

# WaterWay Rainscreen Drainage Mats

Stuc-O-Flex International, Inc.

## **Section 07460 - Rainscreen Drainage Mat**

### Part 1 General

#### 1.1 SUMMARY:

- A. Section Includes: WaterWay Rainscreen Drainage Mat for Use in Sidewall Construction
- B. Related Sections:

1. Division 4 Section: Masonry Units (04 20 00) , Stone 904 40 00) Masonry Veneer (04 70 00)
2. Division 6 Section: Rough Carpentry (06 10 00) Finish Carpentry (06 20 00)
3. Division 6 Section: Sheathing (06 16 00)
4. Division 7 Section: Wood Base Siding (07 46 23)
5. Division 7 Section: Exterior Insulation and Finish Systems (EIFS) (07 24 00)
6. Division 7 Section: Fiber-Reinforced Cementitious Panels (07 46 46)
7. Division 7 Section: Flexible Flashings (07 56 00)
8. Division 9 Section: Portland Cement Plaster (09 22 00)

#### 1.2 SUBMITTALS:

- A. General: Provide submittals in accordance with Conditions of the Contract and Division 1 Submittal Procedures.
- B. Product Data: Submit manufacturer's product data sheets
- C. Details: Manufacturers detail drawings
- D. Samples: Submit minimum 6" x 6" samples for selection and/or verification.
- E. Warranty: Provide manufacturers sample warranty.

#### 1.3 QUALITY ASSURANCE:

- A. Installer: Installer shall have no less than three years of experience with products similar to those specified.
- B. Mock-Ups: [Specify requirements for mock-up.] Subject to acceptance by owner / architect, mock-up may be retained as part of finish work.
- C. Mock-up shall be retained at project location, used as basis of acceptance for completed work
- D. After project completion remove and properly dispose of.
- E. Pre-Installation Meetings: Conduct pre-installation meetings to verify project requirements, substrate conditions, construction documents, details and manufacturer's warranty requirements

#### 1.4 DELIVERY, STORAGE & HANDLING:

- A. General: Comply with Division 1 Product Requirement Section
- B. Delivery: Deliver materials in manufacturer's original, unopened, undamaged rolls / pallets with identification labels intact and clearly visible
- C. Storage and Protection: Store materials protected from rain, direct sun light and exposure to harmful conditions. Extreme cold temperatures will result in firm material, store at temperatures above 40 degrees (if possible).

## 1.5 REFERENCES:

- A. Filter Fabric shall meet minimum performance criteria outlined below:

Performance Testing:

Boat Test ASTM D-779-03:  
H2O Vapor Transfer in 12 Minutes  
96 Hours No Water Passed Through Membrane

Water Vapor Transmission Test: ASTM E-96:  
Perm Rating Exceeds 247

Hydrostatic Pressure Test - AATCC 127:  
10cm / 18 hours

Acceptance Criteria AC-38 / Water Resistive Barriers:  
Passes section 4.2.2 Ponding Water Test

## 1.6 WARRANTY:

- A. Project Warranty: Refer to Conditions of the Contract for project warranty provisions.  
B. Manufacturer's Warranty: Submit, for Owner's acceptance, manufacturer's standard warranty document executed by authorized company official.

## Part 2 Products

### 2.1 RAINSCREEN DRAINAGE MAT:

- A. Manufacturer: Stuc-O-Flex International, Inc.  
1. Contact: 17639 NE 67th Court, Redmond, WA 98052, phone: 800-305-1045; fax: 425-869-0107;  
E-mail: [techservice@stucoflex.com](mailto:techservice@stucoflex.com); website: [www.stucoflex.com](http://www.stucoflex.com)  
B. [Rainscreen Drainage Mat with Moisture resistant filter fabric] including the following: [select product / products]  
C. Filter Fabric shall meet minimum performance criteria outlined below:

Performance Testing:

1. Boat Test ASTM D-779-03:  
H2O Vapor Transfer in 12 Minutes  
96 Hours No Water Passed Through Membrane

2. Water Vapor Transmission Test: ASTM E-96:  
Perm Rating Exceeds 247

3. Hydrostatic Pressure Test - AATCC 127:  
10cm / 18 hours

4. Acceptance Criteria AC-38 / Water Resistive Barriers:  
Passes section 4.2.2 Ponding Water Test

## 1. WaterWay 3mm

**WaterWay 3mm** is a nominal **1/8 inch / 3mm** thick drainage product consisting of a polymer core of fused entangled filaments with a **moisture resistant filter fabric** bonded to the outer surface. WaterWay 3mm is designed for use with manufactured and natural stone, traditional and one coat stucco, EIFS, fiber-cement and wood based sidings, masonry, metal and other wall cladding materials. This rainscreen product provides an un-interrupted drainage path & ventilation for incidental moisture between exterior finish materials and wall sheathing.

- a. Core Material: Extruded Polymer Matrix.
- b. Fabric Material: Non-Woven Polypropylene Fiber
- c. Width: Core 58 " (140.0) Filter Fabric 62" (147.1cm)
- d. Length: 37' (12.3m).
- e. Thickness: 0.125" (3.0mm).
- f. Weight: 13 lb. / roll. 9.53 kg / roll
- g. Footage per Roll: 180 sq. ft. / 16.7 sq. meters

## 2. WaterWay 7mm

**WaterWay 7mm** is a nominal **5/16 inch / 7mm** thick drainage product consisting of a polymer core of fused entangled filaments with a **moisture resistant filter fabric** bonded to the outer surface. WaterWay 7mm is designed for use with manufactured and natural stone, traditional and one coat stucco, EIFS, fiber-cement and wood based sidings, masonry, metal and other wall cladding materials. This rainscreen product provides an un-interrupted drainage path & ventilation for incidental moisture between exterior finish materials and wall sheathing.

- a. Core Material: Extruded Polymer Matrix.
- b. Fabric Material: Non-Woven Polypropylene Fiber
- c. Width: Core 58 " (140.0) Filter Fabric 62" (147.1cm)
- d. Length: 37' (12.3m).
- e. Thickness: 0.30" (7.0mm).
- f. Weight: 16 lb. / roll. 7.2 kg / roll
- g. Footage per Roll: 180 sq. ft. / 16.7 sq. meters

### 3. WaterWay 11mm

**WaterWay 11mm** is a revolutionary Vertical Wall Rainscreen consisting of a nominal **7/16 inch / 11mm** thick extruded polymer matrix of tangled monofilaments. The monofilaments are heat laminated to a **moisture resistant filter fabric with high perm rating** on the outer side. WaterWay 11mm is designed for use with manufactured and natural stone, traditional and one coat stucco, EIFS, fiber-cement and wood based sidings, masonry, metal and other wall cladding materials. This rainscreen product provides an un-interrupted drainage path & ventilation space for incidental moisture between the sheathing and exterior wall claddings. \* Meets Canadian Code Requirements \*

- a. Core Material: Extruded Polymer Matrix
- b. Fabric Material: Non-Woven Polypropylene Fiber
- c. Width: Core 58 " (140.0) Filter Fabric 62" (147.1cm)
- d. Length: 37' (12.3m).
- e. Thickness: 0.43" (11.0mm).
- f. Weight: 25 lb. / roll. 11.36 kg / roll
- g. Footage per Roll: 180 sq. ft. / 16.7 sq. meters

### 4. WaterWay 19mm

Description: WaterWay Rainscreen19mm is a 3/4 inch / 19 mm randomly oriented geometrically patterned drainage and ventilation mat. It is designed to eliminate moisture and moisture vapor in masonry applications and other siding applications. It is produced from an extruded polymer matrix of tangled monofilaments. The monofilaments are heat welded at the junctions to form a resilient structure that spaces siding away from the inner sheathing. The product is especially useful in masonry where a clear cavity is desired. Uses include manufactured and natural stone, traditional and one coat stucco, EIFS, fiber-cement and wood based sidings, masonry, metal and other wall cladding materials.

- a. Core Material: Extruded Polymer Matrix.
- b. Fabric Material: Non-Woven Geo-composite Fabric
- c. Width: 48 " (122 cm)
- d. Length: 50' (15.2m).
- e. Thickness: 0.75" (19.0mm).
- f. Weight: 32 lb/roll. 14.5 kgs/roll
- g. Footage per Roll: 180 sq. ft. / 16.7 sq. meters

## 2.2 PRODUCT SUBSTITUTIONS

A. Substitutions: No substitutions permitted.

## 2.3 ACCESSORIES

A. Provide the following accessories:

1. [Housewrap / Air barrier] [Building paper]:
  - a. Material: [Specify material.].
  - b. Material Standard: [Specify material standard.].
  - c. Manufacturer: [Specify manufacturer.].
  
2. Self adhering flashing
  - a. Material: Therm-Flash / Butyl with reinforced foil film
  - b. Manufacturer: Stuc-O-Flex International, Inc.
  - c. Size: Nominal 20 mils by 4, 6, 9, & 12 inch by 100 foot rolls
  
3. Fasteners:
  - a. Type: [Galvanized Roofing Nails] [Plastic Cap Nails] [Staples]
  - b. Material: Corrosion protected steel
  - c. Material Standard: [Specify material standard]
  - d. Manufacturer: [Specify manufacturer]
  - e. Size: Suitable for project application

## Part 3 Execution

### 3.1 MANUFACTURER'S INSTRUCTIONS

A. Comply with the instructions and recommendations of the manufacturer.

### 3.2 EXAMINATION

A. Site Verification of Conditions

B. Verify that site conditions are acceptable and do not begin installation until substrates have been properly prepared.

1. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding
2. Do not proceed with installation until unacceptable conditions are corrected.

### 3.3 INSTALLATION

A. Install sidewall sheathing material [Gypsum sheathing] [Oriented strand board] [Plywood] [Foam board] [Insert sheathing description.] over framing.

B. Apply [Building paper] [Housewrap] [Fluid Applied Membrane] in compliance with manufacturer's instructions if required.

### C. Install Rainscreen Drainage mat.

1. For horizontal application, work from bottom to top (For vertical applications work from a corner Wrap the building completely, butting tightly to all door and window casings, stopping at all wall ends. Install Drainage mat so that it lies flat against the wall /substrate.
2. If wall is designed as a venting wall, ends should be terminated at a furring strip of matching thickness to prevent air movement to adjoining wall.
3. At all window and door openings, cut tight to vertical part of window, door casings.  
Take care not to cut or damage waterproofing and weather barrier.
4. If finish cladding is Stucco, EIFS or Cultured Stone Veneer, at the bottom of the mat, place a foundation weep screed, a "J" weep hole termination bar or flashing with weeps. Weather barrier and mat should be placed over top of the back piece of the weep screed, termination bar or flashing to create the proper shingle and water management.
5. For other finish cladding, attach a 6" wide piece of insect screen material continuously along the bottom edge of the Drainage mat, 3" above bottom edge of the Drainage mat. Fold over outward facing surface of installed Drainage mat. Attach with a large head nail to hold screen in place until cladding is applied. For top vented walls follow a similar procedure at the top of the Drainage mat.
6. If wall is designed as a venting wall, at wall terminations, place a wood termination strip along the outside edge of each wall to create a wind dam for negative wind load.
7. Refer to manufacturers "Installation Guide for Flashing Windows / Doors" for additional detailing recommendations and instruction. YouTube "rainscreen stucco assembly" for general overview

D. Install specified siding or cladding directly over WaterWay Rainscreen Mat in compliance with manufacturer's installation instructions.

**NOTE:** Maximum exposure of WaterWay Rainscreen shall not exceed 30 days, prior to cladding installation.

## 3.4 PROTECTION

- A. Protect installed work from damage due to subsequent construction activity on the site.