

WaterWay 020 Rainscreen Drainage Mat

Description

WaterWay 020 is a Vertical Wall Rainscreen Drainage Mat consisting of a nominal ¼ inch thick extruded polymer matrix of tangled monofilaments. The monofilaments are heat laminated to a breathable, filter fabric on one side. This multiple layer product creates a rainscreen drainage assembly in a single application. **WaterWay 020** is designed for use with manufactured & natural stone, traditional 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*
- *Lap Sidings*
- *Cedar Sidings*
- *Masonry*
- *Behind EIFS*
- *Fiber-Cement Sidings*
- *Metal Panels*

Features and Benefits

- Excellent durability in a breathable membrane
- Outstanding resistance to moisture penetration.
- Exceeds AC-24 drainage criteria for EIFS
- 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.

Technical Data		
Physical Properties	USA (metric)	Waterway 020
Core Material		Polypropylene
Total Thickness	inches (mm)	0.25 (6)
Total Weight	oz/yd ² (g/m ²)	14.50 (489)
Fabric Weight	oz/yd ² (g/m ²)	1.90 (64)
Core Weight	oz/yd ² (g/m ²)	12.60 (425)

Standard Packaging Information		
Product	USA (metric)	Waterway 020
Width (less flap)	inches (cm)	48.0 (123.0)
Width (with flap)	inches (cm)	52.0 (133.0)
Length	feet (meters)	100.0 (30.6)
Area	ft ² (m ²)	400.0 (37.8)
Roll diameter	inches (cm)	30.0 (76.0)
Gross roll weight	lbs (kg)	41.0 (21.0)

Geotextile Fabric Properties

	Test Method	USA (metric)	Waterway 020
Polymer			PA6 & PET
Weight	ASTM D 5261	oz/yd ² (g/m ²)	3.2 (119)
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)	(.357)
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 (3)
Fabric color			Gray

AC24* Drainage Test

Time	Vert.	Horiz.
Calibration ¹	2.21 Gal.	2.25 Gal.
15 Min.	0.33 Gal.	0.34 Gal.
30 Min.	0.76 Gal.	0.77 Gal.
45 Min.	1.19 Gal.	1.22 Gal.
60 Min.	1.63 Gal.	1.66 Gal.
75 Min ²	2.06 Gal.	2.10 Gal.
135 Min.	2.15 Gal.	2.19 Gal.
Efficiency ³	97.63%	97.47%

¹ Water flow without drain mat for 75min.

² Water flow turned off.

³ Test requires 90% min.

* According to ICBO ES "Acceptance Criteria for Exterior Insulation & Finish Systems" AC24 Section 6.11 Oct. 1999.

Deflection & Compression

Pressure	Waterway 020	
	Inches	(mm)
100 psf	0.160	(4.07)
200 psf	0.159	(4.04)
300 psf	0.158	(4.01)
400 psf	0.148	(4.01)
500 psf	0.157	(3.99)
1000 psf	0.151	(3.84)
2000 psf	0.133	(3.38)
4000 psf	0.072	(1.83)

Flow Gal/Ft/Min

Pressure	020
250 psf	5.54
500 psf	5.39
1000 psf	5.07
1500 psf	4.48
2000 psf	3.95
2500 psf	3.60
3000 psf	2.83
4000 psf	1.73

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 since they, not Stuc-O-Flex International Inc., are responsible for planning and executing procedures appropriate to a specific application.

Prior to installation the contractor's responsibility is to:

1. Ensure that the substrate is sound, that there are no voids or other protrusions or conditions that would interfere with the systems performance. Acceptable sheathing types include those typically approved for local use such as plywood, oriented strand board, water-resistant gypsum and others. Consult your local building code for approved materials.
2. Ensure that the substrate is flat or plumb within 6.4mm (1/4 inch) in a 1.2m (4-foot) radius.
3. Ensure that windows and doors have been properly flashed and sealed and also that roof flashings have been properly installed.
4. Ensure that weather barrier is properly installed to allow proper detailing & installation of drain mat.

Attaching to Weather Barrier / Sheathing

1. For horizontal application work from bottom to top (for vertical application work from a corner). Wrap the building completely covering all door and window penetrations, stopping at all wall ends. Ends should be terminated at a furring strip of matching thickness to prevent air movement to adjoining wall.
2. At all window and door openings cut out rectangle of mat within the rough opening. Take care not to cut or damage weather barrier.

3. At the bottom of the mat place a foundation weep screed, a "J" weep hole termination bar, or flashing with weep holes. 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.

4. At wall terminations place a wood termination strip along the outside edge of each wall to create a wind dam for negative wind load.