



CeramaClad™ AR

abrasion resistant coating

DESCRIPTION

CeramaClad™ AR is a polymer ceramic composite chemistry incorporating an advanced proprietary blend of ceramic and metallic additives with a modified novalac epoxy resin. The matrix is designed to achieve maximum wear and characteristics for restoration of metallic surfaces subjected to severe erosion. This 100% solids, zero VOCs technology is a mastic, two part system designed to withstand dry service temperature up to 500 °F.

SUGGESTED USES :

| | | | |
|------------|-----------|-------------|--------------------|
| Bag house | Scrubbers | Chutes | Wear plates |
| Air heater | Cyclones | Pulverizers | Fly ash separators |

PERFORMANCE PROPERTIES

| Performance Property | Test Method | Result |
|----------------------------|-------------|----------------------------|
| Hardness | ASTM D 2240 | 90 Shore D |
| X-cut Adhesion | ASTM D 6677 | Rating 10 |
| Pull off Adhesion | ASTM D 4541 | Greater than 1, 500 psi |
| Abrasion | ASTM D 4060 | Less than 15 mg loss |
| Compressive Strength | ASTM D 695 | 12,000 psi |
| Flexural Strength | ASTM D 790 | 11,500 psi |
| Chemical Resistance | ASTM D 543 | Excellent |
| Temperature Resistance | Bake cycle | Up to 500 °F (will darken) |
| Solids Content | ASTM D 1259 | 100% |
| Volatile Organic Compounds | ASTM D 2369 | 0 grams/liter |

PHYSICAL PROPERTIES

Color: Dark gray (will darken with elevated temperature exposure)
Pot Life at 77°F : 45 minutes
Pot Life at 90°F : 20 minutes
Application Temperature: 55-90 °F
Dry to Touch at 77°F : 6 to 8 hours
Cure Time: Recommended – 6 Hours @ 250 °F
Alternative – 48 Hours @ 77°F
Min. Recoat Time at 77°F: 6 hours
Max. Recoat Time at 77°F: 48 hours

MIXING INSTRUCTION

This is a two-component system. COMPLETE UNIT MUST BE MIXED AND APPLIED AT ONE TIME. DO NOT MIX PARTIAL QUANTITIES FROM CONTAINERS OR PROPER RATIOS MAY NOT BE OBTAINED. Prior to mixing, components A Resin and B Hardener should be at room temperature (60-75 °F). Pre mix Resin Part B, be sure that any settled material at the bottom of the can is dispersed. Mix for 2 to 3 minutes until a uniform colour and consistency is achieved. Pour Part A Hardener into Part B Resin. Mix for 2 to 3 minutes using a Jiffy mixer head and a mechanical drill. To ensure complete mixing, scrape sides and bottom of container and continue mixing for an additional 1 or 2 minutes. DO NOT HAND MIX. Begin application immediately – no induction time. Contents of the container may be portioned off into smaller containers to maintain pot life.

SURFACE PREPARATION

- 1) Ensure that surface is clean, dry and uncontaminated. Proceed only if the substrate temperature is more than 5°F above the dew point temperature during surface preparation and coating application.
- 2) Abrasive blast clean with garnet or aluminum oxide (G40 or coarser). DO NOT USE steel shot or non-angular media.

For steel surfaces, blast to a White Metal Blast (SSPC-SP5; NACE 1; SA 3):

- minimum 3.5 mil profile for immersion and elevated temperature service.
- minimum 2.5 mil profile for buried underground service;
- minimum 1.5 mil profile for atmospheric service.

CLEAN-UP AND STORAGE

- 1) Use commercial solvents (Acetone, Xylene, Methyl Ethyl Ketone) to clean tools immediately after use.
- 2) Once the coating is dry, the material must be abraded off.
- 3) Keep containers tightly sealed and store upside down. For cleanup, M.E.K. or a 50:50 blend of M.E.K. and Xylol.
- 4) Store between 10°C(50°F) and 27°C(80°F). DO NOT FREEZE. Use product within 6 months of receiving.

APPLICATION INSTRUCTIONS

Once mixed, the product may be applied by trowel, putty knife or brush. Work the material into the surface profile to completely wet out the substrate surface to ensure proper adhesion.

To improve the appearance of the material a low nap roller may be used to back roll the material. No reducing or thinning of the material is permitted.

SAFETY

Before using any products, please refer to the Material Safety Data Sheet (MSDS). Follow standard confined space entry and work procedures, if appropriate.

Wear eye safety protection, chemical resistant gloves. Use NIOSH approved respirator where mist occurs.

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