

MARKETING BULLETIN — Roofing Systems

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**JM PVC Fully Adhered Systems Now Offer
12-Foot Wide Fleece-Backed Sheets**

Johns Manville is excited to announce the introduction of 12-foot wide fleece-backed sheets into the JM PVC product portfolio. This addition enhances JM's commitment to PVC and delivers another option to increase contractor productivity.

Contractors can save time and money — 12-foot sheets have nearly 50% fewer seams than traditional 6-foot sheets.

Below is a list of SKUs available for order:

SKU	Thickness	Color	Size
70000717	50 FB	White	144" x 90'
70000712	60 FB	White	144" x 90'
70000739	80 FB	White	144" x 75'

Pricing: Now available on the July 1 JM price pages.

Application: Fully adhered applications only. Do not use in hot asphalt-applied systems.

Colors: Special colors are available for an up-charge depending on the color and a minimum order of 1,000 squares (call your local JM sales professional for pricing).

Lead Times: This product is not stocked. Expect 2-6 weeks depending on the time of year.

Be sure to contact your local sales representative or customer service advocate to learn more.

Jennifer Ford-Smith
Product Manager



- JM PVC** **JM PVC Fleece Backed**
 50 mil **60 mil** **80 mil**

Description

A flexible, thermoplastic membrane manufactured using UV-resistant polyvinyl chloride and Elvaloy KEE (ketone ethylene ester) formulation. JM PVC membranes are reinforced with a non-wicking polyester fabric and Aramid fiber-reinforced edge.

JM PVC is also available with a lightweight polyester fleece back. The fleece backing is applied in-line ensuring a strong membrane-to-fleece bond.

Use

Waterproofing membrane in new, re-roof (tear-off) and re-cover roof constructions. Install over approved cover boards and insulations, when required.

Advantages

- Exceptional weathering capabilities (Exceeds 12,000 hours of ASTM G 53 Accelerated Weathering Testing)
- Long-term flexibility and durability due to Elvaloy formulation
- Lowest commercial roofing life cycle cost, \$0.37 per square foot per year
- Inherent chemical resistance to oils, air conditioning coolants, fuels and grease
- Excellent for re-cover situations, reducing labor and disposal costs
- High tensile strength

Installation

1. Unroll and allow sheet to relax prior to application.
2. Fully adhere or mechanically fasten membrane over approved roofing substrates according to FM Global requirements, published standard fastening patterns or adhesive recommendations.
3. Heat weld seams. Since a non-wicking reinforcement is utilized, no edge sealant is needed.

Refer to the JM PVC application guides for complete installation methods and additional technical data.

Product Information

Product	Thickness	Color			Sizes			
		White	Grey	Sandstone	Width	Length	Weight	
JM PVC	50	X	X	X	6.5' (1.98 m)	100' (30.48 m)	215 lb (97 kg)	
					3.25' (1 m)	100' (30.48 m)	108 lb (49 kg)	
		X	*	*	10' (3.05)	100' (30.48 m)	330 lb (150 kg)	
					5' (1.52 m)	100' (30.48 m)	165 lb (75 kg)	
	60	X	X	X	6.5' (1.98 m)	100' (30.48 m)	260 lb (118 kg)	
					3.25' (1 m)	100' (30.48 m)	130 lb (59 kg)	
		X	*	*	10' (3.05 m)	100' (30.48 m)	400 lb (181 kg)	
					5' (1.52 m)	100' (30.48 m)	200 lb (91 kg)	
	80	X	*	*	6.5' (1.98 m)	75' (22.86 m)	259 lb (117 kg)	
					3.25' (1 m)	75' (22.86 m)	130 lb (59 kg)	
	JM PVC Fleece Back	73	X	*	*	6.33' (1.93 m)	90' (27.43 m)	211 lb (96 kg)
						12' (3.66 m)	90' (27.43 m)	400 (181 kg)
88		X	*	*	6.33' (1.93 m)	90' (27.43 m)	240 lb (109 kg)	
					12' (3.66 m)	90' (27.43 m)	454 lb (206 kg)	
103		X	*	*	6.33' (1.93 m)	75' (22.86 m)	266 lb (120 kg)	
					12' (3.66 m)	75' (22.86 m)	504 lb (228 kg)	

* Products are not stocked as standard and may be special ordered with 4 - 6 week lead time and required minimum quantities. Please check with your JM sales representative.

Refer to the Material Safety Data Sheet (MSDS) prior to using PVC membranes. Material Safety Data Sheet is available by calling (800) 922-5922 or on the Web at www.jm.com/roofing.

Energy and the Environment

ENERGY STAR®	Pass	Reflectivity: 0.86	
Title 24 (CRRC)			
Initial	Pass	Reflectivity: 0.86	Emissivity: 0.86
3 Year	Pass	Reflectivity: 0.70	Emissivity: 0.82
LEED		Reflectivity: 0.86	Emissivity: 0.94 SRI: 109
Recycled Content		Post Consumer: 0%	
		Post Industrial: 0%-10%	
		Producing Locations: Pawtucket, RI and Lancaster, SC	

Results shown are for the initial reflectivity and emittance for white membranes; emissivity values for Title 24 are tested per ASTM C 1371; LEED emissivity values are tested per ASTM E 408.

Applicable Standards

JM PVC mechanically fastened and fully adhered roof systems are classified by Underwriters Laboratories Inc., Underwriters Laboratories of Canada, FM Global, Miami-Dade and Florida Building Code. JM membranes also meet the material requirements of International Building Code.

JM Peak Advantage Guarantees

Product	Mechanically Fastened or Fully Adhered
JM PVC 50, JM PVC 50 Fleece Back	5, 10 or 15 yr NDL
JM PVC 60, JM PVC 80, JM PVC 60 and 80 Fleece Back	5, 10, 15, or 20 yr NDL

Precautions

Do not allow membranes to come in direct contact with asphalt, coal tar pitch or any petroleum-based product.



- JM PVC** **JM PVC Fleece Backed**
 50 mil **60 mil** **80 mil**

Membranes meet or exceed all of the requirements of ASTM D 4434, Type III.

Tested Physical Properties*

JM PVC Membranes	ASTM Test Method	ASTM Requirements	50 Mil	60 Mil	80 Mil
Thickness, min, in. (mm)	D751	+/- 10% from Nominal	0.049 (1.25)	0.059 (01.50)	0.078 (1.98)
Thickness Over Scrim, min, in. (mm)	D4434	0.016 (0.40)	0.019 (0.48)	0.027 (0.69)	0.038 (0.97)
Breaking Strength, min, lb/in (kN/m)	D751	200 (35)	374 (65.5)	412 (72.1)	418 (73.2)
Elongation at Break, min, %	D751	20	29	29	32
Seam Strength, min, % of breaking strength	D751	75	100	100	100
Properties after Heat Aging, min	D751/D3045				
Breaking Strength, %		90	92	91	97
Elongation, %		90	91	94	90
Tear Resistance, min, lbf/in. (N)	D751	45 (200)	88.6 (394)	110.6 (492)	81 (360)
Low Temperature Bend, °F, (°C)	D2136	Pass	Pass @ -40, (-40)	Pass @ -40 (-40)	Pass @ -40 (-40)
Accelerated Weathering	G53				
Cracking (@7x magnification)		None	No Cracking	No Cracking	No Cracking
Crazing (@7x Magnification)		None	No Crazing	No Crazing	No Crazing
Linear Dimensional Change, max, %	D1204	0.5	0.4	0.5	0.4
Change in Weight After Immersion in Water, max, %	D570 modified	3.0	0.41	0.41	0.41
Static Puncture Resistance, lbf (kg)	D5602	Pass @ 33 (15)	Pass	Pass	Pass
Dynamic Puncture Resistance, J	D5635	Pass @ 20	Pass	Pass	Pass

Membranes meet or exceed all of the requirements of ASTM D 4434, Type III.

Tested Physical Properties*

JM PVC Fleece Backed Membranes	ASTM Test Method	ASTM Requirements	50 Mil Fleece Back	60 Mil Fleece Back	80 Mil Fleece Back
Thickness, min, in. (mm)	D751	+/- 10% from Nominal	0.073 (1.85)	0.088 (2.24)	0.103 (2.61)
Thickness Over Scrim, min, in. (mm)	D4434	0.016 (0.40)	0.02 (0.51)	0.03 (0.76)	0.03 (0.76)
Breaking Strength, min, lb/in (kN/m)	D751	200 (35)	436 (76.3)	457 (80.0)	511 (89.4)
Elongation at Break, min, %	D751	20	40	33	42
Seam Strength, min, % of breaking strength	D751	75	100	90	93
Properties after Heat Aging, min	D751/D3045				
Breaking Strength, %		90	93	90	92
Elongation, %		90	95	92	94
Tear Resistance, min, lbf/in. (N)	D751	45 (200)	175 (778)	86.3 (384)	84.6 (376)
Low Temperature Bend, °F, (°C)	D2136	Pass	Pass @ -40, (-40)	Pass @ -40 (-40)	Pass @ -40 (-40)
Accelerated Weathering	G53				
Cracking (@7x magnification)		None	No Cracking	No Cracking	No Cracking
Crazing (@7x Magnification)		None	No Crazing	No Crazing	No Crazing
Linear Dimensional Change, max, %	D1204	0.5	0.3	0.1	0.2
Change in Weight After Immersion in Water, max, %	D570 modified	3.0	0.41	0.41	0.41
Static Puncture Resistance, lbf (kg)	D5602	Pass @ 33 (15)	Pass	Pass	Pass
Dynamic Puncture Resistance, J	D5635	Pass @ 20	Pass	Pass	Pass

*Tested Values - 78" Width (Magill Laboratories, Inc. - 12/9/2005)

Refer to the Material Safety Data Sheet (MSDS) prior to using PVC membranes. Material Safety Data Sheet is available by calling (800) 922-5922 or on the Web at www.jm.com/roofing.