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NEW GENERATION EPOXY PATCH & REPAIR KIT Heavy Duty Patch & Repair System

PRODUCT DESCRIPTION:

Convenient, ready-to-mix, easy-to-use, 2-part epoxy system with pre-measured hardener. Produces a 100% solids, solvent-free, water-free, SHRINK-FREE high bonding mortar designed for floor applications where extreme strength, bonding and wear characteristics are required.

EASY TO USE: New Generation Epoxy Patch & Repair kit mix is pourable, yet sets rock hard. It can be pumped or injected, for example, with a caulking gun into inaccessible areas.

New Generation Epoxy Patch & Repair can be placed directly onto repair area without sealer or bonding agent. It can be topcoated with New Generation 100 immediately after being placed. Recoat with Straight Seal, New Generation 40 and New Generation 50 when patch is cool to the touch and firm enough to withstand application or roller pressure without deforming the patch.

EXCELLENT BONDING...ABRASION RESISTANCE: Excellent impact and abrasion resistance -- much higher than concrete. New Generation Epoxy Patch & Repair compound has more tensile strength than concrete.

Total chemical cure, ZERO shrinkage. Will not pull away from concrete. Common patching materials contain water or solvent. The solvent evaporates and the patch dries. This causes shrinkage which can cause these products to pull away from the repair surface, decreasing the adhesive strength. This is one reason why new concrete will not stick very well to old concrete. Also, the water-filled spaces in a patch matrix make the patch porous and sensitive to freeze/thaw.

New Generation Epoxy Patch & Repair is 100% solids. No evaporation. No shrinkage. No porosity -- no weakening or cracking due to freezing.

NON-CONDUCTIVE: New Generation Epoxy Patch & Repair is non-conductive. This eliminates reinforcing rod (rebar) corrosion, anchor bolt and fastener corrosion common in ordinary concrete.

Since there is no metal aggregate in the product, the patch will not rust or stain.

New Generation Epoxy Patch & Repairs is versatile and has many uses...keep several pails on hand for emergency repairs.

WHERE TO USE:

- Use indoors or outdoors.
- Use to repair surface defects: holes, cracks, spalls, voids.
- Use to install anchor bolts, posts, poles, base plates.
- Use as a grouting for all types of ceramic, non-resilient tile and flatwork.
- Use to bond new concrete to old concrete by placing concrete overlay onto the Patch & Repair material (or New Generation 100) before the epoxy gels.
- Use to skid-proof loading ramps.
- Use to bond old concrete to old concrete or other material to concrete. Use to "weld" cracked concrete.
- Use to reinforce and protect uneven slab edges from heavy forklift and vehicular damage.
- Use to lower repair costs by adding additional aggregate such as sand, alumina, pea gravel, poly-beads. (Using additional aggregate will reduce bonding strength.)
- Use to make your patch inconspicuous by pressing in aggregate particles that match the surrounding concrete. Add 1 to 5 percent plain cement to darken and further blend color of patch to surrounding concrete.
- Use for vertical surface repairs by adding 3 to 10 percent silica flour or fumed silica to create thicker, non-sagging mortars. Vertical repairs with unthickened mix will require form-work.
- 100 other patch and repair uses! A few examples: install playground and park equipment, seats, gates, partitions, screws, dowels, loose tiles, hand rails, electric machinery. Many municipal uses: install parking meters, repair sidewalks, stairs, speed bumps, parking garages, aprons, etc.

TIPS AND PRECAUTIONS

Remove concrete that has been exposed to oils, greases, fats, etc. down to sound concrete.

Use after shot blasting, etching and final surface preparation. Area must be completely dry. Use propane weed burner to quickly dry cracks and holes. Use dry vacuum to remove remaining particles from patch surface.

Maximum patch thickness: 12" Patches over 12" deep may get very hot (over 150°F) during cure. Use multi-step applications for patches over 12" deep. Protect deep patches from direct sunlight while curing.

The proper combining ratios of Parts A and B is important. If more than 10% of either Part is unrecoverably spilled, discard mix. Unmixed parts will not harden. Mix thoroughly. Transfer mix to second container to check for unmixed spots.

When properly applied and depending on size and shape of patch, a glaze coat will develop at surface. If required, this can be topcoated immediately with New Generation 100; recoat with other products when patch is cool to touch and firm enough to withstand pressure from coating application without deforming. If topcoating after 24 hours, abrade with 100 grit sandpaper.

Not suitable for immersion service in concentrated acids, commercial solvents, strong oxidizers. Not recommended for use over 250°F.

HOW TO USE

Read and understand entire label before using this product.

PREPARE AREA:

1. Remove loose, crumbling concrete, oil, grease, wax, curing membranes and seals. Clean and degrease with Spartan SC-200. Rinse well.
2. Following directions, prep area with Spartan Concrete Prep, shot-blast, sand-blast or otherwise mechanically roughen area to expose sound concrete. Scour newly drilled anchor bolt holes with coarse wire flue brush. Insure that surface of area is completely dry. Gas burners or electric power dryers can be used to quickly dry deep holes and cracks.

PATCH AND REPAIR:

1. Put on gloves and eye protection before opening. Cut slots to open pail. Set up a mixing station. Lay out cardboard or drop cloth on floor. Unmixed Parts, A or B, spilled on floor will never harden and will require clean-up with xylene (xylol). Combined mix spilled on floor and allowed to cure will require removal with hammer and chisel.
2. Mix Part A (gallon pail) until all aggregate is completely wetted. Scrape side and bottom often to insure a complete mix. Mix by hand with a stiff paddle or bar, or mechanically with a plaster mixer or other high-torque, low speed equipment. **AVOID MIXING IN AIR.**
3. Add entire contents of Part B (Curing Agent) to part A (Epoxy Mortar in gallon pail). Mix completely using fold and stir method. Again, scrape sides and bottom often to insure a complete mix. Transfer contents to clean dry pail to check for complete mixing. Incomplete mixing will result in soft spots and repair failure!

- When thoroughly mixed, immediately apply material to prepared area. Cure time will vary depending on application. Quart size repair will harden in one hour. Smaller, thinner repairs require longer cure time. **Combined components, if left in pail, will harden within 30 minutes.** Recommended application temperature is 45-90°F. The warmer the temperature, the faster the set-up. Clean-up will require a solvent such as xylene. Repair may be sanded, sealed or painted when firm. Screen or abrade if recoating after 48 hours.

DO NOT FILL EXPANSION OR ISOLATION JOINTS. CONSULT BUILDING ARCHITECT BEFORE REPAIRING LARGE DYNAMIC CRACKS. NOT RECOMMENDED FOR IMMERSION SERVICE IN COMMERCIAL SOLVENTS.

MINIMUM PATCH THICKNESS: 1/2" MAXIMUM PATCH THICKNESS: 12"

DRY TIME¹ @75°F	
Tack Free Time	
1/2" deep patch	4-5 hours
2" deep patch	3-4 hours
6" deep patch	1-2 hours
Heavy Traffic and/or Chemical Resistance	48 hours

¹Depends on surface temperature and shape and depth of patch.

COVERAGE

One kit will yield 80 fluid ounces (144 cubic inches) of patching material. This would, for example, fill 96 linear feet of a 1/8" x 1" crack or cut.

TECHNICAL DATA

Non-Volatile Solids	100%
Carrier Solvent	None
Density	16.5 lbs./gal.
Aggregate/Binder Ratio	
Volume:	2:1
Weight:	3:1
Epoxy/Curing Agent	
(Binder) Ratio Weight:	5:3
VOC	0
Stability in unopened container	
@ 24°C/75°F	One Year
Freeze/Thaw	Freezes and thaws 3 times

TYPICAL PROPERTIES

Pot Life After Mixing at 75°F	30 minutes (less at higher temperatures)
Induction Time	None
Clean-up Solvent	
Before cure:	Xylene, Xylol
After cure:	Paint or Varnish Remover

WARNING: Causes severe and irreversible eye damage. Wear eye protection. Contains material which may cause chemical burns on skin. Avoid skin contact. Put on gloves before opening container. Wash hands after handling. May cause allergic reaction and/or skin sensitization. Contains material associated with central nervous system damage after repeated, prolonged use.

FIRST AID:

Eye Contact: Hold eyelids apart and immediately flush with water for at least 15 minutes. Remove contact lenses. Call a physician. **Skin Contact:** Wipe immediately from skin. Flush with water. Wash with soap and water. Do not use solvents for skin clean-up. Remove contaminated clothing and shoes. Wash before reuse. **Ingestion:** Give 2-3 glasses of milk or water. Do not induce vomiting. Get immediate medical care. Be prepared to supply medical personnel with MSDS information. **Inhalation:** In case of exposure to high concentration of mist or vapor, move person to fresh air. Seek medical attention.

STORAGE AND DISPOSAL: Store in a cool, dry place. The unmixed components have a shelf life of one year if unopened. Part A (liquid epoxy mortar) strongly absorbs moisture. Keep container tightly closed. Transfer unused, unmixed portions to smaller containers having minimum head space. Under current law, the cured, hardened material produced by this kit is not considered hazardous waste.

PACKAGING: New Generation Patch & Repair Kit is a 2-part, ready-to-mix system packaged in 2 separate containers. Part A consists of a high quality chemically resistant aggregate and a clear, odor-free modified liquid epoxy. Part B consists of a premeasured amount of curing agent. The combined parts give 80 fl. oz. or 144 cubic inches of Patch & Repair mix.

GUARANTEE: Before applying coating, be sure to read carefully manufacturer's guarantee inside packet attached to product container.

Some materials may require special handling or application. Please refer to the appropriate Material Safety Data Sheet and label.