

## **APPLICATION GUIDELINE**

### **125/50 AFRB (Aggregate Filled, Reinforced, Blended Method)**

### **125-mil Blended Aggregate Filled, Reinforced System for Horizontal Surfaces and 50-mil Neat Vertical Surfaces**

Applicable Products: EC-80, EC-90 and EC-200

#### **Application Notes**

These guidelines assume optimal jobsite conditions: 50-to-85°F ambient and substrate temperatures, 70% or lower relative humidity, dry weather, and no moisture problems with the substrate. Conditions at your jobsite may warrant modifications to these procedures.

#### **PART 1. SURFACE PREPARATION**

Immediately prior to application of coating, concrete substrate must be:

- Adequately cured (generally, at least 28 days; check with Blome International if concrete has cured less than 28 days).
- Structurally sound.
- Free of all dirt, dust, debris, oil, grease, fats, chemical contamination, salts, solvents, surface hardeners, incompatible curing compounds and form release agents, laitance and efflorescence.
- Concrete surfaces must be dry.

#### **and must have:**

- Tensile strength of at least 300 psi.
- All fins, projections and splatter removed.
- All defects repaired using patching as described herein.
- Failed or otherwise incompatible old coatings removed.
- A surface texture similar to medium sandpaper (40-to-60 grit).

#### **PART 2. SURFACE RESTORATION**

Blome International recommends the use of R590 and #83MP for surface restoration of horizontal and vertical concrete surfaces to receive a Blome International coating (except when using a vinyl ester coating system).

Refer to the R590 and #83MP technical bulletin for step by step information on mixing, priming, and application as a surface restoration material.

For surface restoration when using a vinyl ester coating system, use EC-200 filled with #410 filler to make a vinyl ester mortar.

#### **PART 3. PRIMING**

##### **3.01 Priming Surface To Be Coated**

- A. Mix Blome International recommended primer. Refer to recommended primer's most recently published technical bulletin for mixing and application instructions.
- B. Apply primer to prepared surface being careful not to create puddles.
- C. Allow to cure

Theoretical Coverage Rate:

Primer @ 5-to-6 mils - 290 sq. ft. per mixed gallon

Note: For complete information on a Blome International recommended primer, refer to its most recently published technical bulletin.

#### **PART 4. SYSTEM APPLICATION**

##### **4.01 Mixing Procedures**

- A. Individually stir each separate Part A and Part B component to a smooth, uniform consistency and color. Any sediment in the container must be thoroughly scraped up and re-dispersed.
- B. Pour the entire contents of the Part B into the Part A container and mix thoroughly for 2 minutes using a Jiffy type mixer.

- C. Pour half the mixed material into another clean container.
- D. Slowly add sand to each bucket while blending with a Jiffy type mixer. Add sand at a 1-1/2 to 1 (sand to mixed material) ratio by weight. Do both containers immediately.

Note: Use only clean, dry, bagged, rounded, 20/40 mesh silica aggregate, or other Blome International approved aggregate.

- E. For vertical or steeply pitched surfaces, add Part C thixotrope. Blend the Part C into the mixed material until the mix is uniform in color and consistency.

Notes: •Adding Part C will darken the color of the coating somewhat. If this is not acceptable, fumed silica may be substituted.

#### **4.02 125-mil Aggregate Filled Reinforced Blended coating (AFRB) System for Horizontal Surfaces.**

- A. Evenly apply a base-coat of material at 50-mils using a trowel or peristaltic spray rig, such as the Carrousel Pump by Quick Spray, Port Clinton, Ohio.
  - Set up the peristaltic rig with a 1" ID, 15' long material line and a 3' pole spray gun.
  - Pre-wet the hoses by pumping a small amount of mixed material without aggregate through the lines and pole gun; about 1/2-gallon should be sufficient.
  - Work the pole gun in a circular action to achieve an even coating thickness.

Notes: •Always use spray equipment in accordance with manufacturer's instructions.

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

- When working in large or congested areas, it may be desirable for the applicator to wear golf shoes.

- B. Immediately place a layer of EC-Scrim reinforcement into the wet base-coat. Overlap the seams a minimum of 2 inches and apply a liberal amount of material between the overlapping layers.

Note: Use a flat trowel or plaster trowel to smooth, flatten and embed the EC-Scrim reinforcement. It is critical the EC-Scrim reinforcement is completely encapsulated and that none is left exposed.

- C. Immediately apply a 75 mil top-coat of material to achieve the desired 125-mil thickness and completely cover the EC-Scrim reinforcement.

- D. Allow to cure.

Theoretical Coverage Rate:

Base Coat @ 50-mils - 32 sq. ft. per mixed gallon

Reinforcing Layer - EC-Scrim reinforcement

Top-Coat @ 75 mils - 21.5 sq. ft. per mixed gallon

Note: These rates are based on the mixed material at a 1.5-to-1 sand-to-material ratio. This will expand the volume of a 1 gallon unit of resin/hardener mixture to 1.5 – 1.75 gallons of aggregate filled mortar. This must be taken into account when estimating quantities of material required.

#### **4.03 50-mil Neat System for Vertical Surfaces**

- A. Evenly apply material at 50-mils (or specified thickness). Use a wet mil gauge to frequently monitor thickness.

Reminder: Add Part C thixotrope for work on vertical or steeply pitched surfaces. Refer to part 4.01 step C.

- B. Allow to cure.

Theoretical Coverage Rate:

Coating @ 50-mils -32 sq. ft. per mixed gallon

#### **4.04 Construction Details**

- A. Refer to job specification or contact Blome International Technical Service for specific construction detail application recommendations for your particular project. Blome International's separate documents "Construction Details" may be used as a general guideline.

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