

## EC-990

### Trowel Applied Novolac Epoxy Floor Topping

#### PRODUCT DESCRIPTION

Blome EC-990 is a Trowel Applied Novolac Epoxy Floor Topping that is typically installed at a nominal ¼" thickness. EC-990 is designed for use as a chemical and abrasion resistant, seamless flooring system for harsh process flooring areas, secondary containment structures, high traffic areas, curbing, equipment pads and other applications that demand excellent chemical resistance and durability. EC-990 exhibits excellent resistance to a broad range of strong mineral acids, alkalis, bleaches, cleaners, salts, oils and many solvents. EC-990 is especially well suited for use in 98% sulfuric acid, 37% hydrochloric acid, nitric acid up to 30% and other aggressive chemicals. EC-990 is typically placed by using screed bars or a screed box to desired thickness and then finished using a steel trowel, resulting in a non-slip yet cleanable finish. EC-990 is a resin rich material that does not require a topcoat or sealer coat to maximize performance. For vertical applications Blome EC-990V Vertical Grade is trowel applied at a nominal 1/8" thickness.

#### PACKAGING AND COVERAGE

EC-990 is available in multi-pack or bulk units. Multi-pack units contain pre-measured resin (one gallon), hardener (one quart) and aggregate (one 54 lb. bag) components. These units are mixed, as supplied, in a large KOL type or paddle type mortar mixer. Each multi-pack unit covers approximately 26 square feet at a nominal ¼" thickness. Bulk units are supplied with four (4) 5 - gallon pails of resin, one (1) 5 - gallon pail of hardener and 20 bags of aggregate. These units are field mixed by blending one gallon resin, one quart hardener and one 54 lb. bag aggregate. Each bulk unit covers approximately 520 square feet at a nominal ¼" thickness. Blome EC-990V Vertical Grade is packaged in pre-measured, multi-pack units. Each multi-pack unit of EC-990V contains resin (one gallon), hardener (one quart) and aggregate (one 56 lb. bag) and covers approximately 50 square feet at a nominal 1/8" thickness.

#### TYPICAL PROPERTIES

Solids by volume:	100%
Resin to Hardener Mix Ratio:	4:1
Pot life @ 75°F:	20 to 30 min
Cure Times @ 75F: Cure firm	3-4 hrs.
Chemical service:	24 hrs.
Primer	Concrete: Primer 75
Compressive Strength - ASTM C-579:	12,000 - 13,000 psi
Tensile Strength - ASTM C-307:	2,250 - 2,500 psi
Flexural Strength - ASTM C-580	3,800 - 4,000 psi
Hardness - Shore D2:	85 - 90
Temperature Limits:	Continuous - 165°F Intermittent - 220°F
Color:	Gray or Red (other colors available)

## **PACKAGING & STORAGE**

Keep EC-990 components tightly sealed in their original containers until ready for use. Store at 50 to 85°F. The optimum temperature for material workability is 75 to 85°F.

Properly stored EC-990 has a minimum shelf life of 12 months.

## **CONCRETE SURFACE PREPARATION**

Surfaces must be clean, dry and free of dust, dirt, oil or grease. The surfaces must be free of contamination with chemicals or any other types of contaminants prior to the material being applied.

1. The concrete should be adequately cured.
2. Structurally sound and dry.
3. Free and dirt and contaminants.
4. All defects should be repaired.
5. All loose coatings must be removed.
6. The concrete to be protected should be prepared by abrasive blasting, shot blasting, grinding or, in some instances, it may be acid etched check with Blome International for specific recommendations.

## **PRIMER APPLICATION**

Following concrete surface preparation, the appropriate Blome Primer is installed prior to installing EC-990. Blome Primer 75 is suitable for most applications. For damp or wet concrete Blome EC-R540 is the preferred primer as it has superior moisture tolerance. For oily concrete Blome Primer 75-OTP is recommended. Refer to specific product data sheets for mixing, application and physical properties data on these products.

Mix and apply appropriate primer as directed on product data sheet. Apply primer to concrete using a roller or stiff bristle brush, working the material into the pores of the concrete. Allow primer to cure until firm and tacky before installing EC-990.

## **MIXING AND APPLICATION OF BLOME EC-990**

Blome EC-990 is supplied as a three component product consisting of a resin, hardener and aggregate. Resin to Hardener mix ratio is 4:1 by volume.

1. Mix one gallon of EC-990 Resin with one quart of EC-990 Hardener and blend the components thoroughly for 2-3 minutes using a drill type paddle mixer.
2. Slowly add one 54 lb. bag of EC-990 Aggregate to mixed resin and hardener. Aggregate can be blended using a large KOL type mixer or a paddle type mortar mixer. Blend the components thoroughly for 2-3 minutes making certain that there are no dry pockets of powder in the corners of the mixer or on the mixer blade.
3. Place mixed material on primed concrete substrate using either screed bars or a screed box to desired thickness. Typical thickness ranges from 3/16" to 3/8"; thicker installations are possible if needed.
4. Finish material using a steel trowel, working the resin to the surface with repeated passes. For best results use a trowel with rounded corners. Trowels need to be kept clean between batches and can be occasionally wetted with solvent to assist smoothing the material.
5. For vertical installations Blome EC-990V is mixed in complete units of resin, hardener and aggregate. This mixture is trowel applied over primed concrete at a nominal 1/8" thickness.

## **CURING**

Blome EC-990 requires a minimum cure time of 24 hours at 75°F before putting the installation into service. Most installations are ready for light foot traffic after 6 hours cure at 75°F. At lower temperatures curing times will be slowed and at higher temperatures curing times will be accelerated. For some harsh chemical service applications or severe mechanical abuse requirements, a minimum 48 hour cure at 75°F is required. The material will continue to increase in strength and chemical resistance for seven (7) days.

For installations below 50°F Blome EC-990 LTC Low Temperature Cure Grade is available.

## **CAUTION**

Blome EC-990 components 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.