Hi-Tek Polymers, Inc., Elgin, Illinois 60120

Hi-Tek Polymers 4001T-Poxy Fill Material

DESCRIPTION: Hi-Tek Polymers 4001T-Poxy Fill Material is recommended for use as a leveling patching and flattening uneven surfaces underneath epoxy terrazzo and other epoxy floorings. Hi-Tek Polymers is a high solids VOC compliant two component blended epoxy product that is compatible for use with other aggregates to level surfaces.

Product Benefits:

- Low odor, 100% solid environmentally friendly product, zero VOC content.
- Provides Low shrinkage and therefore not prone to cracking.
- Provides multiple use depending on aggregate blend and surface depth to be leveled from 1/8''-4'' thick (.24 cm to 10.16 cm)
- Provides high compressive and tensile strength VS cementitious products.
- Provides Quick turnaround time for topping finished system within 8-16 hours.
- Provides 100% compatibility with epoxy terrazzo and other epoxy flooring.

Surface Preparation:

- Applications of non-breathing surface over concrete is vulnerable to high moisture vapor emissions (MVE), therefore the use of efficient moisture /vapor barrier is required, suggested minimum: 15 mls thickness.
- Surface should be checked for "hollow" spots and if found they should be removed. Proper surface preparation is essential. Steel should be sandblasted to a white metal finish, and concrete should be thoroughly cleaned and dried.
- Test concrete substrate for moisture vapor content. This is typically measured with an Anhydrous Calcium Chloride test kit meeting Rubber Flooring Manufacturers Association (RFMA) has established a "safe" limit of 3 pounds or less. ASTM F-1869 where results are reported in pounds of water per 1,000 square feet per 24 hours. The most current test to evaluate concrete is ASTM F-2170. Results greater than 80% relative humidity in the concrete requires special treatment.
- Prepare concrete surface by shot blasting or diamond scarifying resulting with a CSP3-CSP5 profile according to ICRI Guideline NO.03732
- Surface should be void of curing agents, oil or grease as these may cause failure of bond. Shot blasting may be required to remove these and other latent.

APPLICATION:

Hi-Tek Polymers 4001 Fill Material requires a 3 Part of A to a 1 Part of B 'by volume' application. Keep product indoors and do not allow to freeze. Material must be stored in a dry area50º F to 90º F (10º C to 32º C), and away from direct sunlight, flame or other hazards.

Surface and air temperature must be at least 55F (12C) during installation and initial cure. After sound surface preparation, use the t-poxy primer on all surfaces to receive the 4001T-Poxy Epoxy Fill. It can be applied by brush, roller, spray or squeegee to obtain coverage of 250 sq.ft. per gallon. Allow the primer to cure for a period of 2-4 hours until tacky and no longer than 24 hours before topping with 4001T-Poxy Fill. If allowed to cure more than 24 hours then 20-40 mesh silica sand may be lightly broadcasted into the wet primer.

Once primed, proceed with the placement of 4001T Poxy Fill. Stir both parts thoroughly, mix accurately per mix directions. Hi-Tek Polymers 4001T-Poxy Fill is a 3 part of A to 1 Part of B Material. Recommended use is 55-65 lbs. of a well graded aggregate per each gallon of resin. Mix thoroughly until all silica sand is wet out. Aggregate availability and fill thickness may dictate mix design. Mix aggregates thoroughly before dumping onto the substrate and screed to desired thickness. Compact and pull fill tightly and allow curing overnight.

Hi-tek Polymers recommends its primer, 301T-Poxy Epoxy, for grout coating to fill any voids and or pinholes in the filled mortar system. Mix thoroughly for three minutes under low speed. For thicker thixotropic properties, we recommend that each gallon of mixed primer or resin be mixed with 1 gallon of Cab-O-Sil. Primer or resin can be applied using steel trowel or rubber squeegee and back rolled to fill all voids and pinholes. Depending on porosity of the surface, coverage of material will vary. Initial cure of 6-8 hours (maximum of 24 hours) is to be expected prior to proceeding with the installation of the terrazzo flooring.

Technical Data:

Typical Physical Properties-Tensile Strength-ASTM C 307------2,000 psi	
Compressive Strength-ASTM C 579-8,000 – 10,000 psi	
Flexible Strength-ASTM C 580-3,200psi	
Hardness Shore D-ASTM D 2240 75 –80	
Bond Strength-ASTM C1583-04/ACI COMM Bulletin 59-43 (pages 1139-1141)	300 psi minimum(100% concrete failure)
	2.07 MPA (100% concrete failure)

Technical Services:

Hi-Tek Polymers, Inc. distributor of T-Poxy Systems provides services and consultations on material selection, specifications and troubleshooting on various applications and systems including epoxy terrazzo. You May Contact us via products@hitecpolymers.com or at 312-282-9936.

WARRANTY INFORMATION

Values stated herein are typical values based on periodic testing and product experience. Hi-Tek Polymers, Inc. DISCLAIMS ALL OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION THOSE OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Hi-Tek Polymers, Inc., warrants for a period of one (1) year that **4001T-Poxy Fill Material** will be free of manufacturing defects and will conform to published specification when handled, stored, mixed and applied in accordance with Hi-Tek Polymers, Inc., recommendations.

Where customer demonstrates non-conformance of product to typical values stated herein, Hi-Tek Polymers will supply replacement product or, at its option, credit Customer's account for the purchase price of nonconforming product. The liability of Hi-Tek Polymers, Inc. will be limited to replacement or credit of non-conforming **4001T-Poxy Fill Material** if such notice of non-conformity is given to Hi-Tek Polymers, Inc. within one (1) year of delivery of materials. Recommendations herein as to the surface preparation, application, maintenance, and other matters involved in storage, handling, or use of product are based on best information reasonably available to Hi-Tek Polymers ,Inc.

Because Hi-Tek Polymers, Inc. has no control over such matters, or over substrate or other conditions that may affect ultimate performance, Customer has the obligation to determine suitability of product for the intended purpose, and Hi-Tek Polymers, Inc., SHALL HAVE NO RESPONSIBILITY FOR ANY CONSEQUENTIAL, INCIDENTIAL, SPECIAL, EXEMPLARY OR PUNITIVE DAMAGES BUT ONLY FOR THE REPLACEMENT OR CREDITING REMEDY ABOVE. Be it known that no one is authorized to make oral warranties on behalf of Hi-Tek Polymers, Inc. In order to obtain replacement or refund, the customer must provide written notice containing full details of the non-conformity. The sale and purchase of product from Hi-Tek Polymers, Inc. are subject in each case to Hi-Tek Polymers, Inc.'s Terms and Conditions of Purchase.

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