end laps. Apply MFM Spray Adhesive™ to maximize adhesion at perimeters, flashings, vertical surfaces, repairs and detailing areas.
  3. Peel & Seal® shall be installed perpendicular to the slope of the roof on slopes of up to 3 in 12, parallel on slopes exceeding 3 in 12. Installation should begin at the low point of the roof. Proceed up the slope so water does not flow against the laps.
  4. Cut membrane to the desired length. Without removing the release liner, lay the product onto the roof deck in the desired alignment and let the membrane relax into position. One installer shall hold the end of the membrane taught while the other removes 2 to 3 feet (610 to 914 mm) of the release liner at the opposite end of the section. Press this exposed section onto the roof deck and press firmly into place. While the first installer ensures that the membrane remains taught at all times, the second installer should carefully pull away the release liner at a 45 degree angle, working towards the first installer. As the release liner is removed, press the membrane into place by hand. Continue removing the release liner, approaching the installer holding the membrane taught. Raise the last section into the air, remove the remaining release liner; lay membrane back into place.
  5. Entire membrane surface should be rolled with a weighted roller, paying special attention to all overlaps and exposed outside edges, to achieve maximum adhesion. All perimeters shall be mechanically attached.
  6. Where the field of the roof intersects a wall, membrane shall extend up the vertical surface at least 4 inches (102 mm). Another strip of material about 12 inches (305 mm) in width shall be installed as a counter flashing. This strip shall extend 4 inches (102 mm) out onto the roof and extend at least 4 inches (102 mm) above the edge of the roof membrane. This counter flashing shall be mechanically attached on the vertical surface using a metal termination bar and sealed with a bead of exterior grade caulk. All perimeters shall be mechanically attached.

### 3.3 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

**END OF SECTION**