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Product Technical Data

# AM 120PT Power Trowel Epoxy Mortar Resurfacer

## Product Description

AM 120PT Power Trowel Epoxy Mortar Resurfacer is a three component 100% solids epoxy mortar specifically formulated with power trowel applications in mind. The aggregate supplied has been engineered to specifically make applications quicker and easier than conventional blends. In addition, this product provides excellent chemical resistance for chemical spill areas.

## Recommended For

Recommended for heavy traffic areas, chemical spill areas and high volume production areas.

## Not Recommended For

Immersion applications for all acids and chemicals

**Solids By Weight:**
100%

**Volatile Organic Content:**
Zero pounds per gallon.

**Standard Colors:**
Light gray, red, dark gray, and natural.

**Recommended Thickness:**
Apply at 3/16" to 3/8" to yield 1/8" to 1/4" after application by the power trowel. The standard application would involve the placement of 1/4", which would result in a nominal thickness of about 3/16" after the power trowel application.

**Coverage Per Unit:**
Coverage will vary according to the liquid to sand ratio. Accordingly, one 37# bag of aggregate when mixed with 1/2 gallon of the mixed liquids will resurface approximately 19 square feet.

**Packaging:**
Liquids are available in any type package size desired. The aggregate blend is supplied in 37# bags only. Standard packaging is available in: (33.25#A to 12.95#B, ie, 5 gallon mix) and (6.65# A to 2.6#B, 1 gallon mix). However, 0.35 gallons in a gallon can plus 0.15 gallons part B in a quart can be supplied for ease of use on small job applications. All weights and volumes are approximate.

**Mix Ratio:**
A typical mix ratio for this system is a 37# bag of aggregate with 1/2 gallon of mixed liquids. 1/2 gallon of the mixed liquids consists of 0.35 gallons part A to 0.15 gallons part B, ie 3.28# part A to 1.28# part B by weight approximate.) We do not recommend that the liquid to sand ratio be made any dryer than the 1/2 gallon liquids to 37# of aggregate as this could cause loss of physical strength. More liquid can be added (10-15%) to the 37# aggregate and still have a very suitable consistency for power trowel applications.

**Shelf Life:**
2 years in unopened containers

**Abrasion Resistance:**
Excellent

**Viscosity:**
Part A= 950-1,250 cps, Part B= 200-275 cps

**Dot Classifications:**
Part A&C "not regulated"
Part B "CORROSIVE LIQUID N.O.S., 8, UN-1760,PGIII"

**Flexural Strength:**
12,100 psi @ ASTM D790

**Compressive Strength:**
10,375 psi @ ASTM D695

**Tensile Strength:**
7,875 psi @ ASTM D638

**Ultimate Elongation:**
6.59%

**Impact Resistance:**
Excellent

**Heat Deflection Temp.:**
144.5 degrees F @ ASTM D648

**Weathering:**
Good (chalks)

**Cure Schedule: (70°)**
(1/2 gallons mixed liquid and 37# aggregate)

| | |
|---|---|
| Pot life | 30-40 minutes |
| Recoat or topcoat | 6-7 hours |
| Light foot traffic | 12-14 hours |
| Full cure (heavy traffic) | 2-7 days |

**Application Temperature:**
50-90 degrees F

**Chemical Resistance:**

| Reagent | Rating |
|---|---|
| Xylene | C |
| 1,1,1 trichloroethane | C |
| MEK | A |
| Methanol | A |
| Ethyl alcohol | B |
| Skydrol | B |
| 10% sodium hydroxide | D |
| 50% sodium hydroxide | D |
| 10% sulfuric acid | C |
| 70% sulfuric acid | A |
| 10% HC1 (aq) | C |
| 5% acetic acid | B |

Rating key: A - not recommended, B - 2 hour term splash spill, C - 8 hour term splash spill, D - 72 hour immersion, E - long term immersion. NOTE: extensive chemical resistance information is available through your sales representative.

**Primer:**
NP162 power trowel primer recommended (As an alternative, the mortar liquids can be used.)

**Topcoat:**
Highly recommend NP94 or NP95 for increased performance and reduced porosity.

## AM 120PT Instructions:

**1) PRODUCT STORAGE:** Store product in an area so as to bring the material to normal room temperature before using. Continuous storage should be above 55°F to prevent product crystallization.

**2) SURFACE PREPARATION:** All dirt, oil, dust, foreign contaminants and 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 to prevent applications below 1/8" thickness. 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 through 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.

**3) PRIMER:** Primer the surface with NP162 power trowel primer. If preferred, the mixed 120C liquids can be used as a primer. Do not let this primer become tack free. Apply the mortar directly over the power trowel primer while still wet. If the primer dries, it must be cleaned and re-applied before placement of the power trowel mortar. Apply the primer at 150 to 250 square feet per gallon.

**4) PRODUCT MIXING:** Mix the liquids to be used in the power trowel mortar system at the recommended mix ratio. Thoroughly mix the combined components A and 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. Mix the aggregate in thoroughly to insure it is wetted out and uniform in saturation. Improper mixing may result in product failure.

**5) PRODUCT 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. Keep in mind that a 3/16 inch depth of power troweled mortar will yield a nominal finished depth of 1/8 inch and a 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 STATEMENTS: (a) Do not over trowel the mortar a 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.

**6) RECOAT OR TOPCOATING:** (If topcoating the power troweled mortar) After the power troweled mortar is applied and sufficiently cured (about 6-7 hours at 70-80°F), grind off all high spots and trowel marks before placing any topcoats. Topcoats can be grout coats, texture coats, high builds, or UV stable urethanes, etc.

**7) CLEANUP:** Use xylol

**8) FLOOR CLEANING:** Caution! Some cleaners may affect the color. Test each cleaner in a small area. If no ill effects are noted, you can continue to clean with the product and process tested.

**9) RESTRICTIONS:** Restrict the use of the floor to light traffic and non-harsh chemicals until the coating is fully cured (see technical data under full cure). It is best to let the floor remain dry for the full cure cycle.

### Limitations:

Color stability may be affected by environmental conditions such as high humidity, UV exposure, chemical exposure or lighting like sodium vapor lights.

Colors may vary from batch to batch due to variations in silica filler.

Mortar colors are not from our standard color chart.

Substrate temperature must be 5°F above dew point.

For chemical exposure areas, we recommend a suitable topcoat to reduce porosity and chemical migration.

All new concrete must be cured for at least 30 days prior to application.

Test data based on neat resin. The addition of sand will decrease physical properties. When aggregate to mixed liquid ratios are higher than 7:1, it is advisable to apply a suitable tie coat such as our NP94 or NP95 to reduce porosity (37# of aggregate and 1/2 gallons of mixed liquids have a sand to liquid ratio of about 8:1)

Physical properties are typical values and not specifications.

See this side for application instructions.

See this side for limitations of our liability and warranty.

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