



### Part 3 - Scope: Product and Application

This specification describes the coating of substrates with a vapor-barrier, solvent-free, protective, dampproofing, waterproofing, moisture-insensitive, epoxy resin coating.

#### 3.01 Acceptable Manufacturers

- A. Sikagard 62, as manufactured by Sika Corporation, Lyndhurst, New Jersey, is considered to conform to the requirements of this specification and has performed satisfactorily for coating of substrates for a minimum of ten years.
- B. Substitutions: The use of other than the specified product will be considered providing the contractor requests its use in writing to the Engineer. This request shall be accompanied by (a) A certificate of compliance from an approved independent testing laboratory that the proposed substitute product meets or exceeds the specific performance criteria, tested in accordance with the specified test standards; and (b) Documented proof that the proposed substitute product has a ten year proven record of performance of coating of substrates, confirmed by actual field tests and five successful installations that the Engineer can investigate.

#### 3.02 Performance Criteria

- A. Properties of the mixed epoxy resin coating:
  - 1. Pot Life: 25-40 minutes
  - 2. Tack-Free Time to Touch (4-7 mils): 3-4.5 hours
  - 3. Initial Viscosity (Brookfield Viscometer, Spindle #3; Speed 100): 2200-3400 cps
  - 4. Color: red, gray, tan
  - 5. Solids: 100%
- B. Properties of the cured epoxy resin coating:
  - 1. Total Water Absorption (ASTM D-570) at 7 days: 1.5% max. (2 hour boil)
  - 2. Elongation (ASTM D-522) at 14 days: 5% min.
  - 3. Abrasion Resistance (ASTM D-968) at 14 days: 40 l /mil min.
  - 4. Adhesion Classification (ASTM D-3359) at 14 days: 4A min.
  - 5. Bond Strength (ASTM C-882) Hardened Concrete to Hardened Concrete
    - a. 2 day (dry cure): 2000 psi min.
    - b. 14 day (moist cure): 1500 psi min.
  - 6. Shrinkage (ASTM C-883): passes test min.
  - 7. Abrasion (Taber Abrader) at 14 days
    - a. Weight loss: 0.7 gm max. (H-22 wheel; 100 gm weight; 1000 cycles)
  - 8. The coating shall be approved by the United States Department of Agriculture.

#### 3.03 Materials

- A. Epoxy resin coating:
  - 1. Component A shall be a modified epoxy resin of the epichlorohydrin bisphenol A type containing suitable viscosity control agents. It shall not contain butyl glycidyl ether.
  - 2. Component B shall be primarily a reaction product of a selected amine blend with an epoxy resin of the epichlorohydrin bisphenol A type containing suitable viscosity control agents, pigments, and accelerators.
  - 3. The ratio of Component A: Component B shall be 1:1 by volume.
  - 4. The material shall not contain asbestos.
- B. Granules for slip-resistance shall be supplied by the manufacturer of the specified product and shall be able to be mixed into the coating and shall not settle during the application.

#### 3.04 Mixing and Application

- A. Mixing of the epoxy resin coating:
  - 1. To minimize color differences, blend two complete Component B's together. Use only one of the blended Component B's to mix with a Component A. After the first Component B has been used, blend the second Component B with a new Component B and repeat the above procedure for the entire application.
  - 2. Premix each component. Proportion equal parts by volume of Component A and Component B into a clean, dry mixing pail. Mix thoroughly for 3 minutes min. with a jiffy paddle on a low-speed (400-600 rpm) drill. Mix only that quantity of material that can be used within its pot life (25-40 minutes at 73F).
- B. Placement Procedure: The epoxy resin coating shall be applied only to approved, prepared surfaces with high-quality brushes, rollers or spray equipment. Coating shall be applied at ambient and substrate temperatures between 50 and 90F. Application thickness shall be between 4-7 mils per coat. Subsequent coats shall be applied within 48 hours of the previous coat. Care is to be taken to avoid sags or runs. If they occur they are to be sanded out and the area re-coated.
- C. If coating of horizontal surfaces that will receive traffic is specified, a slip-resistant aggregate shall be incorporated into the mixed epoxy resin coating at 1/2 lb/gal or as directed by the Engineer.
- D. When applying the coating, never stop the application until the entire surface has been coated, if possible. If impossible always discontinue at an edge, corner, or joint. Never let a previously coated film dry. Always coat into a wet film. Always apply the coating at a 45° angle to an edge, corner, or joint.
- E. Adhere to all limitation and cautions for the epoxy resin coating as stated in the manufacturers printed literature.

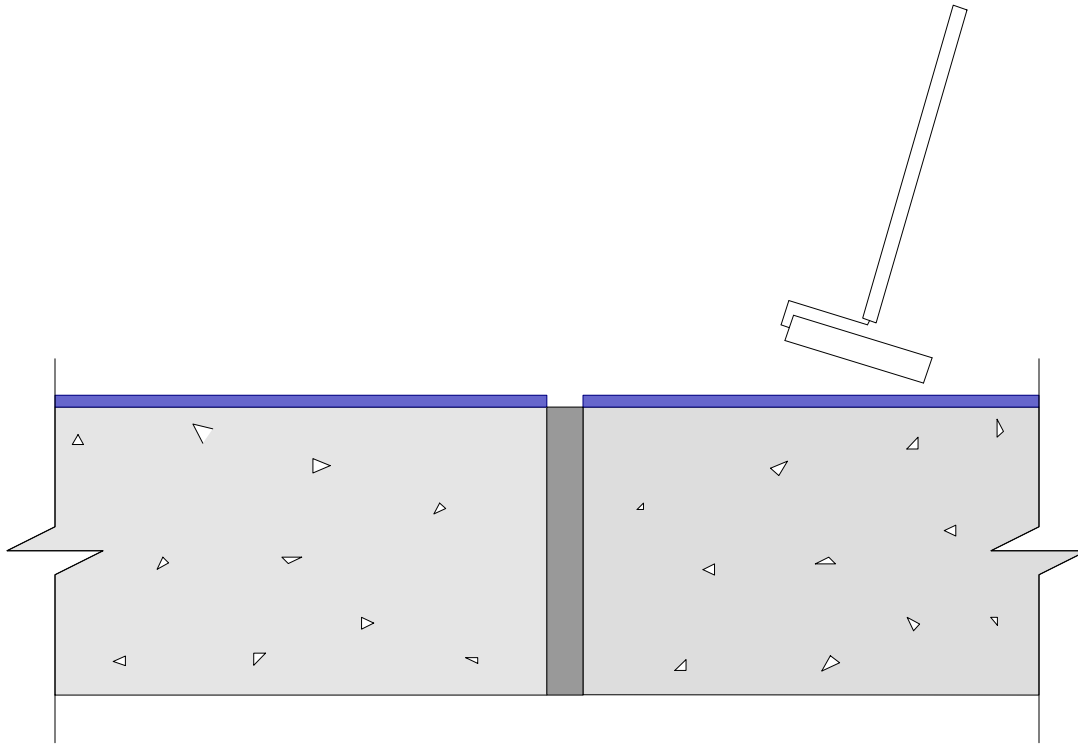
### **3.05 Cleaning**

- A. The uncured epoxy resin coating can be cleaned from tools with an approved solvent. The cured epoxy resin coating can only be removed mechanically.
- B. Leave finished work and work area in a neat, clean condition without evidence of spillovers onto adjacent areas.

Note: Tests were performed with material and curing conditions at 71-75 F and 45-55% relative humidity.

# SC-054

## Sikagard<sup>®</sup> 62 Coating



1. Apply Sikagard 62 with high quality brushes or rollers. Care should be taken to avoid sags or runs.
2. When applying the coating, never stop the application until the entire surface has been coated.
3. Subsequent coats shall be applied within 48 hours of the previous coat.
4. For a slip-resistant surface, aggregate shall be incorporated into the mixed epoxy resin coating at a ½ lb./gal.

Note: When applying Sikagard 62 always end at an edge, corner or joint. Do not apply 62 directly over joint filler.



Client Name: _____
_____
Job Name: _____
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Date: _____