

WaterAlley Drainage Mats

Section 07460 - Rainscreen Drainage Mat

Part 1 General

1.1 SUMMARY

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

- 1. Division 4 Section: Masonry Units, Stone
- 2. Division 6 Section: Rough Carpentry and Finish Carpentry for Exterior Trim
- 3. Division 6 Section: Sheathing
- 4. Division 7 Section: Siding
- 5. Division 7 Section: Exterior Insulation and Finish Systems (EIFS)
- 6. Division 7 Section: Fiber-Reinforced Cementitious Panels
- 7. Division 7 Section: Flexible Flashings
- 8. Division 9 Section: Portland Cement Plaster

1.2 SUBMITTALS

- A. General: Submit listed submittals in accordance with Conditions of the Contract and Division 1 Submittal Procedures Section.
- B. Product Data: Submit manufacturer's product data including Details.
- C. Samples: Submit minimum 6" x 6" samples for selection and/or verification.
- D. Closeout Submittals: Submit the following:
 - 1. Warranty documents.

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, mock-up may be retained as part of finish work.
If mock-up is not retained, remove and properly dispose of.
- C. 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
- C. Storage and Protection: Store materials protected from exposure to harmful environmental conditions and at temperature and humidity conditions recommended by the manufacturer

1.5 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. Manufacturer's warranty is in addition to, and not a limitation of, other rights Owner may have under contract documents

Part 2 Products

2.1 RAINSCREEN DRAINAGE MAT

- A. Manufacturer: Stuc-O-Flex International, Inc.
 - 1. Contact: 1055 Ninne North Drive, Alpharetta, GA, phone: 800-325-7540; fax: 770-772-4618; E-mail: technical@demandprodcuts.com; website: www.demandproducts.com.com
- B. Products/Systems: [Rainscreen Drainage mat with Code Compliant Weather Resistive Barrier], [Rainscreen Drainage mat with Moisture resistant filter fabric] including the following: [select product / products]

1. WaterAlley 716

WaterAlley 716™ is a revolutionary Patent Pending Vertical Wall Rainscreen Mat consisting of a nominal **7/16 inch / 11mm** thick extruded polymer matrix of tangled monofilaments. The monofilaments are heat laminated to an impenetrable, breathable, filter fabric on one side and **Typar** code compliant (NER-660, CCMC-12892R) weather resistive barrier on the other side. This multiple layer product creates a **one step weather resistive barrier and rainscreen drainage assembly** in a single application. WaterAlley 716 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. * Meets Canadian Code Requirements *

- a. Core Material: Extruded Polymer Matrix.
- b. Fabric Material: Non-Woven Polyester Fiber
- c. Width: 39 " (99 cm)
- d. Length: 100' (30.5 m).
- e. Thickness: 0.45" (11.47 mm)
- f. Weight: 52 lb /roll. 24 kg / roll
- g. Footage per Roll: 324 sq ft / 30.1 sq meters

2. WaterAlley 516



WaterAlley 516 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. WaterAlley 516 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 55 " (140.0) Filter Fabric 58" (147.1cm)
- d. Length: 115' (35.0m).
- e. Thickness: 0.30" (7.0mm).
- f. Weight: 50 lb / roll. 22.7 kgs / roll
- g. Footage per Roll: 527 sq ft / 49 sq meters

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

3. WaterAlley 11mm



WaterAlley 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. WaterAlley 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 Polyester Fiber
- c. Width: 55 " (140 cm)
- d. Length: 100' (30.5m).
- e. Thickness: 0.45" (11.5mm).
- f. Weight: 50 lb / roll. 22.7 kgs / roll
- g. Footage per Roll: 458 sq ft / 42.5 sq meters

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

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] 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). When using product with attached weather barrier install with flap up to assure proper shingling. Wrap the building completely, covering all door and window penetrations, 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.

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

3.4 PROTECTION

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