

## Greenstone 830 AR Flooring

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## product data

### SELECTION & SPECIFICATION DATA

# TYPE & DESCRIPTION

830 AR Flooring is a 100% solids advanced ceramic composite, formulated to protect equipment from aggressive erosion, chemical attack and corrosion. Trowel applied at a nominal film thickness of 1/4" per coat. Formulated for extremely abrasive and corrosive environments where substrate loss is often repaired by more silica based polyer overlay. It can be used either to rebuild eroded metal surfaces or to provide a wear resistant surface which typically outperforms the original substrate. weld overlays or rubber liners.

### **ADVANTAGES**

830 AR cures at temperatures as low as 50°F to form an exceptionally abrasion resistant polymer-aggregate matrix. 860 AR is applied to a primed surface by trowel, where close tolerances and a smooth finish are required. Dramatically outlasts other wear resistant materials and coatings, extending the operating cycles of equipment. Outperforms weld overlays and silica based polymer matrixes. May be molded to precise dimentions for critical tolerances. Performs well in a variety of fluctuating chemical environments.

## USES

830 AR may be used alone, or in conjunction with other Greenstone systems. This trowel applied liner system greatly extendes surface wear and will provide predictable preventative maintenance.

- Pulverizers
- Hoppers and Silos
- Slurry Pumps and Pipe Elbows
- Blowers
- Transport Pipelines for Abrasives
- Lined Chutes

- Dredge Pumps
- Tile Lined Conveyor Screws
- Fans
- Cyclones
- Metal Clad Exhaust Fan Housings
- · Rubber Lined Deflector Hoods

#### FOR INDUSTRIAL USE ONLY!

### **PHYSICAL DATA**

Compressive Strength - 15,250 psi

Tensile Strength - 6,350 psi Impact Strength - 100 in./lbs.

Indentation - No indentation MIL-D-3134F

Maximum Temperatures - Wet Exposure 160°F, Dry Heat 250°F

Shelf Life - 1 Year (warehouse conditions)

Working Time - approximately 30 minutes at 75°F.

Potlife - approximately 20 minutes at 75°F.

Cure Time - hardens in 8-12 hours at 75°F. The warmer the temperature, the faster it cures. Allow a minimum cure of 48 hours at 75°F for full cure.

Solids - 100%

Colors - Charcoal.

# PACKAGING / COVERAGE

830 SURFACER / MORTAR - packaged in batches -

1 BATCH KIT - covers approximately 16 square feet a 1/4 inch - containing the following -

1 container - Part A (resin)

1 container - Part B (hardener)

1 bag - Part C (chemical resistant aggregate)

3 BATCH KIT - covers approximately 48 square feet at 1/4 inch - containing the following -

1 container - Part A (resin)

1 container - Part B (resin)

3 bags - Part C (chemical resistant aggregate)

Required - 330 PRIMER

830 AR PATCH KIT (8 square feet at 1/4") 1EA - 5 Gallon Pail - containing the following.

### 330 Primer

1 container - Part A (resin)

1 container - Part B (hardener)

### 830 AR Flooring

1 container - Part A (resin)

1 container - Part B (resin)

1 bag - Part C (abrasion and chemically resistant aggregate)

SUPPLEMENTAL PRODUCTS

350 Grout, 300 Coving, 810 Coating, 100 CR Topcoat, 300 Flex

Chemical Resistance

Recommended for exposure to many concentrations of acids, alkalies, bleaches and other chemicals. Please refer to the Greestone Chemical Resistance Guide for a comprehensive list of chemicals and the corresponding resistance ratings.

### SURFACE PREPARATION AND SUBSTRATES

# SURFACE PREPARATION

**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). **Note:** Holes and depressions 1/2" or deeper should be prefilled with 830 AR Flooring, or a similar system, prior to application. All surfaces must be dry prior to application of polymer system.

**New Contrete:** must have a minimum of 28 days cure, and no curing agents or sealers shall be used. Remove oil, grease or other lose or foreighn materials and contaminanst. A good bonding tooth, the texture of rough

**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, the 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
- C. Scarify

## MIXING AND EQUIPMENT

**MIXING** 

Primer - Add the Part B to the Part A and mix thoroughly until uniform in color with no streaking.

**Liner** - Empty the contents of Part B into Part A and mix thoroughly. When completed, empty the entire container into a mechanical mixer, draining for approximately 30 seconds. Start the mixer, and slowly add the Part C, aggregate, and mix the three components for approximately 3 minutes - until completely homogeneous.

**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**

**PRIMER:** Apply approximately 8 mils of 860 AR Primer by brush or roller. Spread the mortar immediately, before the Primer has hardened, which will occur in approximately 60 minutes at 75°F.

MORTAR: Spread mixed 830 AR Flooring evenly on the substrate. Trowel evenly over the primed surface in long, even strokes with moderated trowel pressure, filling in low spots as you go. Remove any surface marks by quickly passing over the mortar surface with light pressure.

CURE TIME - 830 AR Flooring will harden within a few hours at 75°F. The warmer the temperature, the faster the cure. Allow 48 hours for full cure.

CLEAN-UP - Cured or hardened Greenstone 830 AR Flooring 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. Since varying application conditions may not be covered, consult GREENSTONE Technical Service Department for further information.

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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.