

ICO Floor SL

Product Data Sheet

Product Description

ICO-Floor SL is a three part, 100% solids, low odor epoxy flooring resurfacer. Normally applied between 1/16" and 1/8" thick in a single step self leveling application, ICO-Floor SL quickly and economically restores a pitted, worn concrete floor to a smooth, glossy, easy-to-clean surface. It possesses good wear resistance and will resist chemical attack from most oils, greases, lubricants, caustics and mild acids. With its more resilient formulation, as indicated by a tensile elongation of 12%, ICO-Floor SL can better withstand vibration and impact, compared to more brittle, conventional floor resurfacers.

ICO-Floor SL dries to a smooth, high gloss finish. For anti-slip textures, fine silica sand or aluminum oxide can be broadcast into a top coat of ICO-Floor Coating. For a more decorative look, vinyl flakes can be added, followed by an application of a clear top coat of ICO Sealer or ICO Ure Guard 80. A faster cure version, ICO-Floor SL FC, is also available for faster turnaround time.

Typical Application

ICO-Floor SL is an ideal floor resurfacer for relatively dry areas such as warehouses, food distribution centers, airplane hangars, retail stores, schools, hospitals and general industrial use. Unlike a thin film coating that will "mirror" minor defects in the substrate, ICO-Floor SL, applied at a minimum of 1/16" thickness, will hide such imperfections, providing a "showroom quality" floor. By "seeding" the self-leveling floor to excess with silica sand, then top coating with ICO-Floor Coating, a high build, longer lasting, slip resistant floor can be delivered at relatively inexpensive costs.

Chemical Resistance

A complete list of chemical resistances is available in the Milamar Coatings Chemical Resistant Chart or contact Milamar Technical Service for specific recommendations.

Physical Properties

| Tensile Strength (ASTM C-307): | 1920 psi | Vapor Transmission Rate (E-96): | .03 perms |
|--------------------------------------|----------|---|--------------------------------|
| Tensile Elongation (C- 307): | 12% | Coefficient of Thermal Expansion (D- 696): | 1.7x10 ⁻⁵ per °F |

| Flexural Strength (C- 580): | 1760 psi | Gardner Impact: | 120 in Ibs. |
|--------------------------------------|-----------------------|---|---------------------|
| Compression Strength (C- 579): | 6170 psi | Water Absorption (D- 570): | 0.2% in 24 hours |
| Hardness, Shore D (D- 2240): | 73 | Taber Abrasion CS17, 1000 cycles at 1kg. (D-1044): | 106 mg loss |
| Bond Strength to Quarry Tile: | >1000 psi | 60° Gloss: | 93 |
| Flammability: | Self Extinguishing | | |

Physical Characteristics

| Product | Mixing Ratios | By Volume | By Weight |
|--------------|------------------|-----------|-----------|
| ICO Floor SL | Part A:Part B | 2.53:1 | 2.96:1 |
| ICO FIDOR SE | Aggregate:Liquid | 1:1 | 1.5:1 |
| ICO Floor SL | Part A:Part B | 2.93:1 | 3.48:1 |
| FC | Aggregate:Liquid | 1:1 | 1.5:1 |

| Viscosity @ 77F, CPS | | Density, lbs./gal | |
|----------------------|-----|-------------------|-------|
| Part A: | 750 | Part A: | 10.03 |
| Part B: | 420 | Part B: | 8.55 |
| A&B Mixed: | 700 | A&B Mixed: | 9.66 |

| Product | Curing Times | 50°F | 77°F | 90°F |
|--------------------|------------------------|---------|---------|---------|
| ICO Floor SL | Pot Life | 50 min | 40 min | 20 min |
| | Work Time | 40 min | 30 min | 20 min |
| | Hard, Foot Traffic | 60 hrs. | 26 hrs. | 14 hrs. |
| | Hard, Truck Traffic | 70 hrs. | 34 hrs. | 20 hrs. |
| ICO Floor SL FC | Pot Life | 20 min | 15 min | 10 min |
| | Work Time | 15 min | 12 min | 10 min |
| | Hard, Foot Traffic | 30 hrs. | 18 hrs. | 8 hrs. |
| | Hard, Truck Traffic | 40 hrs. | 24 hrs. | 12 hrs. |

Maximum Hardness achieved after 7 days @ 77°F

| Color Availability | Packaging and Coverage Rates | |
|--|------------------------------|--|
| <u>Standard Colors:</u> White, Gray, dark Gray, Beige, Yellow, Red, Green, Blue, Brown and Black | 4 Gallon Kit: | 50 SF at 1/8" Depth 100 SF at 1/16" depth |
| Shelf Life: 1 year at 60°F-80°F in unopened containers. | | |

Installation

Please refer to our Application Specs for detailed instructions. Particular care must be taken to follow those instructions precisely to assure proper installation.

- New concrete should be allowed to cure a minimum of 28 days and/or be checked with a rubber mat or plastic sheet to insure adequate curing time has occurred.
- All surfaces to be covered should be power washed, shot blasted, acid etched, scarified or sanded to present a clean, sound substrate to which to bond to. The prepared surface should have a ph of 7.
- Cracks 1/8" wide or greater, pour joints and construction joints must be cleaned and filled with ICO-Gel. Patch all holes over 1/2" deep with ICO-Patch.
- 4. The three ingredients should be mixed in the prescribed ratios, using a low speed jiffy-style mixer (maximum 750 rpm), until uniform in color and consistency.
- 5. Do not add solvent to the mix.
- Apply ICO-Floor SL with a notched rubber squeegee or steel trowel. Spike roll with porcupine roller to improve air release.
- For an anti-slip surface, allow ICO-Floor SL to dry, apply a top coat of ICO- Floor Coating and broadcast in silica sand.

NOTE: Failure to follow the above instructions, unless expressly authorized by a Milamar Technical Service Representative, will void our material warranty.

Precautions

- 1. Only apply over a tack free primer to help prevent out gassing.
- Do not apply either regular or fast cure versions below 50°F.
- 3. Do not apply less than 60 mils thick.
- 4. Do not apply on floor sloped > 1/8'' per foot.
- 5. Do not apply fast cure version >70°F.
- 6. Do not apply in severe thermal shock environments.

Product Specification

The specified area shall receive an application of ICO-Floor SL™as manufactured by Milamar Coatings LLC. of Oklahoma City, Oklahoma. The system shall be installed by precisely following the manufacturer's published recommendations pertaining to surface preparation, mixing, and application. The material shall be a low odor, three part, solvent-free 100% solids epoxy system with

moderate resilience to resist impact and vibration. It should be applied by notched trowel or squeegee in one application without needing a top coat. It shall be a resin-rich mix ratio of 1:1, **ICO-Fill™** aggregate to resin and hardener. It shall have an elongation of 12% when tested using ASTM C-307 and Gardner Impact of 120 inch pounds. The compressive strength when tested in accordance with ASTM C-579 shall not exceed 6200psi and the hardness shall not exceed 73 (Shore D). It shall have excellent adhesion to wood, metal, tile, brick as well as concrete. The system shall be unaffected by oils and greases and have high chemical resistance against acids such as 10% nitric, 30% phosphoric, citric, and 50% sulfuric, as well as resist such caustics as 50% sodium hydroxide and 26% ammonium hydroxide.

The data statements and recommendations set forth in this product information sheet are based on testing, research and other development work which has been carefully conducted by us, and we believe such data. Statements and recommendations will serve as reliable guidelines. However, this product is subject to numerable uses under varying conditions over which we have no control, and accordingly we do NOT warrant that this product is suitable for any particular use. Users are advised to test the product in advance to make certain it is suitable for their particular production conditions and particular use or uses.

LIMITED WARRANTY

Milamar Coatings products are manufactured to be free of defects in material and workmanship in meeting the properties specified on its individual Product Data Sheets. Users and installers of Milamar Coatings products are solely responsible for determining the suitability of the products for specific product applications. Milamar Coatings makes no Warranty or Guarantee, express or implied, including warranties of fitness, design compatibility or merchantability, for any particular use and shall have no responsibility or liability, including direct, indirect or consequential damages, due to injury, delay or third party claims for installation or repair. Likewise, Milamar Coatings assumes no liability of any nature for products that are adjusted in the field or that do not utilize all specified Milamar Coatings components. Should any Milamar Coatings product be proved to be defective within one year from the date of shipment, Milamar Coatings will, at its sole discretion, either replace the material; issue a credit to the customer's account; or provide a cash refund for the initial, paid purchase price of the material. Potential claims regarding product quality must be received in writing by Milamar Coatings within 30 days of the discovery of such potential defect. This Warranty is exclusive of all other warranties, expressed or implied, and may only be adjusted in writing, signed by an officer of Milamar Coatings, L.L.C.

Milamar Coatings, L.L.C.

<u>www.milamar.com</u> | 800.459.7659 311 NW 122nd St., Suite 100 Oklahoma City, OK 73114