PIP Cove Mortar

Vertical Epoxy Cove Mortar



7875 Bliss Parkway North Ridgeville, OH 44039 440-327-0015 440-353-0549 - FAX

DESCRIPTION:

PIP Cove Mortar is a three component 100% solids, epoxy resin mortar mix designed to primarily inlay a continuous, seamless, vertical cove in conjunction with an epoxy floor mortar or coating system. Mix designs are prescribed using both standard silica sand aggregates and decorative quartz aggregates.

ADVANTAGES:

- Allows for radius coves and easy cleaning at floor and wall junctions
- Extremely low odor
- Improves the appearance and completion of floor substrates.
- Easy to mix, tool and hold to a vertical substrate.

STORAGE: Materials should be stored in un-opened containers between $65^{\circ}F$ ($18^{\circ}C$) and $90^{\circ}F$ ($32^{\circ}C$) and at or below 50% RH.

SHELF LIFE: 1 year from date of manufacture (un-opened).

Materials and Mixing

PART A PACKAGING- 1000 Gel -A /5SF (does 4 mixes) PART B PACKAGING- 1000ST-B/1 (does 4 mixes) Part C Aggregate 3000 Blend Aggregate (non-decorative) Part C Aggregate DS Quartz (decorative) Total Mix Kit Size

> Non-Decorative = 1.48 Cu. Ft. (4 x 0.37 Cu. Ft. each mix) Decorative = 1.88 Cu. Ft. (4 x 0.47 Cu. Ft. each mix)

Non-Decorative Single Mix

0.37 cu. Ft Mix (2.8 Gallon mixture) 1000 GEL-A- Measure off ½ gallon 1000 ST-B Measure off 1 quart 3000 Blend Series Aggregate -3 gallons (39 lbs) (Partial Bag)

Coverages per above mix depending on cove design:

106 LF - 1" 45 degree Cant Cove
26 LF - 2" 45 degree Cant Cove
248 LF- 1" Radius Cove
62 LF -2" Radius Cove
55 LF- 4" Vertical, 1/8" thick with 1" radius cove
29 LF- 4"Vertical, 1/8" thick with 2" radius cove

*COLOR- If a pigmented non-decorative mortar is desired, use 4 fl. oz. CPU color per 2.8 gallon mix of PIP Cove Mortar.

Decorative Single Mix Mix

0.47 cu. Ft Mix (3.5 Gallon) 1000 Gel -A- Measure off ½ gallon 1000ST-B Measure off 1 quart DS Quartz (30 mesh Broadcast)- 4 gallons (50 lbs)

Coverages per above mix depending on cove design:

135 LF - 1" 45 degree Cant Cove
34 LF - 2" 45 degree Cant Cove
315 LF- 1" Radius Cove
78 LF -2" Radius Cove
70 LF- 4" Vertical, 1/8" thick with 1" radius cove
36 LF- 4" Vertical, 1/8" thick with 2" radius cove

Other mix sizes using the above ratios can be made depending on mixing and manpower capabilities.

Consult Protective Industrial Polymers for coverage and material requirements regarding other cove design requirements.

Contamination and surface defects: If contaminates including oil, silicone, mold release agents and/or other materials are present, resin systems may fisheye or crawl away from the surface. All surface contaminates should be removed with a suitable detergent prior to application. Solvent cleaning of silicone based contaminates is NOT RECOMMENDED. Please contact Technical Service for additional recommendations.

CURED PROPERTIES:

Tensile Strength	ASTM C-307	1,000 psi
Comprehensive Strength	ASTM C-579	8,000 psi
Flexural Strength	ASTM C-580	2,000 psi
Hardness	ASTM D-2240	Shore D 85
Impact Resistance	ASTM D 2794	>160 in./lbs.
Thermal Coefficient of		
Linear Expansion	ASTM C-531) 1.75 x 10-5 in./in. °C	
Cure Rate		6 hours

*Properties and results are based on laboratory testing at 72°F (22°C) %50 RH, theoretical calculations and estimates. Typical properties, as stated, are to be considered as representative of current production and should not be treated as specifications.

INSPECTION AND APPLICATION:

Caution! Follow all precautions and instructions prior to installation.

SUBSTRATE: The substrate must be free of curing membranes, silicate surface hardener, paint, or sealer and be structurally sound. If you suspect concrete has been treated or sealed, proceed with complete removal process. Consult your PIP representative for further instruction if silicate hardeners or membranes have been utilized.

MOISTURE: Moisture and moisture vapor transmission rates are dynamic in nature and may change over time. Initial testing does not guarantee future results. If the relative humidity of the concrete substrate is over 75% (using ASTM F2170), Protective Industrial Polymers must be consulted and issue a written moisture mitigation recommendation prior to product use.

VAPOR/CONTAMINATION: Testing for MVT does not guarantee against future problems. If there is no known vapor barrier or the vapor barrier is inadequate, there is an elevated risk of bond failure. Other factors including the migration of oils, chemicals, excessive salts or Alkali Silica Reaction (ASR) from the concrete from may also elevate the risk of adhesion difficulties. <u>Consult your PIP representative for approved mitigation treatments.</u>

TEMPERATURE AND HUMIDITY: During the application and cure of the coating, the substrate temperature, material temperature and room conditions must be maintained between 65°F (18°C) and 90°F (32°C). Relative Humidity (RH) should be limited to 30-80%. DO

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NOT apply unless the surface temperature is more than five degree over the dew point.

APPLICATION EQUIPMENT:

- Protective equipment and clothing as called for in the SDS (Safety Data Sheet)
- Jiffy[®] Mixer Blade and drill
- Clean container for mixing material
- Low speed high torque drill motor
- Application radius or straight trowel.

PREPARATION:

Surface dirt, grease, oil and contaminates must be removed by detergent scrubbing and rinsing with clean (clear) water.

Mechanical Preparation: Diamond grinding the surface is the preferred method of preparation. The success of industrial diamond grinding as a concrete preparation method will vary depending on technique and the hardness of the concrete.

MIXING:

Liquids mixing ratio is 2 Parts A to 1 part B by volume. \ast

The 0.37 cu. Ft. non-decorative mix size uses ½ gallon of 1000-Gel-A (Part A) and 1 Quart of 1000ST-B and 3 gallons (39 lbs.), of 3000 Blend Aggregate. Mix the Part A and Part B together first with a drill and mix paddle for 1 minute. Then add 3 gallons of 3000 Blend aggregate and mix thoroughly until mix consistency is homogenous. Applicators may find adding or subtracting the amount of aggregate better suits their needs and application parameters. Do not vary the 2:1 mixing ratio of the resin and hardener.

The 0.47 cu. Ft. decorative mix size uses ½ gallon of 1000-Gel-A (Part A) and 1 Quart of 1000ST-B and 4 gallons (50 lbs.), of DS Quartz Broadcast Aggregate. Mix the Part A and Part B together first with a drill and mix paddle for 1 minute. Then add 4 gallons of 3000 Blend aggregate and mix thoroughly until mix consistency is homogenous. Applicators may find adding or subtracting the amount of aggregate better suits their needs and application parameters. Do not vary the 2:1 mixing ratio of the resin and hardener.

Smaller or larger mixes can be made if ratios are kept the same. An adjustment using slightly more or less aggregate can be made to suit handling needs and job conditions.

POT LIFE- Once mixed, best handling properties are achieved within 15 minutes of the mix time. After this time has expired, the material will stiffen and be hard to place.

Mix only enough material at one time that can be applied without exceeding the pot life.

APPLICATION

Priming: PIP Cove Mortar can be applied on a vertical surface such as sheetrock, concrete, or cinder block. In all cases, it is strongly recommended to prime the wall first. Priming can be done by simply mixing and applying by either brush or roller the Part A and Part B. Let it set for approximately 30-45 minutes before application of the mortar for best results.

Mortar Application: A variety of methods can be used to apply many types of coving such as Cant, radius, and extended radius coves. It is general practice to place the material from the bottom and spread upwards firmly on the vertical with a spring steel trowel. The radius is next added once the vertical is applied. Spray trowel with water or denatured alcohol often to lubricate trowel reducing resin stickiness and allowing for smooth finishing.

Material will be sufficiently set and ready to coat in 5 hours.

READ SDS (SAFETY DATA SHEET) FOR SAFETY AND PRECAUTIONS. USE PRODUCT AS DIRECTED FOR INDUSTRIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN.

MAINTENANCE GUIDELINES:

Allow floor coating to cure at least one week before cleaning by mechanical means (IE: sweeper, scrubber, disc buffer).

CARE: Increased life of the floor will be seen with proper maintenance and will help maintain a fresh appearance of your new Protective Industrial Polymers floor. Regularly sweep to avoid ground in dirt and grit which can quickly dull the finish, decreasing the life of the coating. Spills should be removed quickly as certain chemicals may stain and can permanently damage the finish. Only soft nylon brushes or white pads should be used on your new

floor coating. Premature loss of gloss can be caused by hard abrasive bristle Polypropylene (Tynex®) brushes.

CAUTION: Heavy objects dragged across the surface will scratch all floor coatings. Avoid gouging or scratching the surface.

Pointed items or heavy items dropped on the floor may cause chipping or concrete pop out damage. Plasticizer migration from rubber tires can permanently stain the floor coating. If a rubber tire is planned to set on the floor for a long period of time, place a piece of acrylic sheet between the tire and the floor to prevent tire staining. Rubber burns from quick stops and starts from lift trucks can heat the coating to its softening point causing permanent damage and marking.

TECHNICAL SUPPORT: For application questions, please contact your salesman or PIP technical service at 440-327-0015

DISPOSAL: Dispose in accordance with federal, state, and local regulations.

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WARRANTY AND CONDITIONS OF USAGE

WARRANTY AND LIMITATION OF LIABILITY: Protective Industrial Polymers Inc. ("PIP") warrants that its products shall conform to the manufacturer's written specifications and shall be free from defects for one (1) year from the date of purchase. PIP MAKES NO WARRANTIES, IMPLIED OR OTHERWISE, AS TO THE MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSES OF ITS PRODUCTS AND EXCLUDES AND DISCLAIMS THE SAME, INCLUDING, WITHOUT LIMITATION, FAILURE OF THE PRODUCT DUE TO ACTS OF GOD, FLOODING, EXTREME OR ABNORMAL TEMPERATURES, HUMIDITY AND MOSITURE, STRUCTURAL CONDITIONS, SITE PREPARATION AND CONDITIONS, ACCIDENTS, DAMAGE CAUSED BY INSTALLATION OF MACHINERY, EQUIPMENT OR FIXTURES WITHOUT ADEQUATE FLOOR PROTECTION OR WITHOUT ADEQUATE TIME FOR CURING, FAILURE TO COMPLY WITH CONDITIONS OF USAGE (SPECIFIED BELOW), VANDALISM, NEGLIGENT OR INTENTIONAL ACTS OF THIRD PARTIES OR OTHER CASUALTIES. If any PIP product fails to conform to this warranty, PIP shall either replace the product at no cost to Buyer or refund the cost of the product, in PIP's sole discretion. Replacement of any product or a refund of the cost of any product shall be the sole and exclusive remedy available to buyer, and buyer shall have no claim for incidental, special or consequential damages, including, without limitation, business interruption damages. Any warranty claim must be made within one (1) year from the date of delivery of products. PIP does not authorize anyone on its behalf to make any written or oral statements which in any way alter PIP's warranty or installation and storage information or instructions in its product literature or on its packaging labels. Any installation of PIP products which fails to conform to such installation information or instructions or the "Conditions of Usage" (specified below) shall void this warranty. Product demonstrations, if any, are done for illustrative purposes only and do not constitute a warranty or warranty alteration of any kind. Buyer shall be solely responsible for determining the suitability of PIP's products for the Buyer's intended purposes.

CONDITIONS OF USAGE: Installation of all products purchased must be by professional installers periodically published by PIP or otherwise approved by PIP in writing. Modification to any of PIP's products voids the warranty. The installer shall maintain a written contemporaneous record of field conditions (including, without limitation, surface and atmospheric conditions, usage rates, and lot numbers of products installed). PIP reserves the right of inspection of any installed product, installation and maintenance records and records of field conditions and may conduct additional testing as is reasonably required to investigate any warranty claims. Warranty shall only apply for products or materials that have been paid for in full. Moisture Vapor Transmission (MVT) and ASR (Alkali Silica Reaction) Disclaimer and Exclusion: Although rare, some floors at or below grade level are sometimes subjected to saturation by moisture from beneath the concrete floor slab. This moisture can travel through the concrete and collect between floor toppings creating the potential for delaminating from hydrostatic pressure and or ASR. Conditions contributing to this include heavy rainfall, broken pipes, excess hydration within fresh concrete, and other factors or defective and old concrete. These factors are difficult, if not impossible to predict. PIP recommends testing for MVT and/or the presence of ASR in the concrete substrate prior to applying any polymer floor topping. The recommended test method for MVT is ASTM F 2170-11. ASR can be predicted by a higher than normal pH within the concrete. If high pH should be detected, it is recommended a lab test for ASR. If and when delamination of the floor occurs because of a moisture condition that exists beneath or in the concrete slab beyond the capacity of the individual product installed or failure of the concrete due to ASR, this Limited Warranty does not extend to such delaminating or topping failure. This writing constitutes the sole and only agreement of warranty relating to PIP products.