Technical Data Sheet

IB PMMA Liquid Horizontal Resin

IB Roof Systems®

Product Description

IB PMMA Liquid Horizontal Resin is a high-quality waterproofing resin designed to be mixed with IB PMMA Catalyst Gel as a two-part fast curing PMMA horizontal waterproofing membrane. It is designed to coat horizontal surfaces in conjunction with IB PMMA Liquid Flashing.

Use

When IB PMMA and catalyst components are combined, the PMMA forms a strong, fast curing monolithic waterproofing membrane. The intended application over primed substrates is a 3-course application of the mixed PMMA (Resin & Catalyst) as a base coat and top coat with an embedment of IB PMMA Fleece in between the two to help reinforce the liquid waterproofing system.

Packaging

IB PMMA Liquid Horizontal Resin – 10 Kg White (22 lbs.) IB PMMA Liquid Horizontal Resin – 20 Kg White (44 lbs.) Each pail has a re-sealable locking ring lid.

Color:

White (Standard)

Approximate Coverage Rate – 10 kg*					
Smooth Surfaces			Yield		
Base Coat	Minimum	45 mils	Approximately 40 sq. ft.		
Top Coat	Minimum	45 mils	@ 90 mils		
Total	Minimum	90 mils			
Rough/Porous Surfaces			Yield		
Base Coat	Minimum	45 mils	Approximately 32 sq. ft.		
Base Coat Top Coat	Minimum Minimum	45 mils 45 mils	Approximately 32 sq. ft. @ 110 mils		

Temperature Guidelines/Storage & Handling

Store in a cool and dry location, away from heat, ignition sources, or open flame. Do not store in direct sunlight, around strong acid, alkaline, or oxidizing agents. Protect from freezing. Optimum chemical storage temperature is 45-75°F (7-23°C). Product can polymerize if temperatures reach 122°F (50°C). Approximate shelf life is 12 months when left sealed, unmixed and with proper storage parameters. Keep material in a shaded and well-ventilated area if stored at job site. If shade is unavailable, use a white, reflective tarp to cover material in a way that still allows the air to circulate underneath.

Application Conditions

IB PMMA Liquid Horizontal is formulated for all seasons with an ambient temperature range between 20°F (-6°C) to 100°F (37.3°C). The ambient temperature at the jobsite will determine the amount (% by weight) of IB PMMA Catalyst Gel to be added. For hot days, it is necessary to provide shade over the substrate and keep the substrate surface temperature below 122°F (50°C) before and after application. Refer to the IB PMMA Mixing Chart recommended amount (%) of catalyst per weight based on the temperature at application.

Mixing & Catalyzing

When preparing a full container, mix resin for 2-3 minutes before pouring into a second container. IB PMMA has a short pot life, depending on amount of catalyst added and ambient temperature. Take care to only catalyze the amount that can be used during the intended time period. Pre-measure and add catalyst to the container of resin. Using a slow-speed agitator or mixing stick, stir mixture for 2 minutes. Following the Mixing Chart, calculate how much catalyst is needed depending on weight and ambient temperature.

Pot Life

The IB PMMA pot life varies depending on ambient temperature, humidity and amount of catalyst used. Pot life will be reduced at higher ambient temperatures. At 68°F (20°C) the IB PMMA has a pot life of approximately 12 to 18 minutes. To maximize the pot life, make sure to keep resin mixture cool after catalyst is added.

Cure Time				
The IB PMMA cure time varies based on ambient temperature and humidity.				
Rain Proof	@ 68°F (20°C)	> 30 minutes		
Recoat Window	@ 68°F (20°C)	> 45 minutes		
Foot Traffic	@ 68°F (20°C)	> 2 hours		

Mixing Chart				
1.3% @ 70 - 100°F, (21.1 – 37.7°C)				
Resin Qty	IB PMMA Catalyst Gel			
	Pouches			
5.0 kg	1			
10 kg	2			
2.6% @ 50 - 70°F, (10 – 21.1°C)				
Resin Qty	IB PMMA Catalyst Gel			
	Pouches			
5.0 kg	2			
10 kg	4			
3.9% @ 35 - 50°F, (1.7 – 10°C)				
Resin Qty	IB PMMA Catalyst Gel			
	Pouches			
5.0 kg	3			
10 kg	6			
5.2% @ 2	5.2% @ 20 - 35°F, (-6.0 – 1.7°C)			
Resin Qty	IB PMMA Catalyst Gel			
	Pouches			
5.0 kg	4			
10 kg	8			

Handling

Keep away from heat, ignition sources, or open flame. Vapors are flammable and may form explosive mixture with air. Avoid breathing fumes/vapors. Do not eat, drink, or smoke around container or area of application. Avoid contact with skin and eyes. Refer to SDS pertaining to this product and prior to use or handling. See SDS for more information.

Personal Protection Equipment

To ensure safe use of this product, applicators should wear a long-sleeved shirt, long pants, and work boots. Butyl rubber or nitrile gloves should be worn when mixing or apply this product. Safety glasses with side shields should be worn at all times. A NIOSH approved respirator must be worn when using product in poorly ventilated areas in danger of exceeding a safe Threshold Limit Value (TLV). Follow protection requirements under 29 CFR 1910.134. The specific type of respirator will depend on the airborne concentrations. Do not use a dust mask or filtered face mask in lieu of recommended face wear.

Surface Preparation

All substrates must be sound, clean, dry, free of contaminants like dirt, oils, grease, residual coatings, moisture, or any condition that would compromise the adhesion of the IB PMMA Universal Primer or IB PMMA Liquid Horizontal to the substrate. Some substrates may require scarification, shot blasting, or grinding to provide a suitable substrate.

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Substrate	Preparation Requirements
Concrete (existing) Concrete (new)	Minimum 2500 psi, free of contaminants, debris, and foreign substances, Grind, shot blast, and/or scarify to remove sharp edges, ridges, and irregular surfaces. New concrete requires a hydration period of 28 days (minimum) per the American Concrete Institute (ACI). New concrete must be free of curing agents, penetrating release agents, or waterproofing materials which can compromise PMMA adhesion.
Masonry	Prepare masonry substrates in the same manner as concrete substrates. Repair compromised or deteriorated masonry and mortar joints prior to PMMA application.
Metal	Metal surfaces should be dry, clean, and free of contaminants, debris, rust, or oxidation. Surface should be abraded or sanded to a bright metal finish prior to any cleaning or priming.
PVC Membranes	PVC membrane surfaces should be dry, clean, and free of contaminants, debris, soil, and moisture. Surface should be abraded or sanded to remove the acrylic finish prior to any priming or PMMA application.

Adhesion Test

Adhesion of the IB PMMA Universal Primer or IB PMMA Liquid Horizontal should always be checked. Apply 6" – 12" square of the PMMA and embed a piece of 1" wide IB PMMA Fleece into the PMMA, leaving a minimum 2" tail of the fabric exposed. Allow a minimum or 2 hours for the PMMA to cure and perform a 90° pull test of the fabric tail to test adhesion of the PMMA to the substrate.

Relative Humidity Precautions

PMMA products are moisture sensitive. Do not apply this product when it is raining or if there is condensation on the substrate or when the dew point is less than 5°F within the ambient temperature. Do not apply in conditions when the relative humidity exceeds 90%.

Application:

Properly prepare substrate in accordance with surface preparation guidelines. Ensure that the surface to be flashed is clean, dry, and free of contaminants.

- Use masking tape to mask off area to be primed and flashed.
- Etch, abrade, or sand metal surfaces such as stainless steel, copper, or aluminum prior to primer application.
- Use IB PMMA Universal Primer to prime surfaces. (Refer to IB PMMA Universal Primer Technical Data Sheet for specific product application guidelines).
- Cut and dry fit the reinforcement fleece to accommodate horizontal field condition to be installed accordingly before mixing. Cut reinforcement to terminate ¼-inch from the inside edge of the masking tape so as not to extend the reinforcing fleece beyond the PMMA Liquid Horizontal.
- Mix IB PMMA Liquid Horizontal Resin and IB PMMA Catalyst according to the desired quantity and coverage. (Refer to Mixing Chart in this document).
- Apply base a coat at 45-55 wet mils of the catalyzed PMMA resin to the prepared surfaces.
- Embed the pre-cut IB PMMA Fleece into the freshly applied catalyzed PMMA resin. Overlap courses 4-inches at side laps

- and 6-inches at ends. Avoid trapped air bubbles under the reinforcement fleece.
- Apply second coat at 45-55 wet mils of catalyzed resin on the newly applied IB PMMA Fleece reinforcement and saturate the fleece within 15-20 minutes after application of first coat of PMMA. Note: The IB PMMA Fleece should be completely saturated with no white or bare spots showing. It is important to correct any deficiencies before the catalyzed resin cures. The final thickness should be minimum 90 dry mils.
- Remove masking tape and allow material to dry. Protect the installation temporarily as necessary.

Clean Up

When work is interrupted or completed, clean all tools thoroughly with mineral spirits <u>before</u> resin hardens.

Disposal

Catalyzed and cured resin may be disposed of in standard landfills. Uncured resin is considered a hazardous material and must be handled as such, in accordance with local, state, and federal regulations.

Disclaimer

All values given are approximate and are subject to change without notice. There is no implied or express warranty given through these values or statements, nor are there any assertions that the product purchased has been individually tested to conform to these standards. Testing is performed on a random basis by "in-house" and independent "third party" evaluation for the purpose of classification and or approval. Acceptance, purchase, and selection of these products are the sole responsibility of the buyer or buyer's representative. We assume no responsibility for coverage, performance or injuries resulting from use. Liability, if any, is limited to replacement of the product only.

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