

# WaterAlley 516

## Rainscreen Drainage Mat

### Description

**WaterAlley 516** is a nominal **5/16 inch / 7mm** thick drainage product consisting of a polymer core of fused entangled filaments bonded to a moisture resistant filter fabric on the outer surface. WaterAlley 516 is designed for use with manufactured and natural stone, traditional and one coat stucco, EIFS, fiber-cement, wood based sidings, masonry, metal and other wall cladding materials. This rainscreen product provides an uninterrupted drainage path & ventilation for incidental moisture between exterior finish materials and wall sheathing. Applications for roofing and below grade drainage.

WaterAlley 516 has a unique filter fabric bonded to the outer surface that **resists liquid water penetration**, providing greater substrate protection than competitive rainscreen mats.

**Exceeds ICC / IRC AC -38 acceptance criteria for Weather Resistive Barriers**

### Recommended Applications

- WaterAlley Drainable Stucco Assembly
- EIFS
- Traditional Stucco
- Fiber-Cement & Lap Sidings
- Manufactured & Natural Stone
- Below Grade Drainage
- Brick
- Roofing Applications

### Features and Benefits

- Creates space for water drainage & ventilation
- 50 times faster at draining water than standard weather resistive barriers
- Filter fabric ensures a clear drainage path
- Filter fabric exceeds AC-38 acceptance criteria for "Water Resistive Barriers"
- Keeps wet claddings away from the building & weather resistive barriers
- 90% Open space within cavity
- Provides cushion between building & cladding assembly – Reduced cracking
- Up to 40% recycled content – LEED Credits

<b>Technical / Packaging Information</b>		
<b>Product</b>	<b>USA (metric)</b>	<b>WaterAlley 516</b>
Core Material	Polypropylene	
Total Thickness	inches (mm)	0.30 (7.5)
Width (less flap)	inches (cm)	58 (147.3)
Width (with flap)	inches (cm)	62 (157.4)
Length	feet (meters)	37.3 (11.37)
Area	sq. ft. (m2)	180 (16.7)
Roll diameter (average)	inches (cm)	13 (33.0)
Gross roll weight (average)	lbs (kg)	13 (5.8)

<b>Filter Fabric Properties</b>			
<b>Test Method</b>		<b>USA (Metric)</b>	<b>WaterAlley 516</b>
Polymer		Polypropylene	
Weight	EN 1849-1	oz/yd <sup>2</sup> (g/m <sup>2</sup> )	2.21 (75)
Mean Tensile Strength	EN 12311-1	Lbs/ft (kN/m)	181.58 (2.65)
Mean Elongation @ Break	EN12311-1	% (%)	75 (75)
<b>Test Reports</b>			
Hydrostatic Head Pressure	AATCC 127	10 cm / 18 hours (equal to 70-mph wind)	
Acceptance criteria for WRB	AC-38	Sec. 4.2.2 Ponding water - Pass	
Moisture vapor transmission	ASTM E-96	Exceeds 247 perms	
Water resistance (Boat test)	ASTM D-779	Vapor transfer 12 min, no water after 96 hours	
Fabric color		White	

## Installation Procedure

These suggestions represent generally accepted procedures for successful installation. It may be followed, modified, or rejected by the owner, engineer, contractor or their representative to accommodate project specific requirements.

### **Prior to installation the contractor's responsibility is to ensure that:**

1. The substrate is sound, that there are no voids or other protrusions or conditions that would interfere with the drainage plane. Acceptable sheathing types include code compliant exterior grade plywood, oriented strand board, water-resistant gypsum and others. Consult your local building code for approved materials.
2. The substrate is flat or plumb within 6.4mm (1/4 inch) in a 1.2m (4-foot) radius.
3. Windows and doors have been properly flashed and sealed and also that roof flashings have been properly installed. Refer to Installation Guide for Flashing Windows/Doors (Available upon request).
4. Weather resistive barrier is properly installed to allow drainage without water penetration.

### **Attachment to Sheathing with Weather Resistive Barrier**

1. For wall application work from bottom to top. Attach fabric side out with flap down to assure proper shingling. Wrap the building completely, butt tightly at all door, window and other building materials (electrical boxes, air conditioning units, etc.), stopping at all wall ends. Install drainage mat so that it lies flat against the wall with adequate corrosion resistant fasteners to hold in place until cladding material application is complete.
2. If specified cladding is stucco, EIFS or cultured stone veneer, at the bottom of the mat, place a foundation weep screed. Weather barrier and mat may be placed over top of the back leg of the weep screed to create the proper shingle effect and support moisture drainage.

\*\* Review Specifications

## **Storage & Handling**

WaterAlley 516 should be stored at temperature between 50 degrees to 90 degrees, out of direct sunlight.