

# PermaFlash® System

## **Elastomeric Liquid Applied Flashing Membrane**

### **Features and Components**

The PermaFlash System consists of PermaFlash Primer, MBR Flashing Cement, and PermaFlash Scrim. It is an integrated flashing system specifically formulated for use in bituminous systems.

**PermaFlash Primer (Low VOC)**: One-Part Solvent-Based Primer that improves adhesion of MBR® Flashing Cement to nonporous substrates.

MBR Flashing Cement¹: Two-part, liquid-applied flashing material that cures to a durable, elastomeric film.

PermaFlash Scrim: Flexible stitchbonded polyester scrim.

Colors: Primer - Clear; Liquid Base - Black; Activator - Brown;

Scrim - White

1. Please see the MBR Flashing Cement data sheet for more information.



**Features:** Can be used to flash most penetrations, drains, and vertical surfaces.

Resists virtually all factors affecting flashing performance while providing superior flexibility and durability.

High solids, low odor, VOC compliant, and UV stable.

System Compatibility This product may be used as a component in the following systems. Please reference product application for specific installation methods and information.

₽	BUR		APP		SBS			
Multi-	НА	CA	CA	HW	HA	CA	HW	SA
₹	Compatible with all Multi-Ply systems*							

TPO PVC EPDM

MF FA MF FA MF FA BA

Do not use in Single Ply systems

Key: HA = Hot Applied CA = Cold Applied HW = Heat Weldable SA = Self Adhered MF = Mechanically Fastened FA = Fully Adhered BA = Ballasted

### **Energy and the Environment**

Maximum VOC	0 g/L (primer - low VOC) <121 g/l (base) 0 g/l (activator) <98 g/l (activated base)
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## **Physical Properties**

Pro	pperty	ASTM Test Method	MBR Flashing Cement
ngth	Tensile Strength	D 412	600 psi (4.1 MPa)
Strength	Elongation	D 412	> 300%
ation	Working Time <sup>2</sup> @ 77°F (25°C)	-	30 min
Installation	Rainproof After <sup>2</sup> @ 77°F (25°C)	-	4 hrs
	Hardness @ 77°F (25°C)	D 2240	65 Shore A
	Crack Bridging (after heat aging)	-	1/8" (3 mm)
ıξ	Softening Point, Ring and Ball	D 36	275°F (135°C)
Longevity	Elastomeric Waterproofing	C 836 / C 957	Exceeds All Criteria
ᅙ	Abrasion Resistance	D 4060 <sup>3</sup>	1.2 mg loss
	Permeability to Water Vapor	E 961	0.03 perms
	Service Temperature	NA	-60° to 220°F (-51° to 104°C)

<sup>1.</sup> Method E, 100°F (38°C), 100 mil (3 mm) sheet 2. Working and cure times will vary depending on ambient, surface and material temperatures. 3. 1,000 gr/1,000 rev., CS-17 wheel

# **Peak Advantage® Guarantee Information**

Systems	Guarantee Term
Any bituminous roofing system.	Up to 20 years*

<sup>\*</sup>Can be included in Peak Advantage Guarantee for new systems.

Refer to the Material Safety Data Sheet and product label prior to using this product. The Material Safety Data Sheet is available by calling (800) 922-5922 or on the Web at www.jm.com/roofing.

## Installation/Application









## **Packaging and Coverage**

Primer Container Size	Box of six 32 oz (946 ml) bottles		
Primer Coverage Rate <sup>1</sup>	75 ft² (7.4 m²/l)		
Cement Container Sizes	Base: 3.9 gal (16.5 l) pail Activator: 44.1 oz (1.3 l) jug Base & Activator: 28.7 oz (848.8 ml) cartridges		
Cement Coverage Rate <sup>2</sup>	20-25 ft²/gal (0.49 - 0.61 m²/l)		
Scrim Roll Size	12" (305 mm) w x 300' (91.4 m)		
Scrim Coverage	300 ft <sup>2</sup> (27.87 m <sup>2</sup> ) or 20 ft <sup>2</sup> (1.86 m <sup>2</sup> ) - within kit		
PermaFlash Kit	4 - 28.7 oz (848.8 ml) cartridges 1 roll - 12" (305 mm) w x 20' (91.4 m) scrim 1 - 32 oz (946 ml) bottle of primer		
Primer DOT Class	Class 3, UN1219, PGII, NMFC 42680 "Limited Quantity" 173.150 49 CFR		

- Do not apply material at higher coverages per square foot. Applying too much PermaFlash Primer will result in less adhesion than if the primer had not been used. When applied at the proper coverage, evaporation should occur within a few seconds.
- 2. Nominal 1/16" (2 mm) thick layer of adhesive. Coverage, open and dry time rates can vary dramatically depending on the particular substrate and environmental conditions. Coverage rates stated herein are approximate only. If FM Global® or UL® approval is required, consult specific RoofNav® or the UL Certifications Directory for specific application rates.

#### **Storage**

Shelf Life	Primer & Scrim: 24 months from manufacture date Base: Indefinite in sealed container; Activator: 24 months; Cartridges: 12 months
Storage Conditions	Clean, dry, indoor environment, unopened container
	Primer: 20°F – 90°F (-7°C – 32°C)
(Protect from freezing)	Cement & Scrim: 60°F – 90°F (16°C – 32°C)

<sup>\*</sup>As part of the PermaFlash integrated flashing system



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## **Application Instructions**

See PermaFlash Bituminous Flashing System Detail Instructions, PermaFlash Bituminous Flashing System Penetration Flashing, and PermaFlash Flashing Details for installation instructions.

### **Clean-Up and Disposal**

#### **Clean-Up Information**

Use mineral spirits to clean tools immediately after completion of work. Periodically place tools in a pail of mineral spirits to prevent buildup of cement. Wear rubber gloves during all applications and clean up procedures. Follow manufacturer's warnings and cautions about using solvents.

### **Disposal Information**

MBR Flashing Cement, i.e., MBR Flashing Cement Base that has been fully reacted with MBR Flashing Cement Activator, can usually be disposed of at a licensed landfill.

MBR Flashing Cement Base is considered a hazardous waste. Disposal must be in accordance with local, state and federal regulations. If possible, fully react any remaining material with MBR Flashing Cement Activator; this reacted material can usually be disposed of at a licensed landfill.

MBR Flashing Cement Activator is also considered a hazardous waste. Disposal must be in accordance with local, state and federal regulations. If the material reacts with MBR Flashing Cement Base, disposal can be as recommended for MBR Flashing Cement. If this is not the case, the material can be neutralized by mixing with a 90 percent water, 8 percent ammonia and 2 percent detergent solution. Leave containers open for at least 48 hours to allow any carbon dioxide gas evolved to escape. The resulting solidified waste can then usually be disposed of at a licensed landfill.

## **Empty Containers**

MBR Flashing Cement Base containers, when empty, contain combustible and harmful vapors and residue. Do not reuse the container or remove the labels. Follow all of the label warnings even when the container is empty. Dispose of containers in accordance with applicable regulations. If the residue is of fully reacted material, the container can usually be disposed of at a licensed landfill.

Neutralize MBR Flashing Cement Activator containers with the solution described in the disposal information above. Leave decontaminated containers open for at least 48 hours to allow any carbon dioxide gas evolved to escape. Containers can then be disposed of at a licensed landfill.

### **Precautions**

Johns Manville PermaFlash Primer is a combustible material and should be shipped and stored away from open flames, heat or sources of ignition. Keep all bottles tightly sealed while in storage. It should be used only in well-ventilated areas. It may cause eye, skin and respiratory irritation, and is harmful or fatal if swallowed. Avoid contact with skin. Use impervious clothing and rubber gloves to avoid prolonged or repeated contact with skin. Read the container label and follow all safety instructions.

MBR Flashing Cement is prepared on the jobsite and requires extra care during preparation. Roofing contractors must advise their crews to precisely follow all safety, storage, handling, preparation and application instructions. JM will not accept responsibility for any use of this product that does not comply with the instructions printed on the containers.