

## **EC-80** **High Performance Epoxy Coating**

### **PRODUCT DESCRIPTION**

EC-80 is a 100% solids, Epoxy coating that is used as a chemical resistant coating and lining system for secondary containment structures, concrete floors, and other process applications that demand chemical resistance, and durability. EC-80 is typically aggregate filled by the "seeded" or blended methods. Aggregate filled EC-80 results in a non-slip yet cleanable finished surface. The product can be reinforced with EC-Scrim to provide a system with high impact and thermal shock resistance. EC-80 reinforced with EC-Scrim is crack resistant and will effectively bridge minor cracks in concrete. EC-80, as packaged, is a semi-leveling material. By adding a third component, Part C, a non-silica thixotrope, a high build coating is produced. The product may be applied by spray, notched trowel, squeegee, brush or roller. EC-80 is also installed as a 1/8" thick Dense Mortar Lining using Blome 410 Filler Powder. For a trowel/caulk grade or putty, add Part C or 410 Powder.

### **PACKAGING AND COVERAGE**

EC-80 is available in 1, 5, and 25-gallon units. Each unit consists of pre-measured Part A and Part B components. The mix ratio of Part A to Part B is 4:1 by volume. Bagged Part C thixotropic agent, and/or Blome 410 Filler Powder are ordered separately. Coverage will be affected by the condition and type of substrate being coated (degraded vs. smooth, steel vs. concrete, etc.) and the applicator's ability to maintain consistent thickness. To calculate theoretical coverage per gallon, divide desired mil thickness into 1604. The result is the number of square feet per gallon.

### **TYPICAL PROPERTIES**

|                                   |  |
|-----------------------------------|--|
| Solids by volume:                 | 100%                                   |
| Weight per Mixed Gallon:          | 10 lbs                                 |
| Pot life @ 75°F:                  | 25 to 35 min                           |
| Cure Times @ 75F: Cure firm       | 12 hrs                                 |
| Chemical service:                 | 36 hrs                                 |
| Primer:                           | Concrete: Primer 75<br>Steel: Optional |
| Compressive Strength- ASTM C-579: | 15,000 – 16,000 psi                    |
| Tensile Strength - ASTM D-638:    | 7,000-8,000 psi                        |
| Flexural Strength – ASTM D 790    | 10,000 – 10,500 psi                    |
| Hardness - ASTM D-2240 Shore D:   | 75                                     |
| Color:                            | Gray                                   |

## **PACKAGING & STORAGE**

Keep EC-80 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-80 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 coating 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 lined 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.

## **APPLICATION OF NON-REINFORCED, AGGREGATE FILLED SYSTEMS BY THE "SEEDED" METHOD**

1. EC-80 may be applied by spray, trowel, squeegee or roller.
2. For spray applications, materials must be maintained at a minimum temperature of 80°F. Use a Graco 45:1 airless spray rig.
3. Mix and apply Primer 75 at approximately 4-6 mils and allow to set firm to the touch before proceeding.
4. Premix EC-80 Part A and Part B in their individual containers prior to use.
5. Pour the entire contents of Part B into container holding Part A and mix thoroughly for 2-3 minutes using a Jiffy type mixer attached to a power drill.
6. Apply EC-80 at the specified thickness.
7. While EC-80 is still wet, broadcast 20/40 mesh silica sand into the wet basecoat until a dry layer of sand appears on the surface. Allow to cure until firm.
8. Remove excess aggregate by sweeping. Repair any defective areas at this time by grinding and re-applying EC-80.
9. Apply a 10-15 mil top coat of EC-80 by squeegee and backrolling.
10. Allow to cure 36 hrs at 75°F before placing in service.

## **REINFORCED APPLICATION**

1. EC-80 may be applied by spray, trowel, squeegee or roller.
2. For spray applications, use a Graco 45:1 airless spray rig.
3. Mix and apply Primer 75 at approximately 4-6 mils and allow to set firm to the touch before proceeding.
4. Pre-cut EC-Scrim into easy to handle sections and have them clearly marked as to where they go before mixing any material. Allow for a two inch overlap of seams.
5. Premix EC-80 Part A and Part B in their individual containers prior to use.
6. Pour the entire contents of Part B into container holding Part A and mix thoroughly for 2-3 minutes using a Jiffy type mixer attached to a power drill.

7. Apply a 35 – 40 mil base coat of EC-80 to the primed surface, and immediately imbed EC-Scrim reinforcement, using flat trowels or rollers and working from the center to the outer edges, remove any trapped air and cause the EC-Scrim to lay flat. Immediately apply additional EC-80 to thoroughly saturate the fabric and apply a minimum of 60 – 75 mils. Overlap seams two inches.
8. Allow to cure 36 hours before placing in service.

#### **CAUTION**

Blome EC-80 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.

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