WaterWay Plus®
Rainscreen Drainage Mats

Description

WaterWay Plus is a revolutionary Patent Pending Vertical Wall Rainscreen Drainage 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 **Dow WeatherMate Plus** on the other side. This multiple layer product creates a one step code compliant weather resistive barrier (NER-640) or (CCMC-13012-R) and rainscreen drainage assembly in a single application. **WaterWay Plus** 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.

Recommended Applications

- *Waterway Drainable Stucco Assembly*
- *Behind Traditional Cement Stucco*
- *Behind Manufactured Stone*
- *Metal Panels*
- *Retaining Walls*
- *Masonry*
- *Behind EIFS*
- *Fiber Cement Sidings*
- *Lap Sidings*

Features and Benefits

- Excellent durability in a breathable membrane
- Outstanding resistance to moisture penetration.
- Exceeds AC-24 drainage criteria for EIFS
- Code Complainant Weather Resistive Barrier (NER-640) (CCMC – 13012-R)
- Easily interfaced with adjacent material / through wall penetrations
- Conforms to irregular surfaces and corners with complete and effective coverage.
- Un-interrupted Drainage Cavity across wall surface unlike strapping or furring
- Class “A” Fire Rated.
- Long rolls reduce installation costs by eliminating interlocking and excessive seams.
- Dimensionally stable in hot weather - not brittle in cold.
- Continuous ventilation when properly designed – Equalizes pressure.
- Redirects & draws moisture away from vulnerable wall sheathing materials.
- Filter fabric assures drain path remains completely clear of stucco or mortar.
- No special skill or training required
- Very competitive vs. strapping/furring

Standard Packaging Information				
Product	**USA**	**(Metric)**	**Waterway 040**	
Core Width	inches	(cm)	48.0	(122.0)
Length	feet	(meters)	100.0	(30.6)
Area	ft^2	(m^2)	400.0	(37.8)
Roll Diameter	inches	(cm)	24.0	(61.0)
Gross Roll Weight	lbs	(kg)	52.0	(24.0)

Flow Rate*	
Pressure (psf)	Gal/Min/Ft
500	5.5
750	3.5
1000	2.5
1500	1.5
2000	1.0

*Typical flow rate vs. pressure for vertical wall applications

Hydraulic gradient 1.0 / sample configuration: plate / Waterway 040 / plate

Technical Data				
Physical Properties	**USA**	**(Metric)**	**Waterway 040**	
Core Material			Polypropylene	
Thickness	inches	(mm)	0.45	(11.4)
Total Weight	Oz/yd^2	(g/m^2)	18.9	(641.0)
Core Weight	Oz/yd^2	(g/m^2)	17.0	(577.0)
Compressive Load Test[1]	psf	(kn/m^2)	>30,000 No Failure*	(1437.0)
Durability Characteristics	80% Strength Retention			
Low Temperature	°F	(°C)	-100	(-73)
High Temperature	°F	(°C)	250	(121)
Fuel & Gasoline Submersion			Stable	
Fire Rating			NFPA Class A[2]	
Smoke Density			15	
Flame Spread			25	
Fuel Contribution			0	

[1] Test Method: ASTM 1621 modified & ASTM D 4716 [2] Will not promote flame spread

Geotextile Fabric Properties					
	Test Method	**USA**	**(metric)**	**Waterway 040**	
Polymer				PA6 & PET	
Weight	ASTM D 3776	Oz/yd^2	(g/m^2)	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^2	(l/sec/m^2)	185.0	(125)
Permittivity	ASTM D 4491	sec^{-1}	(sec^{-1})	2.5	(2.5)
Fabric color				Gray	

Installation Procedure – Above Grade Walls

Horizontally Attaching to Sheathing

1. For horizontal application, work from bottom to top (For vertical applications work from a corner). When using product attach to the surface with the flap up to assure proper shingling. Wrap the building completely, covering all door and window penetrations, overlapping at all wall ends. Install WaterWay Plus mat so that it lies flat against the wall surface using fasteners of appropriate length to hold material in place until claddings are installed.

2. At all window and door openings, cut an “X” across the face of the area starting at each corner, crossing to the opposite corner. Remove the core and fascia at the perimeter of the opening.

3. If finish cladding is Stucco, EIFS or Manufactured 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 may be placed over top of the back piece of the weep screed, termination bar, or flashing to create the proper shingle and water management, or surface mounted over drainage mat assembly.

4. Contact Stuc-O-Flex International, Inc. for more specific information on installation and application opportunities. Cladding selection and scheduling may affect installation procedures.

Stuc-O-Flex International, Inc.
17639 NE 67th Court
Redmond, WA 98052
1-800-305-1045
425-885-5085 Office
425-869-0107 Fax
techservice@stucoflex.com
www.stucoflex.com