

product data

SELECTION & SPECIFICATION DATA

TYPE & DESCRIPTION	310 CR Mortar is a novolac epoxy monolithic floor surfer, specifically designed for surfacing and patching both old and new floors, formulated for optimum chemical resistance and physical properties. Applied at 1/8" nominal film thickness.
ADVANTAGES	Cures quickly to form an exceptionally tough, impact and abrasion resistant surface. Excellent adhesion to concrete, steel, and wood. Minimum down time. Skid resistant, sanitary, non-shrinking. Easy to clean - USDA acceptable.
CHEMICAL RESISTANCE	Not affected by water, oil, brine, most acids (including 98% sulfuric acid) and alkalines. For specific recommendations, please refer to Greenstone's Chemical Resistance Guide.
USES	Resurfacing floors in food production plants, aisle ways, chemical spill containment area's, industrial production facilities, and pulp and paper mills.
GOVERNMENT AGENCY	Meets the requirements of the U.S. Department of Agriculture (USDA) for use as an incidental food contact flooring system.

FOR INDUSTRIAL USE ONLY!

PHYSICAL DATA	<p>Compressive Strength, ASTM D695 - 10,700 psi Modulus of Elasticity, ASTM D695 - 1.058×10^6 Tensile Strength, ASTM D638 - 1,250 psi Flexural Strength, ASTM D790 - 3330 psi Thermal Coefficient of Linear Expansion, ASTM D696 - 6.16×10^{-6} in/in/°F. Bond Strength, ASTM C-321 - Greater than 350 psi (100% substrate failure). Impact Strength - 130 in/lbs. Indentation - MIL-D-3134F - No Indentation Water Absorption - ASTM C-413 - 0.047% Shelf Life - Minimum 12 months when storage temperature is between 70°F and 85°F. Working Time - approximately 35 minutes at 75°F. Potlife - approximately 20 minutes at 75°F. Cure Time - Greenstone 310 CR will harden within a few hours at 75°F. The warmer the temperature, the faster it cures. Allow a minimum cure of 24 hours for light traffic, and 96 hours for heavy traffic loads and chemical spillage. Flammability - Does not support combustion Solids - 100% Colors - Gray, Red (Special colors available, please contact Sales for details)</p>
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PACKAGING / COVERAGE	<p>310 CR SURFACER / MORTAR - packaged in batches -</p> <p>1 KIT - covers approximately 31 square feet a 1/8 inch - containing the following -</p> <ul style="list-style-type: none">1 container - Part A (resin)1 container - Part B (hardener)1 bags - Part C (chemical resistant aggregate)1 bags - Part D (broadcast aggregate) <p>Topcoat Recommended - Greenstone 100 CR, at a coverage rate of 70-80 square feet per gallon.</p>
SUPPLEMENTAL PRODUCTS	350 Grout, 300 Coving, 100 CR Topcoat, 300 Flex, 150 CR Topcoat

SURFACE PREPARATION

New Concrete: must have a minimum of 28 days cure, and no curing agents or sealers shall be used. Remove oil, grease or other loose or foreign materials and contaminants. A good bonding tooth, the texture of rough sandpaper, is required to maximize adhesion, with the removal of all glaze. Examples of mechanical surface prep including, but not limited to -

- A. Sandblast with steel shot, fine silica, or other similar material.
- B. Wheel Abrader
- C. Scarify

Existing Concrete: remove all loose, weak concrete, and any paint wax, oil, grease or other contaminants. Once the concrete has been cleaned and neutralized, mechanical surface preparation shall be used to provide a good bonding tooth, a texture of rough sandpaper, with the removal of all glaze. Examples of mechanical surface preparation including, but not limited to -

- A. Sandblast with steel shot, fine silica, or other similar material.
- B. Wheel Abrader
- B. Scarify

Note: Holes and depressions 1/4" or deeper should be prefilled with 350 grout, or a similar system, prior to application. All surfaces must be dry prior to application of polymer system.

Metal Surfaces: Degrease surface prior to sandblasting. Use organic solvents, alkaline solutions, steam, hot water with detergents, or other systems that will completely remove dirt, oil, grease, etc. Blast the surface to near white SSPC-SP 10-70, or NACE No. 2 using a Venturi blast nozzle with 100psi air. To produce the 4 mil minimum anchor pattern or tooth, the blasting media used shall be a properly graded, clean, sharp angular abrasive similar to Humble Abrasive Flint S7 (6-30 mesh), Steel Grit (HG25), or Black Beauty (BB1040).

MIXING AND EQUIPMENT

MIXING

Mortar / Surfacer - Empty the contents of Part B into Part A and mix thoroughly. When completed, empty the container into a mechanical mixer, draining the container for approximately 30 seconds. Start the mixer, and slowly add the Part C, chemical resistant aggregate, and mix the three components for approximately 3 minutes - until completely homogeneous. Note - Person mixing should wear a dust mask or respirator.

Mixer: A mechanical mixer designed for quick, thorough mixing of aggregate epoxy systems similar to those manufactured by -

Kol Mixal	Quick Stir, INC.
Div. of Man U Fab Inc.	P.O. Box 327
7740 Main St. N.E.	Port Clinton, Ohio 43452
Minneapolis, MN 55432	

Important! - The working life of the mixed blend is approximately 20 minutes. Always pour mixed batches as soon as possible. Mixed materials remaining in a container will produce heat. Keep away from combustible materials. Do not reseal mixed containers!

APPLICATION AND SAFETY

APPLICATION

FLOOR SURFACER / MORTAR: Pour the entire batch onto the floor in a ribbon approximately 10" wide. Spread with a clean steel trowel, applying pressure to scratch surfacer thoroughly into floor surface. Smooth the surfacer with trowel, holding it nearly flat and applying even pressure. Finish each batch as you go. After each batch, wait approximately 5-8 minutes to allow the material to flow, and polymer to "cream" to the surface. Evenly broadcast Part D (aggregate) over newly laid surface, covering evenly all areas to slight excess. Allow for a wet edge of approximately 2 feet for the next batch, of material which is not broadcast. Unless otherwise specified, the 310 CR is designed to follow the existing contour of the substrate.

FINISHING THE EDGES - Cut approximately 1/2" deep chase or groove into concrete. Chisel a shoulder into the saw cut, back approximately 2 to 4 inches. Trowel smooth to meet adjoining floor level. Do not use a feather edge.

CURE TIME - Greenstone 310 CR will harden within a few hours at 75°F. The warmer the temperature, the faster the cure. Allow 24 hours, at 75°F, for light traffic, and 96 hours for full cure.

CLEAN-UP - Cured or hardened Greenstone 310 CR is almost impossible to remove. Clean tools and equipment immediately with hot soapy water, or a mixture a acetone and ethanol.

SAFETY

Observe good personal hygiene. Certain personnel may be sensitive to various types of resins which may cause dermatitis. Avoid contact with skin and breathing of vapor. Read and follow all caution statements on product info bulletin, material safety data sheet and container labels for this product. This bulletin provides standard information for the system and application procedure. Since varying application conditions may not be covered, consult GREENSTONE Technical Service Department for further information.

We guarantee our product to be free of defects in material and workmanship, and to be in accordance with our company quality control standards. All data, statements and recommendations made herein are based upon information we believe to be reliable, but are made without any representation or guarantee or warranty of accuracy and are made with reservation of all patent rights. Our products are sold on the condition that the user will evaluate them, as well as our recommendations, to determine their suitability for his own purpose before adoption. Also, statements regarding the use of our products or processes are not to be construed as recommendations for their use in violation of any patent rights or in violation of any applicable laws or regulations. Liability under any condition shall be limited to replacement of material only. No liability is assumed or implied, for injury to personnel, labor costs, product loss or any other expenses incidental to the structure or operation of the plant and equipment where the system is being applied.

