



ICO Floor Coating

Product Data Sheet

Product Description

ICO Floor Coating™ is a two part, 100% solids epoxy coating with very low odor and excellent self-leveling characteristics. It can be applied in virtually any thickness down to about 5 mils (320 sf/gal) by brush, roller or spray; however if applied much over 10-15 mils per coat, use of a porcupine roller is highly recommended to help air release. It is a self-priming material that has excellent adherence to concrete, as well as wood and metal surfaces. It dries to a high gloss finish; if texture is required, suitable aggregate can be broadcast into the first coat and then back rolled to achieve a more uniform finish.

ICO Floor Coating™ has excellent chemical resistance to caustics, moderate concentrations of most inorganic acids, and oils, lubricants and fuels. It is a flexibilized epoxy with elongations of 11% and as such does not chip or crack nearly as easily as conventional, more brittle epoxies.

ICO Floor Coating is also available in an extra thick (**XT**) version for a grout coat over our drier mixes, or for achieving an orange peel finish. Both of these are available in a fast cure (**FC**) version for accelerated turnaround times.

Typical Application

ICO Floor Coating is an ideal floor coating for providing an excellent light-reflective surface that will prevent moisture and other liquids from penetrating through to the concrete. It is particularly useful as a protective coating in warehouses, distribution centers, auto service shops and aisle ways seeing light to intermediate loads. It is also an excellent intermediate coat underneath one of our UV-resistant polyurethane coatings in such facilities as airplane hangars and dealer showrooms where a higher build coating is needed to help smooth out overlapping blastrac patterns or minor imperfections in the concrete. For badly pitted, old concrete, our **ICO Floor SL**, three-part self leveling epoxy applied 60-120 mils is preferred to yield a smooth even surface.

Chemical Resistance

ICO-Floor Coating™ is recommended for areas subject to such chemicals as battery acids, Skydrol, caustics, gasoline, brake fluids and some weak solvents. A more complete list of chemical resistance is available in the Milamar Coatings Chemical Resistance Chart under "ICO-Floor".

Physical Properties

Tensile Strength (ASTM D-638):	2705 psi	Bond Strength to Concrete:	450 psi (concrete failure)
Tensile Elongation (D-638):	11%	Vapor Transmission Rate (E-96):	.03 perms
Hardness, Shore D (D-2240)	68	Taber Abrasion (D-1044), CS17 1000g., 1000 cycles:	106 mg loss
60° Gloss	80		

Physical Characteristics

Unless otherwise designated, all data are for regular cure material, gray.

Density, lbs./gal		Viscosity @ 77°F, cps	
Part A:	12.77	Part A:	1520
Part B:	8.55	Part B:	520
A&B Mixed:	11.72	A&B Mixed:	1000

ICO Floor Coating		
Mixing Ratios	By Volume	By Weight
Part A: Part B, RC	3.00:1	4.48:1
Part A : Part B, FC	2.85:1	4.36:1

Material	Curing Times	50°F	70°F	90°F
ICO Floor Coating	Pot Life	50 min	40 min	25 min
	Work Time	40 min	30 min	20 min
	Tack Free	24 hrs.	14 hrs.	5 hrs.
	Hard, Foot Traffic	60 hrs.	28 hrs.	8 hrs.
	Hard, Truck Traffic	70 hrs.	36 hrs.	14 hrs.
ICO Floor Coating FC	Pot Life	20 min	12 min	8 min
	Work Time	15 min	8 min	4 min
	Tack Free	20 hrs.	6 hrs.	3 hrs.
	Hard, Foot Traffic	40 hrs.	14 hrs.	8 hrs.
	Hard, Truck Traffic	54 hrs.	20 hrs.	14 hrs.

Maximum hardness and chemical resistance are achieved after 7 days at 77°F.

Color Availability	Packaging and Coverage Rates (for 10 mil coverage)	
<u>Standard Colors:</u> White, Gray, Dark Gray, Beige, Blue,	4 Gallon Kit:	640 SF
	20 Gallon Kit:	3200 SF

Red, Yellow, Green, Brown and Black.	100 Gallon Kit:	16,000 SF
Shelf Life: 1 year if stored between 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.

1. 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.
2. 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.
3. No priming is necessary on concrete of average porosity. On new concrete or old concrete with an open porosity apply ICO-Primer LV or ICO-Primer LV FC or a thinned version of ICO Floor Coating using MEK, Toluene or Xylene at about 10% by volume to help prevent outgassing, bubbling and pin holing from escaping entrapped air. Allow to dry tack free.
4. The ingredients should be mixed in the prescribed ratios, using a low speed jiffy-style mixer, (maximum 750 rpm). Mix Part A first for 30-60 seconds and then add Part B and mix for another 30-60 seconds, until uniform in color and consistency.
5. Do not mix less than the prescribed amount of any ingredient.
6. Apply contents onto floor immediately after mixing. Spread with a notched squeegee, then back roll with a fine nap (1/8") roller.
7. Apply a second coat when dry enough to walk on, but before cure hard times for truck traffic. If more time has elapsed the first coat should be sanded before recoating.
8. A suitable aggregate may be broadcast into the first coat to provide a more anti-slip profile. It is advisable to test various types and sizes of aggregate to achieve the desired finish profile. For more uniform distribution, back roll after broadcasting.

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

Precautions

1. Recoat windows without sanding: Regular Cure at 70°F: 36 hours; Fast Cure at 70°F: 20 hours.
2. Do not apply below 50°F.

Product Specification

The specified area shall receive an application of ICO-Floor Coating™ as manufactured by Milamar Coatings LLC. of Oklahoma City, Oklahoma. The material 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 100% solid, two part epoxy coating with enhanced resilience to resist thermal and mechanical shock. The system must adhere to concrete, metal and wood surfaces, as well as well-bonded epoxy and urethane coatings. It shall have an elongation of 11% when tested using ASTM D-638. The film hardness shall be a Shore D of 68. It shall resist chemical attack for up to seven days from such chemicals as diesel fuel, mineral oils, sugar and 5% bleach.

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.

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