

APPLICATION GUIDELINE

125/50 AFRS (Aggregate Filled, Reinforced, Seeded system) 125-mil Seeded Aggregate Filled Reinforced System for Horizontal Areas and 50-mil Neat Verticals

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 or #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. For vertical 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 Seeded coating (AFRS) System for Horizontal Surfaces

- A. Evenly apply a base-coat of material at approximately 40-to-50 mils.

Note: The preferred hand tools for applying material are a notched squeegee, notched trowel or spray.

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

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

- C. Wearing shoes with metal spikes such as golf shoes, walk into the wet basecoat and immediately begin broadcasting aggregate. Continue broadcasting until the material is saturated and a uniform layer of dry aggregate covers the entire area. Broadcasting must be completed before the coating material begins to gel.

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

- Broadcasting technique is extremely important. The aggregate should be tossed up and allowed to rain down into the wet coating. Do NOT throw aggregate directly down into the coating material. The force of the throw may cause the material to fold and produce an irregular finish that will need to be repaired.

- Do NOT strew aggregate on uncoated areas ahead of the coating material applicator.

- D. Allow to cure. The coating must be able to support foot traffic.

Note: Refer to specific material Technical Bulletin for cure times.

- E. Completely remove all loose aggregate from the coating surface.

- F. Inspect the coating surface and make repairs as necessary. In particular watch for:

- Shiny spots - these will need to be repaired before the top-coat is applied.
- Protrusions - these will need to be ground down.

Note: Except for shiny spots, it is not necessary to wash or abrade the coating before applying the top-coat. This is a primary advantage of the Seeded system. The heavy concentration of exposed aggregate in the coating provides a suitable bonding surface for the top-coat. However, the coating must be kept protected from moisture and contamination prior to top-coat application. At the time the top-coat is applied, the coating must be adequately cured and free of loose aggregate, dirt, debris, oil, grease and other contamination.

- G. Apply a top-coat of coating material to seal the exposed aggregate. At least 10-to-15 mils will be required to adequately cover the exposed aggregate. More may be needed to meet the finish texture and 125-mil (or specified) thickness required by the job specification.

- H. Allow to cure.

Theoretical Coverage Rate:

- Base-Coat @ 50-mils - 32 sq. ft. per mixed gallon
- Reinforcing Layer - EC-Scrim Reinforcement
- Aggregate Fill - 2# per sq. ft.
- Top-Coat @ 15-mils - 100 sq. ft. per mixed gallon

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. The Blome International separate document "Construction Details" may be used as a general guideline.

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