

## EPOXY MORTAR SYSTEM SPECIFICATION SHEET

### BENEFITS:

- Resurfaces/repairs damaged concrete floors
- Highly chemical resistant & Excellent wear
- Specially blended aggregate engineered for quicker, easier, and tighter trowel ability
- Several colors available for mortar binder
- Aggregate is packaged in 37 lb. bags to provide accurate proportioning with mortar binder
- Typical application between 1/8" and 1/4"

### RECOMMENDED FOR:

- Heavy Traffic Areas/Forklift traffic
- Manufacturing Areas
- Restrooms and Locker rooms
- Lobbies / Public Areas
- Laboratories
- Concert / Arenas
- Inferior Concrete Floors
- So Many Others

### SYSTEM COMPONENTS (APPROX 3/16" TO 5")

COAT	PRODUCT	MIX RATE	COVERAGE
PRIMER	PTP100	2:1	200-267 FT <sup>2</sup> PER GALLON
MORTAR	EPOXY MORTAR	4:1	19 FT <sup>2</sup> PER UNIT
PT SAND AGGREG	AG BLEND NATURAL	74lb/gallon	38 FT <sup>2</sup> PER MIXTURE
GROUT	GC100	2:1	125 FT <sup>2</sup> gal 267 FT <sup>2</sup> gal
WEAR COAT	PR0100	2:1	125 FT <sup>2</sup> PER GALLON

\* See individual data sheets for preparation, mixing, and application instructions, as well as product limitations, limitations of liability, warranty, and common chemical resistance information.

Spartan Epoxies also has available, several crack fillers, joint sealant and other support products. Please inquire with your sales representative for more information.

### OPTIONAL TOPCOAT

PR0100 may be used as an optional topcoat in this system. Consult your Spartan Expert.

### GROUT COAT

GC100 - 2 Part 100% Solids Epoxy designed to seal the surface of epoxy mortar. 1 - 2 coats.

### HEAVY DUTY RESURFACER

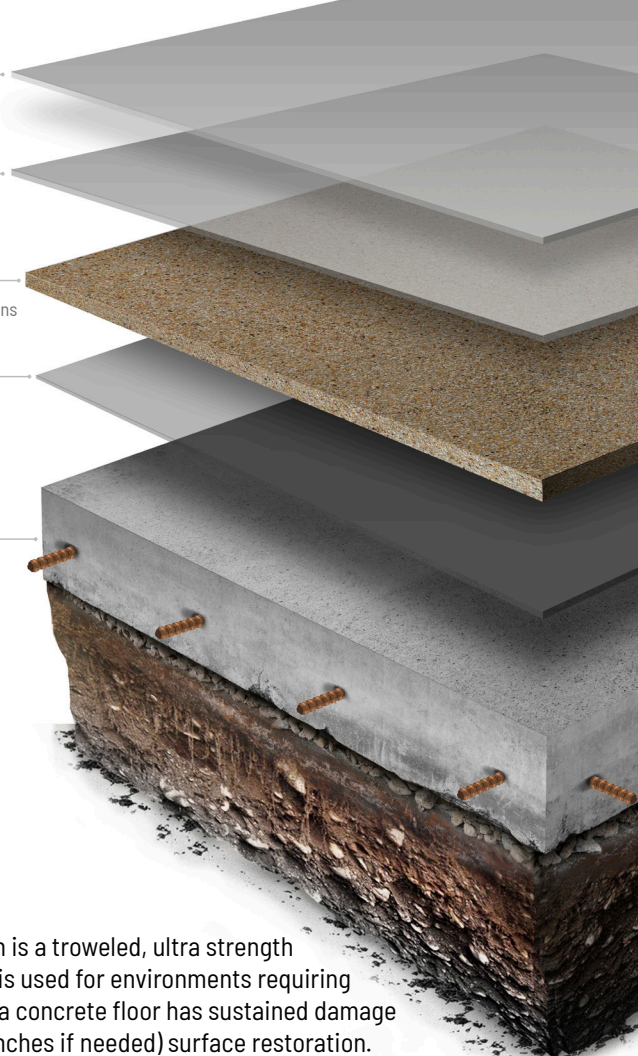
3 Part - 100% Solids Epoxy Mortar for applications when excellent wear and strength are required.

### PRIMER

PTP100 is our 2 part 100% solids epoxy mortar primer designed for use as a base coat with our epoxy mortar system. It's amber/clear in color.

### CONCRETE SUBSTRATE

Always prepare your concrete. New, old or a certain finish, it doesn't matter. Have a wood substrate? You can apply over it. Ask us how.



### SYSTEM DESCRIPTION

Our Epoxy Mortar Flooring System is a troweled, ultra strength concrete resurfacing material. It is used for environments requiring an industrial grade floor or when a concrete floor has sustained damage requiring a 3/16" to 1/4" (up to 5 inches if needed) surface restoration.

The system described is Spartan Epoxies standard system. Spartan Epoxies has several product variations available to obtain a variety of outstanding benefits and features, but not limited to, low odor or low VOC products. Consult with our expert coating team for details and recommendations that are specifically beneficial to your application.

\* Refer to individual data sheets for preparation, mixing and application guidelines. As well as limitations, limitations to liability, warranty information, and common chemical resistance information.

PROPERTY	TEST METHOD	RESULTS
ADHESION	N/A	340 PSI (CONCRETE FAILURE)
FLEXURAL STRENGTH	ASTM D790	15,150 PSI
COMPRESSIVE STRENGTH	ASTM D695	11,150 PSI
TENSILE STRENGTH	ASTM D638	6800 PSI
ELONGATION		4.65%
IMPACT RESISTANCE		EXCELLENT
ABRASION RESISTANCE	CS-17 1000 /500	32-34 MG
APPLICATION TEMP		60° TO 90° F

\* Typical values and not specifications.

## EPOXY MORTAR SYSTEM

### APPLICATION INSTRUCTIONS

\* See individual data sheets for complete details.

**PRODUCT STORAGE:** See product tech data.

**SURFACE PREPARATION:** All dirt, oil, dust, foreign contaminants & laitance must be removed to assure a trouble free bond to the substrate. We recommend that an aggressive shot blast be performed prior to the application of this product. A less adequate method would be acid etching, but the etch should properly profile the substrate. All edges and around columns or beams should be mechanically scarified. All termination points should not be feather edged, but should be saw cut with the termination ending at the saw cut. All large cracks should be V cut and filled with an appropriate crack filler. All expansion joints should be filled with an appropriate joint filler. When overlaying an expansion joint, a single saw cut though the epoxy overlay will prevent random fracturing. A test should be made to determine that the concrete is dry; this can be done by placing a 4'X4' plastic sheet on the substrate and taping down the edges. If after 24 hours, the substrate is still dry below the plastic sheet, then the substrate is dry enough to start coating. The plastic sheet testing is also a good method to determine if any hydrostatic pressure problems exist that may later cause disbonding.

**PRIMER MIXING:** Mix the liquids in an oversized container thoroughly and until streak free. No induction time is necessary. The mix ratio is two to one by volume. Improper mixing may result in product failure.

**PRIMER APPLICATION:** Apply mixed material to the substrate with a brush or roller at the recommended thickness. While the primer is still wet, apply the epoxy overlay over the wet power trowel primer. Follow the procedures for placing the epoxy mortar overlay from the technical data sheet. Maintain temperatures within the recommended ranges during the application/ curing process. If the epoxy primer tacks off before applying the epoxy mortar overlay, check for an epoxy blush and clean as necessary. Re-apply the power trowel primer over the previous primer and apply the epoxy mortar overlay before the primer tacks off. This product is only intended for use as a primer for epoxy mortar overlays.

**MORTAR MIXING:** Mix the liquids to be used in the power trowel mortar system at the recommended mix ratio. Thoroughly mix the combined components A & B with a jiffy mixer or other suitable equipment. Continue to mix for a couple of minutes to insure the material is mixed well. After the liquids are thoroughly mixed, pour the liquids into a Koel mixer, mud mixer or other suitable mixer (depending on batch size). After the liquids are in the mixer, immediately add the special aggregate blend into the mixer. The amount of aggregate should not exceed 37 pounds of the aggregate to 1/2 gallon of mixed liquids. For best results, we recommend a 7:1 aggregate to liquid ratio by weight. Mix the aggregate into the liquids thoroughly to insure it is wetted out and uniform in saturation. Improper mixing may result in product failure. (Mix ratio: 1/2 gallons mixed liquid to 37# bag of special aggregate)

**MORTAR APPLICATION:** The material can be spread by using a screed box, rake or other suitable equipment. Spread the mixed mortar directly over the wet power trowel primer while wet. Keep in mind that a 3/16 inch depth of power troweled mortar will only yield a nominal compacted depth of 1/8 inch and 3/8 inch depth of power troweled mortar will yield a nominal finished depth of 1/4 inch. We do not recommend a finished depth below 1/8 inch. Power trowel the mortar mix with a slow speed power trowel. When hand troweling the edges, use sufficient downward force to compact the mortar and blend in with the power troweled sections.

**PRECAUTIONARY STATEMENT:** (a) Do not over trowel the mortar as this can cause blistering. (b) Air currents directly across or above the mortar can cause blistering. Always use materials (liquids) from the same batch or (especially when using colored systems) properly box the material prior to using.

**GROUT COAT MIXING:** This product has a mix ratio of 2 parts A (8.7- 8.9#/ gallon) to 1 part B (3.95#/gallon) by volume for standard colors, and 9.3# part A to 4.6# part B for the clear. Standard packages are in pre-measured kits and should be mixed as supplied in the kit. We recommend that the kits not be broken down unless suitable weighing equipment is available. However, a direct 2:1 mix proportioning by volume can be employed. After the two parts are combined, mix well with slow speed mixing equipment such as a jiffy mixer until the material is thoroughly mixed and streak free. Continue mixing for another couple of minutes to insure a homogeneous mixture. Make sure you scrape the bottom and sides of the pail while mixing. Improper mixing may result in product failure.

**GROUT COAT APPLICATION:** After the power troweled mortar is applied and sufficiently cured (about 8 hours at 70-80°F), grind off all high spots and trowel marks before applying the grout coat. Make certain that the epoxy mortar overlay where the product is to be applied, is clean, sound and free of all sanding and grinding dust and foreign contaminants. Apply the mixed grout by a flat flexible rubber squeegee so as to spread out the material in a uniform manner removing all excess material from the surface of the mortar; then backroll (removing all excess material) with a fine nap roller. Depending on the porosity of the mortar overlay and the color selected, it may be necessary to apply more than one coat of material to achieve uniform coverage. When applied properly, the texture of the mortar will still be visible. Maintain temperatures and relative humidity within the recommended ranges during the application and curing process.

**OPTIONAL TOPCOAT (Wear Coat) PRODUCT MIXING:** This product has a mix ratio of 12# part A to 4.15# part B or two parts A to one part B by volume for standard colors. Standard packages are in pre-measured kits and should be mixed as supplied in the kit. We highly recommend that the kits not be broken down unless suitable weighing equipment is available. After the two parts are combined, mix well with slow speed mixing equipment such as a jiffy mixer until the material is thoroughly mixed and streak free. After mixing, transfer the mixed material to another pail (the transfer pail) and again remix. The material in the transfer pail is now ready to be applied on the primed substrate. Improper mixing may result in product failure

**TOPCOATING GROUT COAT:** After the grout coat has cured, Coat before 24 hours to achieve proper bonding. If topcoating after 24 hours, it would be recommended that you degloss the grout coat before applying the optional topcoat. The mixed material can be applied by brush or roller. Maintain temperatures within the recommended ranges during the application and curing process. It is best to maintain a wet edge to avoid roller marks. Direct sunlight or high temperatures may cause visible roller marking during application. Too thick of an application may result in product failure. Exposure to certain types of lighting such as sodium vapor lights may cause the product to discolor.

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## EPOXY MORTAR SYSTEM

### NOTICE TO BUYER

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#### **DISCLAIMER OF WARRANTIES AND LIMITATIONS ON OUR LIABILITY**

We warrant that our products are manufactured to strict quality assurance specifications and that the information supplied by us is accurate to the best of our knowledge. Such information supplied about our products is not a representation or a warranty. It is supplied on the condition that you shall make your own tests to determine the suitability of our product for your particular purpose. Listed physical properties are typical and should not be construed as specifications. NO WARRANTY IS MADE, EXPRESSED OR IMPLIED, REGARDING SUCH OTHER INFORMATION, THE DATA ON WHICH IT IS BASED, OR THE RESULTS YOU WILL OBTAIN FROM ITS USE. NO WARRANTY IS MADE, EXPRESSED OR IMPLIED, THAT OUR PRODUCT SHALL BE MERCHANTABLE OR THAT OUR PRODUCT SHALL BE FIT FOR ANY PARTICULAR PURPOSE. NO WARRANTY IS MADE THAT THE USE OF SUCH INFORMATION OR OUR PRODUCT WILL NOT INFRINGE UPON ANY PATENT. We shall have no liability for incidental or consequential damages, direct or indirect. Our liability is limited to the net selling price of our product or the replacement of our product, at our option. Acceptance of delivery of our product means that you have accepted the terms of this warranty whether or not purchase orders or other documents state terms that vary from this warranty. No representative is authorized to make any representation or warranty or assume any other liability on our behalf with any sale of our products. Our products contain chemicals that may CAUSE SERIOUS PHYSICAL INJURY. BEFORE USING, READ THE MATERIAL SAFETY DATA SHEET AND FOLLOW ALL PRECAUTIONS TO PREVENT BODILY HARM.