

DIRECTIONS FOR APPLYING MICOROX® SSF FLOORS INTO CONCRETE SILO BASES

I. Floor Preparation

Since silo floors usually contain no grease or oily coating, two general methods of concrete preparation work well.

- A. Sand Blasting : Blast to white, clean concrete. Remove all dust and loose particles. Concrete should be white and porous in appearance. No dust should be evident when wiping the fingers over the concrete. Dust must be vacuumed out completely or floor rinsed thoroughly and dried.
- B. Acid Etching: 3 gallons of 36% muriatic acid, a 5 gallon pail (plastic), a stable broom, good water pressure (a high pressure washer is preferred), a 2-3 foot flexible squeegee, a good wet vacuum, a high volume fan. Apply acid to silo floor previously scrapped and swept of dirt and silage. Mix 1 gallon of acid to 3-3 1/3 gallons of water in 5 gallon pail. Always add acid to water. Spread onto floor and broom vigorously. Acid should foam upon initial contact with floor. No foaming indicates a foreign substance on the floor which must be removed.

Broom several times in 20 minutes that acid is on floor. Rinse well. (A high pressure hose is excellent for this step.) Squeegee excess water off of floor. Vacuum up all loose standing water. Place a fan to circulate air. If silo has a good updraft, no fan is necessary. Compressed air can also be used to dry the floor--or it can be torched dry.

Efficient use of this method can have a 20' silo ready for application in 1 1/2-2 hours. Floor must be white and porous in appearance.

II. Application

- A. Old Concrete Floor: The SSF polymer system is designed to self-prime. This is the reason why it is important to have the correct type and amount of aggregate. Adding too much and/or too fine an aggregate can result in too dry a mix. This can prevent proper wetting of the concrete and poor adhesion. The self-priming feature reduces your costs by eliminating the need to buy and apply an additional primer. (The proper aggregate mix also has a major influence in the ease of troweling of our epoxy system.)

The SSF System consists of a 3-component mix: the resin, the hardener and specially selected and graded aggregates--all proportioned. Mix the three components in a mortar mixer and apply.

Using a 5 gallon pail to mix and/or spread, invert the pail of mortar, tilt the front of the pail about 3/8" from the floor and pull backwards. One batch will cover about 16 sq. ft. Spread to about 1/4" thickness with the trowel. Use smoothing liquid if mortar sticks to the trowel. Finished surface should be resin rich and relatively free of trowel marks.

SSF mortar components should be between 70°F and 90° for best workability. The colder the mix and the floor, the more tacky the mix will be.

Trough: To apply the SSF System to the trough which has been prepared in a manner similar to the floor, Micor Co. supplies the 320 Liner system. Essentially, this is the same resin system with a specially prepared aggregate, all preproportioned, that will cling to vertical as well as horizontal surfaces. Additional liquids are supplied to prime the concrete since the mortar is drier than the SSF floor system.. The mortar is trowelled at 1/8" thickness. See Micorline 320 bulletin.

B. Green, Day Old Concrete: Although it takes one extra day for completion due to cure times involved, the application of the SSF systems to fresh, green concrete is actually easier and simpler than for old concrete. Primarily this is because no concrete cleaning or preparation is needed.

The concrete is laid and screened flat using a 2 x 4, and broom finished. As soon as the concrete can be walked on (or within 24 hours after setting), the Micorox® 103 Primer is mixed and rolled on. It covers approximately 250 sq. ft. per gallon.

The 103 is mixed (1:2 parts by volume) and allowed to sit for 15 minutes prior to use. After rolling on, the 103 Primer "disappears" as it is drawn into the concrete surface. It must be allowed to cure for 6 hours at 70°F or overnight if colder.

The next step is to roll on the Micorox® Floorlife Primer. This is a 1:1 by volume mix and can be applied directly after mixing. Allow 60 minutes for solvents to evaporate.

III. Clean Up

Clean tools in hot soapy water. If solvent is used, wash immediately with soap and water.

IV. Coverage

One unit of SSF Resurfacer covers approximately 200 sq. ft.

V. Working Life

Approximately 30 minutes at 75°F.

VI. Storage and Shelf Life

Store at 70° to 90° for several days prior to use. Stored at room temperature, Micor Co. Inc., will guarantee shelf life of unopened containers for 3 years.

VII. Warranty

The technical data furnished herein is true and accurate to the best of our knowledge, however no guarantee of accuracy is given or implied.

Micor assumes no responsibility for any loss or damage resulting from the handling or use of the products by the buyer. Seller warranties only that the products will conform to Micor's manufacturing standards. In no event shall Micor be responsible for consequential damages of any such breach of warranty including, but not limited to, the buyer's loss of material or profits, increased expense of operation, downtime or reconstruction or the work. In no event shall Micor's obligation under this warranty exceed the price of the defective material.

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