GREENSTONE Polymer Systems Inc.

400 Lombardi Avenue, Green Bay, WI 54304 ♦ 866-690-6160 ♦ info@greenstonepolymer.com ♦ www.greenstonepolymer.com

Greenstone 860 AR Liner System

product data

SELECTION & SPECIFICATION DATA

TYPE & DESCRIPTION

860 AR LINER 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 1/8" per coat. Formulated for extremely abrasive and corrosive environments where metal loss is often repaired by more conventional weld overlay. It can be used either to rebuild eroded metal surfaces or to provide a wear resistant surface with typically outperforms the original metal, weld overlays or rubber liners.

ADVANTAGES

860 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. May be molded to precise dimentions for critical tolerances. Performs well in a variety of fluctuating chemical environments.

USES

860 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

860 AR Lining System - components sold separately -

860 AR PRIMER - 1 quart - covers approximately 50 square feet at 8 mils -

1 container - Part A (resin)
1 container - Part B (hardener)

860 AR LINER - 1 batch - covers approximately 12.5 square feet at 1/8"

1 container - Part A (resin)
1 container - Part B (hardener)
1 bag - Part C (Abrasion resistant and chemical resistant aggregate)

860 AR VEIL COAT - 1 quart - covers approximately 50 square feet at 8 mils -

1 container - Part A (resin)
1 container - Part B (hardener)

Supplemental Products	**810 AR Coating, 860 AR Mortar**
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 1/4" or deeper should be prefilled with 860 AR LINER, or a similar system, prior to application. All surfaces must be dry prior to application of polymer system.

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
Div. of Man U Fab Inc.
7740 Main St. N.E.
Minneapolis, MN 55432

Quick Stir, INC.
P.O. Box 327
Port Clinton, Ohio 43452

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.

LINER: Place mixed 860 AR LINER on a mud board and then take a small amount on the center of a small trowel. Spread mortar firmly with a trowel evenly over the primed surface in long, even strokes with heavy trowel pressure. Fill in low spots as you go. Remove any surface marks by quickly passing over the mortar surface with light pressure. A quality "swimming pool" finishing trowel, such as Goldblatt or Marshalltown, is recommended.

CURE TIME - 860 AR LINER 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 860 AR LINER 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.