

# Water Alley 7/16 Rainscreen Wall Drainage Mat

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## Description

**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 a 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, 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. \* Meets Canadian Code Requirements \*

\* The Only Rainscreen with a Weather Resistive Barrier, Drainage Core and Filter Fabric in a Single Application \*

## Recommended Applications

- *WaterWay Drainable Stucco Assembly*
- *Behind Traditional Cement Stucco*
- *Behind Manufactured Stone*
- *Behind EIFS*
- *Fiber-Cement Siding*
- *Lap Siding*

## Features and Benefits

- Creates space for water drainage & ventilation
- 50 times faster at draining water than standard weather resistive barriers alone
- Filter fabric ensures a clear drainage path
- Keeps wet claddings away from the building & weather resistive barriers
- 90% Open space within cavity
- Provides cushion between building & cladding assembly – Reduced cracking
- Class “A” Fire Rated
- Meets Canadian Code Requirements
- LEED Points / Green Build Advantage
- Exceeds AC-24 drainage criteria for EIFS
- Easily interfaced with adjacent material / through wall penetrations
- Equalizes pressure
- Price competitive vs. strapping / furring

Standard Packaging Information			Flow Rate*	
Product	USA (Metric)	WaterAlley 716	Pressure (psf)	Gal/Min/Ft
Core Width	inches (cm)	39.0 (99)	500	5.5
Length	feet (meters)	100.0 (30.5)	750	3.5
Area	yd <sup>2</sup> (m <sup>2</sup> )	36 (30.1)	1000	2.5
Roll Diameter	inches (cm)	30 (76)	1500	1.5
Gross Roll Weight	lbs (kg)	52.0 (24.0)	2000	1.0

Technical Data			Technical Data Typar Housewrap		
Physical Properties	USA (Metric)	WaterAlley 716			
Core Material		Polypropylene	Dry tensile Strength	ASTM D-5034	80 lbs md 87 lbs xd
Thickness	In (mm)	0.45 (11.4)			
Total Weight	Oz/yd <sup>2</sup> (g/m <sup>2</sup> )	13.0 (440.9)	Trapezoidal Tear	ASTM D-1117	30 lbs md 33 lbs xd
Core Weight	Oz/yd <sup>2</sup> (g/m <sup>2</sup> )	8.0 (271)			
Compressive Load <sup>1</sup>	psf (kn/m <sup>2</sup> )	>30,000 (1437.0) No Failure*	Hydrostatic Pressure Resistance	AATCC 127-1995	865 cm
Low Temperature	° F (°C)	-100 (-73)	Moisture Vapor Transmission	ASTM E96-95	11.7 perms
High Temperature	°F (°C)	250 (121)	Water resistance (Boat Test)	ASTM D-779	PASS
Fuel & Gasoline		stable			
Fire Rating		NFPA Class A <sup>2</sup>	Water Ponding	CCMC Technical Guide	PASS
Smoke Density		15			
Flame Spread		25			
Fuel Contribution		0			
Durability		80% Strength Retention			

<sup>1</sup> Test Method: ASTM 1621 modified & ASTM D 4716 <sup>2</sup> Will not promote flame spread

<b>Filter Fabric Properties</b>			
<b>Test Method</b>	<b>USA (metric)</b>	<b>WaterAlley 716</b>	
Polymer		PA6 & PET	
Weight	ASTM D 3776	Oz/yd <sup>2</sup> (g/m <sup>2</sup> )	3.2 (109)
Grab strength	ASTM D 4632	lbs (N)	125.0 (556)
Grab elongation	ASTM D 4632	% %	40.0 (40)
Trapezoidal tear	ASTM D 4533	lbs (N)	40.0 (178)
Puncture resistance	ASTM D 4833	lbs (N)	35.0 (155)
Mullen burst	ASTM D 3786	psi (Kpa)	160.0 (1102)
AOS (maximum average)	ASTM D 4751	(mm)	(0.375)
Flow rate	ASTM D 4491	gpm/ft <sup>2</sup> (l/sec/m <sup>2</sup> )	185.0 (125)
Permittivity	ASTM D 4491	sec <sup>-1</sup> (sec <sup>-1</sup> )	2.5 (2.5)
Fabric color		Gray	

## 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.

### Storage & Handling

Water Alley 716 should be stored at temperature between 50 degrees to 90 degrees, out of direct sunlight.