WaterWay 9714 Rainscreen Drainage Mat

Description:

WaterWay 9714 is a nominal 3/16 inch thick drainage product consisting of a nylon core of fused entangled filaments and a geotextile fabric bonded to one side. WaterWay 9714 is designed for use with traditional stucco, EIFS, cultured stone, and other wall cladding applications as an exterior wall drain. The rainscreen provides a drainage path & ventilation for incidental moisture between exterior wall finish materials and weather resistive barriers.

Recommended Applications

- WaterWay Drainable Stucco Assembly
- Behind Traditional Cement Stucco
- Behind Manufactured Stone

- Behind EIFS
- Fiber-Cement Siding
- Lap Siding

Features and Benefits

- Excellent Durability Class "A" Fire Rated
- Surpasses EIFS / AC-24 Drainage Criteria
- Conforms to irregular surfaces with complete and effective coverage
- Continuous flow even under high loads
- Long rolls reduce installation costs by eliminating interlocking and excessive seams
- Dimensionally stable in hot weather remains flexible in cold
- Continuous ventilation when properly designed Equalizes pressure
- Redirects & draws moisture away from vulnerable wall sheathing materials
- Filter fabric assures an uninterrupted drain path that remains clear of stucco or mortar

Technical Data				
Physical Properties	USA	(metric)	WaterW	ay 9714
Core Material		Ny	rlon 6	
Total Thickness	inches	(mm)	0.19	(4.7)
Total Weight	oz/yd ²	(g/m ²)	10.80	(360)
Fabric Weight	oz/yd ²	(g/m²)	1.90	(64)
Matrix Weight	oz/yd ²	(g/m ²)	8.90	(296)

Standard Packaging Information				
Product	USA (metri	ic) WaterWay 9714		
Width (less flap)	inches	39.0		
Width (with flap)	inches	42.0		
Length	feet (met	ters) 150.0 (46.8)		
Area	yd² (m²	¹²) 54.6 (46.0)		
Roll diameter	inches (cr	m) 19.0 (48.0)		
Gross roll weight	lbs (kg	g) 50.0 (22.7)		

Geotextile Fabric Properties					
	Test Method	USA	(Metric)	WaterW	ay 9714
Polymer		PA6 & PET			
Weight	ASTM D 5261	oz/yd²	(g/m²)	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			whi	te	

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%		

Deflection & Compression				
Pressure	WaterW	WaterWay 9714		
	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	9714		
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 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

WaterWay 9714A should be stored at temperature between 50 degrees to 90 degrees, out of direct sun light.

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.

<Average time from first water to first drain over 8 ft. Wall Panel is 91.5 seconds>