

CC-3002

High Temperature Ceramic Filled Brushable Epoxy Coating

DESCRIPTION AND USES

CC-3002 is a high temperature, high build, abrasion resistant epoxy coating designed primarily for high-build wear resistant applications withstanding temperatures of 550F degrees. Its excellent bonding qualities and high physical properties make CC-3002 ideal for use in lining applications requiring abrasion and chemical resistance. Blome CC-3002 exhibits outstanding resistance to abrasion and erosion due to its ceramic, aluminum oxide filled formulation.

CC-3002 is a high temperature, ceramic filled novolac epoxy coating for immersion service and for use in abrasion resistant slurry and other wear applications. Typical sprayed or brush applied, its high build properties allow thicknesses up to 60 mils to be achieved on vertical surfaces.

CC-3002 is a two component product with a 4:1 volumetric mix ratio.

CC-3002 possesses the following characteristics:

- Thermal Shock, Impact, and Wear Resistance
- Excellent edge coat properties;
- 100% solids;
- Resistance to thermal shock, impact and wear;
- Excellent chemical resistance;
- High bond strength;
- High cohesive strength;
- Low permeability;
- Low odor

Typical uses include:

Slurry tank linings, chutes, hoppers, mixer blades, screw conveyers and other equipment exposed to significant wear and erosion.

PACKAGING/COVERAGE

CC-3002 is available in 1 gallon, 5 gallon and 25 gallon units. Each unit consists of pre-measured Part A and Part B components. Application thickness may vary from 15-to-80 mils depending on expected service conditions.

Coverage rates will be affected by the condition of surface being coated (degraded vs. smooth, steel vs. concrete, etc.). To figure theoretical coverage per gallon divide desired mil thickness into 1,604. (For example, theoretical coverage for a 30 mil thickness is: 1,604 divided by 30 = 53.46 square feet per gallon.) For practical coverage, make necessary allowances for condition of the substrate, temperatures, jobsite conditions, waste, overspray, etc.

TYPICAL PROPERTIES -WET

Solids by Volume	100%
Weight per Mixed Gallon:	11 lbs
*Pot Life @ 75°F:	25-30 min
Cure Times @ 75°F Dry to Touch:	4 hrs
Firm:	12 hrs
Chemical Service:	72 hrs
Primer:	Not required on prepared steel
Flammability:	Nonflammable

*Significantly less at elevated temperatures

TYPICAL PROPERTIES-CURED

Color:	Medium Gray
Temperature Limitation:	550 F
Hardness - ASTM D-2240 Shore D:	72
Compressive Strength -ASTM C-579:	15,000 psi
Tensile Strength -ASTM D-638:	7,800 psi
Flexural Modulus of Elasticity -ASTM D-790:	5.9 psi x 10 ⁵
Bond Strength -ASTM D-4541:	Concrete: failure in concrete Steel: 1,750 psi Minimum
Water Vapor Transmission -ASTM E-96:	WVT: 0.0120 grain per hr ft ²
Permeability:	0.004 perm. in.

STORAGE AND SHELF LIFE

Keep CC-3002 components tightly sealed in their original containers until ready for use, Store at 50°F to 75°F, out of direct sunlight. CC-3002 has a shelf life of one year, when properly stored.

APPLICATION GUIDELINES

TEMPERATURE CONSIDERATIONS

1. The temperature of the surface to be coated, and the ambient air temperature, should be at least 55°F while applying CC-3002 and while it cures. If you wish to attempt to apply CC-3002 in cooler temperatures, tarp and heat the area to be coated to create and maintain the minimum 55°F conditions.
2. Stop application if the temperature falls within 5°F of the dew point.
3. Twenty-four hours before application, all materials (components A and B) should be stored at 75°F-85°F, to facilitate handling and spraying.

SURFACE PREPARATION -GENERAL

Surfaces must be dry and free of dirt, dust, oil, grease, chemicals and contaminants immediately prior to applying each coat of either primer or CC-3002.

SURFACE PREPARATION OF STEEL

Abrasive blast steel surfaces to white metal finish with a 3 to 4 mil anchor profile. (Ref. SSPC-SP-5)

All welds should be continuous and should be ground to remove sharp edges, laps, under cuts and other surface irregularities. Relatively smooth, ripple finished welds are acceptable. Stripe-coat all welds just prior to applying coating.

MASKING

Mask surfaces that are not to be coated. CC-3002 is difficult to remove, once cured.

PRIMING

Steel -priming is optional.

APPLICATION EQUIPMENT

CC-3002 is typically applied by brush or roller . If spraying, use Graco "King" spray rig or Graco Hydro-Cat spray rig fixed at a 4:1 volumetric ratio.

CARE OF SPRAY RIG HOSES

Take care to prevent the mixed material from setting up in your hoses. For best results, keep hoses as short as possible and purge hoses immediately if work is interrupted. Keep hoses out of direct sunlight and insulated or away from hot surfaces.

MIXING AND APPLICATION

CC-3002 may be thinned for certain spray applications. Use up to 5% by weight of MEK. Refer to the specifications for your project or consult Blome for alternate thinner recommendations. The mix ratio of Part A to Part B is 4:1 Part A to B by volume.

1. The components must be individually agitated immediately prior to use:
 - a. Part A - Blend each Part A component to a uniform consistency in its individual container, using a Jiffy type mixer.
 - b. Part B - Stir each Part B component to a uniform color in its individual container.
2. Material should be applied in even coats
If spraying, use multidirectional passes to ensure positive coverage and a proper film build.
3. Coating Thickness
 - a. Horizontal Surfaces: The entire desired thickness may be put down on horizontal surfaces in a single coat.
 - b. Vertical Surfaces: Minimum 15 mils and maximum 80 mils thickness may be applied to vertical surfaces.

SPARK TESTING STEEL

Spark testing is recommended for coated steel in immersion service. Test at 100 volts per mil.

CLEANUP

Before material gels, tools and equipment should be cleaned using hot, soapy water. After CC-3002 begins to cure, xylene or MEK will be required. Chlorinated solvents may be used if flammable solvents are prohibited.

**SAFETY PRECAUTIONS
FOR INDUSTRIAL USE
ONLY**

Avoid contact with skin & eyes; do not ingest material or inhale vapors.

When mixing or applying CC-3002, always wear chemical goggles, appropriate rubber gloves, and other appropriate safety clothing.

When spraying in confined areas, wear a fresh air hood and/or make provisions for forced air ventilation.

When spraying in open areas, a NIOSH approved respirator suitable for organic vapors can replace fresh air hood.

Prolonged or repeated exposure to the Part A and Part B components of CC-3002 may cause skin irritation and/or allergic reactions.

Refer to Blome material safety data sheets on individual components.

CAUTION

CC-3002 may cause skin irritation with prolonged or repeated contact. Handle with care and read the material safety data sheet, which is available for each product.

WARRANTY

We warrant that our goods will conform to the description contained in the order and that we have good title to all goods sold. Our material data sheets and other literature are to be considered accurate and reliable, but are used as guides only. WE GIVE NO WARRANTY OR GUARANTEE, WHETHER OF MERCHANTABILITY OR FITNESS OF PURPOSE OR OTHERWISE, AND WE ASSUME NO LIABILITY IN CONNECTION THEREWITH. We are happy to give suggestions for applications; however, the user assumes all risks and liabilities in connection therewith regardless of any suggestion, we may give. We assume no liability for consequential or incidental damages. Our liability, in law and equity, shall be expressly limited to the replacement of non-conforming goods at our factory, or at our sole option, to repayment of the purchase price of the non-conforming goods.

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Supersedes all previous literature