

SECTION 07130

SHEET WATERPROOFING – NX 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
Fax: (740) 622-6161
Email: customerservice@mfmbsp.com
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 for more information or pricing.

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Self-adhering sheet waterproofing membranes.

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 412 - Standard Test Methods for Vulcanized Rubber and Thermoplastic Rubbers and Thermoplastic Elastomers-Tension.
 - 2. ASTM D 779 - Standard Test Method for Water Resistance of Paper, Paperboard, and Other Sheet Materials by the Dry Indicator Method.
 - 3. ASTM D 882 - Standard Test Method for Tensile Properties of Thin Plastic Sheeting.
 - 4. ASTM D 1970 - Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection.
 - 5. ASTM E 96 - Standard Test Methods for Water Vapor Transmission of Materials.
- B. International Code Council - Evaluation Service (ICC-ES):
 - 1. ICC-ES AC 38 - Acceptance Criteria for Water-Resistive Barriers.
 - 2. ICC-ES ESR 2783 - Evaluation Report.

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.
- F. 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. Delivery: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.
- B. Storage:
 - 1. Store materials in clean, dry, heated area indoors in accordance with manufacturer's instructions.

2. Store cartons on end and protect from moisture and damage.
3. Protect from temperatures above 100 degrees F (38 degrees C).
4. Do not remove rolls from cartons until application.

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 two 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@mfbmp.com. Web: <http://www.mfbmp.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.

2.2 WATERPROOFING MEMBRANES

NX Seal™ is a prefabricated, self-adhering sheet-type waterproofing membrane. It is engineered to be a multi-purpose waterproofing sheet suitable for use under siding and exterior plaster. NX Seal adheres aggressively to most clean, dry substrates including metal, wood, vinyl and masonry. It can be used as an underlayment for stucco at head, sill, chimney shoulder, pot shelves, parapets, pony walls and other general waterproofing applications. The special NX Seal polymer modified waterproofing compound self-seals around punctures such as nails, screws and staples to prevent damage from water penetration.

- A. Product: **NX Seal™** as manufactured by MFM Building Products Corp.

**** NOTE TO SPECIFIER **** Delete products model numbers not required.

1. Product Model Numbers: 36 inches (914 mm) wide, MFM 51436.
2. Product Model Numbers: 18 inches (457 mm) wide, MFM 51418.
3. Product Model Numbers: 12 inches (305 mm) wide, MFM 51412.
4. Product Model Numbers: 9 inches (229 mm) wide, MFM 51409.
5. Product Model Numbers: 6 inches (152 mm) wide, MFM 51406.
6. Description: Prefabricated self-adhering sheet-type waterproofing membrane.
7. Composition: High-tensile polyester film coated with a layer of specially formulated rubberized asphalt adhesive.
8. Release Liners: Protect asphalt, removed as membrane is installed.

9. Technical Properties:
 - a. Installation Temperature Range: Greater than 50 degrees F (10 degrees C).
 - b. Material Color: Black.
 - c. Material Thickness (ASTM D 1970): 40 Mils (1.0 mm) Nominal.
 - d. Flexibility at -20 degrees F (-29 degrees C) (ASTM D 1970): Pass.
 - e. Vapor Permeance (ASTM E 96): 0.08 g/m² Maximum.
 - f. Nail Sealability (ASTM D 1970): Pass.
 - g. Tensile (ASTM D 412): 37 lbf/in² (0.04 ksi).
 - h. Elongation (ASTM D 412): 135 percent Minimum.

**** NOTE TO SPECIFIER **** For installation below minimum installation surface temperature. Delete if not required.

2.3 ACCESSORIES

- A. Adhesive: MFM Spray Adhesive™ as manufactured by MFM Building Products Corp.
- B. Primer: Asphalt-based commercial primer.

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.

NX Seal adheres to most clean, dry substrates including metal, wood, rigid vinyl, masonry, poured concrete, concrete block, wallboard/mortarboard, foam insulation board and other common building materials such as house wrap. Concrete, OSB, masonry, Densdeck® and Fiberock® must be dry, fully cured and primed with an asphalt-based primer before applying. A primer helps to remove any surface dust or loose material that would inhibit good adhesion. Clean, dry wood and metal surfaces do not require priming. Prime weathered surfaces as needed. It is the contractor's responsibility to ensure adequate adhesion. NX Seal's film surface is compatible with most construction sealants and primers. For additional adhesion, especially in cool temperatures, use MFM Spray Adhesive™. When applying on vertical concrete surfaces, a termination bar is recommended around the top.

3.2 INSTALLATION

- A. Install in accordance with manufacturer's instructions including the following:
 1. Apply in clear, dry weather.
 2. Surface must be clean, dry and free from oil.
 3. Masonry must be clean, fully cured and primed with an asphalt primer.
 4. Prime weathered surfaces as necessary - clean, dry, wood and metal surfaces do not require priming.
 5. Use 3 inches (76 mm) side laps and 6 inches (152 mm) head laps.

6. Apply uniform pressure with a 2 to 3 inches (51 to 76 mm) hand roller to entire surface.
7. Do not install over solvent-based sealants unless fully cured - active solvents may liquefy bottom adhesive surface.
8. Test for compatibility with caulks and sealants.
9. Do not install over flexible vinyl gaskets.
10. Do not expose installed product to direct sunlight for more than 90 days.

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