RamFlash PMMA Primer

Two-part Polymethyl Methacrylate Primer

Description

RamFlash PMMA Primer is a two-part quick-curing primer for porous and non-porous substrates to prepare for the application of RamFlash PMMA Membrane.

Uses

RamFlash PMMA Primer is designed to prepare substates for the RamFlash PMMA Membrane system to be used in conjunction with RamTough 250 and/or Black Pearl Membranes.

Storage

Always store in cool and dry location. Do not store in direct sunlight or in temperatures below 35°F (1.7°C) or above 80°F (27°C). Approximate shelf life 12 months with proper storage. RamFlash PMMA Catalyst Powder must be stored separately.

Catalyst Powder Requiements

Material Temp °F	Catalyst Powder (100g/bag)	Pot Life (min)	Completely Cured (min.)
35°F - 50°F	2 bags	20	45
50°F - 64°F	2 bags	20	30
65°F - 85°F	1 bag	15	30
>85°F	1/2 bag	10	15

Properties

Description	Measurement
Color	Transparent
Physical State	Cures to solid
VOC Contents	62 g/l
Usage Time*	15 minutes
Water Resistant After*	30 minutes
Cures After*	30 minutes
Apply Membrane/Coating After*	30 minutes

Packaging

5 kg units-Approximately 1-gallon units
Area 125 sq ft

Surface Preparation

All surfaces must be free from gross irregularities, loose, unsound or foreign material such as dirt, ice, snow, water, grease, oil, release agents, lacquers, or any other condition that would be detrimental to adhesion of the primer and membrane. This requires careful preparation of existing horizontal and vertical substrates; cracks are filled, expansion joints are prepared, flashings are removed or modified, and termination points are determined. Substrates and penetrations are prepared to rigorous industry standards, and may require scarifying, sandblasting or grinding in some cases to achieve a suitable substrate.

NOTE: Prior to opening the containers of RamFlash Primer, wear appropriate safety glasses and protect hands and wrists by wearing gloves.

Material Preparation

RamFlash PMMA Primer may be applied when the ambient temperature is between 35°F (2°C) and rising. The substrate temperature must be a minimum of 5 degrees above the dew point. RamFlash PMMA Membrane must be applied to primer within 48 hours of primer application. Primer exposed for more than 48 hours must be re-primed.

Provide and maintain positive airflow over freshly applied RamFlash materials during entire curing period to facilitate complete cure. Natural airflow is typically sufficient for exterior applications, but locations such as beneath large mechanical units, at inside corners, at the base of high walls, and other similar areas where stagnant air may occur should be provided with powered fans.

Step 1: Mix RamFlash PMMA Primer with a spiral agitator, until the liquid is a uniform color, with no streaks present.

Step 2: Add the 100 g RamFlash PMMA Catalyst Powder to RamFlash PMMA Primer according to temperature table and mix with the same agitator for 2 minutes or until the powder is completely mixed throughout the liquid resin. The amount of Catalyst Powder must be adjusted according to the ambient temperature (see table).

NOTE: RamFlash PMMA Primer is extremely fast curing. Excessive mixing time reduces the available working time for the Primer.

Step 3: Apply RamFlash PMMA Primer with a nap roller or brush.

RamFlash PMMA Membrane

Two-part Polymethyl Methacrylate Membrane

Description

RamFlash Membrane is a two-part quick-curing, UV-stable waterproof and roofing Polymethyl Methacrylate (PMMA) membrane.

Uses

RamFlash Membrane is designed to be used as a waterproof/ roofing flashing material in conjunction with RamTough 250 and/or Black Pearl Membranes. RamFlash PMMA Membrane is applied before the installation of RamTough 250 and/or Black Pearl. Do to it UV-stability it can be left exposed to the elements as a waterproof coating.

Color

Gray and White

Storage

Always store in cool and dry location. Do not store in direct sunlight or in temperatures below 35°F (1.7°C) or above 80°F (27°C). Approximate shelf life 12 months with proper storage. RamFlash PMMA Catalyst Powder must be stored separately.

Catalyst Powder Requiements

Material Temp °F	Catalyst Powder (300g/bag)	Pot Life (min)	Completely Cured (min.)
23°F - 35°F	2 bags	45	90
35°F - 50°F	2 bags	35	70
50°F - 70°F	1 1/2 bags	30	40
70°F - 85°F	1 bag	20	30
>85°F	1/2 bag	20	30

Properties

Description	Measurement	Testing
Color	Gray & White	
Physical State	Cures to Solid	
Thickness (120 Fleece)	90 mils	
VOC Content	32 g/l	
Peak Load @ 73 F, avg.	D5147 70 lbf/in	
Elongation	Min 30%	D5147
Tearing Strength	80 lbf	D5147
Dimensional stability	0.05%	D1204
Water absorption	0.05% (7 days)	D570
Impact Resistance	Shore A:75 +/- 5	D2240
Crack spanning	2 mm/0.08 inch	
Short-term temperature resistance	250 ºC/482 ºF	
Usage time*	20 minutes	
Rainproof after*	30 minutes	
Solid to walk on after*	30 minutes	
Apply coating after*	60 minutes	
Apply overburden after*	60 minutes	
Completely hardened*	6 hours	

Packaging

15 kg units-Approximately 5-gallon units
48 units per pallet

Surface Preparation

All surfaces must be free from gross irregularities, loose, unsound or foreign material such as dirt, ice, snow, water, grease, oil, release agents, lacquers, or any other condition that would be detrimental to adhesion of the primer and membrane. This requires careful preparation of existing horizontal and vertical substrates; cracks are filled, expansion joints are prepared, flashings are removed or modified, and termination points are determined. Substrates and penetrations are prepared to rigorous industry standards, and may require scarifying, sandblasting or grinding in some cases to achieve a suitable substrate.

NOTE: Prior to opening the containers of RamFlash Membrane, wear appropriate safety glasses and protect hands and wrists by wearing gloves.

Material Preparation

RamFlash PMMA Membrane may be applied when the ambient temperature is between 35°F (2°C) and rising. The substrate temperature must be a minimum of 5 degrees above the dew point. RamFlash PMMA Membrane must be applied to primer within 48 hours of primer application. Primer exposed for more than 48 hours must be re-primed.

Provide and maintain positive airflow over freshly applied RamFlash PMMA materials during entire curing period to facilitate complete cure. Natural airflow is typically sufficient for exterior applications, but locations such as beneath large mechanical units, at inside corners, at the base of high walls, and other similar areas where stagnant air may occur should be provided with powered fans.

Step 1: Allow RamFlash PMMA Primer to cure completely prior to application of the RamFlash PMMA Membrane.

Step 2: Mix RamFlash PMMA Membrane with a spiral agitator, until the liquid is a uniform color, with no streaks present.

Step 3: Add the 300 g RamFlash PMMA Catalyst Powder to RamFlash PMMA Membrane according to temperature table and mix with the same agitator for 2 minutes or until the powder is completely mixed throughout the liquid resin. The amount of Catalyst Powder must be adjusted according to the ambient temperature (see table).

NOTE: RamFlash PMMA Primer is extremely fast curing. Excessive mixing time reduces the available working time for the Primer.

Step 4: Apply RamFlash PMMA Membrane with a nap roller or brush apply 2/3 of the resin liberally and evenly onto the surface in even stroke. Covering one working area at a time, between 10 - 15 ft^2 (0.56-0.84 sq meters).

Step 5: Roll the RamFlash PMMA Fleece directly into the Resin, making sure the SMOOTH SIDE IS FACING UP (natural unrolling procedure), avoiding folds and wrinkles. Use the roller or brush to work the resin into the fleece, saturating from the bottom up.

Step 6: Apply the remaining 1/3 of the resin to the top of RamFlash PMMA Fleece to complete the saturation. Rolling the final coat of RamFlash PMMA Membrane onto the RamFlash PMMA Fleece should result in a glossy appearance. The RamFlash PMMA Fleece can only hold so much resin and all excess should be rolled forward to the unsaturated portion of the RamFlash PMMA Fleece. The correct amount of RamFlash PMMA Membrane will completely saturate the RamFlash PMMA Fleece and no dry spots should be visible. Work wet RamFlash PMMA Membrane to avoid any blisters, openings, or lifting at corners, junctions, and transitions. Always assure full saturation.

Step 7: RamFlash PMMA Membrane must be fully cured and tack free before applying RamTough 250 or Black Pearl.

RamFlash PMMA Fleece

Polyester Reinforcement Fabric

Description

RamFlash PMMA Fleece is a non-woven, needle-punched polyester fabric to reinforcement the RamFlash PMMA Membrane cold liquid-applied reinforced PMMA waterproofing membrane systems.

Uses

RamFlash PMMA Fleece reinforcement the RamFlash PMMA Membrane to improve strength tear and puncture resistance while the membrane remains uniform.

Surface Preparation

RamFlash PMMA Fleece is to be kept clean and be embedded into the RamFlash PMMA Membrane immediately.

Storage

Store in cool and dry location. Store flat to avoid deforming rolls and creasing fabric.

Application

Refer to RamFlash PMMA Membrane Installation Instructions.

Properties

Description	Measurement		
	200	**165**	**120**
Color	White	White	White
Physical state	Solid	Solid	Solid
Thickness (165/200 fleece)	70 mils	50 mils	40 mils
Weight (g/m^2)	200	165	120
Tensile strength @ break	>2,200 lbs.	>1,775 lbs.	>1,550 lbs.
Elongation	>75%	>75%	>65%
Tear resistance	>885 lbs.	>665 lbs.	>530 lbs.
Puncture strength	>1,245 lbs.	>1,110 lbs.	>1,065 lbs.

Packaging

13.8”x164’
Area 110 sq ft
3 rolls per bag
96 bags per pallet

20.1
Document: KF-01024

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RamFlash PMMA Catalyst

Powder Use to Initiate Cure of RamFlash PMMA Membrane & Primer

Description

RamFlash PMMA Catalyst is an initiator agent based on 50% dibenzoyl peroxide to induce the cure of RamFlash PMMA Membrane and RamFlash PMMA Primer.

Uses

RamFlash PMMA Catalyst 300 g bag to be used with RamFlash PMMA Membrane and RamFlash PMMA Catalyst 100 g bag to be used with RamFlash PMMA Primer.

Storage

Always store in cool and dry location. Do not store in direct sunlight or in temperatures below 35ºF (1.7ºC) or above 80ºF (27ºC). Approximate shelf life 36 months with proper storage. Store separately from the other products.

Application

Refer to RamFlash PMMA Primer and Membrane Installation Instructions.

Packaging

100 g plastic bag
300 g plastic bag

20.1
Document: KF-01019

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