



# ICO Floor

## Product Data Sheet

### Product Description

ICO Floor is a three-part, 100% solids low odor epoxy flooring material offering excellent wear resistance in heavy traffic areas. By virtue of its higher aggregate to liquid fill ratio, it can easily be power trowelled in any thickness down to 3/16", leaving a flat matte finish. To seal the floor, a two coat application of ICO-Floor Coating XT and ICO-Floor Coating is recommended. Should a more ant slip texture be needed, silica quartz or aluminum oxide can be broadcast into the sealer coat.

ICO-Floor provides good chemical resistance to common caustic cleaners, moderately aggressive acids, oils and lubricants. Unlike other power-trowelled systems, ICO-Floor is a tougher, more resilient material, with a tensile elongation of 11% (unfilled system) and a Gardner Impact Strength of over 160 inch pounds. As such, it resists mechanical impact better than more brittle conventional epoxies. For faster turnaround times, ICO-Floor FC should be used.

### Typical Applications

ICO-Floor is particularly suited for relatively dry areas subject to heavy tow-motor traffic, such as aisle ways, truck unloading bays and ramps. Typical industrial use includes auto assembly plants, badly gouged warehouse and distribution center floors. For wet-processing areas use our resin rich ICO Floor 51 product, or for more highly corrosive areas, one of our other ICO trowelled systems.

### Chemical Resistance

ICO-Floor is recommended for areas subjected to caustics, moderate concentrations of inorganic acids and some weak solvents. A more complete chemical resistance list is available in the Milamar Coatings Chemical Resistance Chart under "ICO Floor".

### Physical Properties

Tensile Strength (ASTM C-307):	1010 psi	Hardness, Shore D:	70-75
Tensile Elongation (D-638):	11%	Flammability (D-635):	Self-extinguishing
Compression Strength (C-579):	4750 psi	Gardner Impact Strength (D-635):	>160 inch pounds
Flexural Strength (C-580):	1940 psi		

### Physical Characteristics

Curing Times		50°F	77°F	90°F
ICO Floor	Pot Life:	60 min	50 min.	25 min.
	Working Time:	40 min	30 min.	20 min.
	Tack Free:	22 hrs.	8 hrs.	5 hrs.
	Hard, Foot Traffic:	40 hrs.	15 hrs.	10 hrs.
	Hard, Fork Truck:	50 hrs.	30 hrs.	20 hrs.
ICO Floor FC	Pot Life:	40 min.	25 min.	12 min.
	Working Time:	25 min.	20 min.	10 min.
	Tack Free:	12 hrs.	4 hrs.	2 hrs.
	Hard, Foot Traffic:	16 hrs.	8 hrs.	5 hrs.
	Hard, Fork Truck:	30 hrs.	16 hrs.	10 hrs.

Mixing Ratios	ICO Floor		ICO Floor FC	
	By Volume	By Weight	By Volume	By Weight
Part A:Part B	2.3:1	2.7:1	2.2:1	2.5:1
Aggregate:Liquid	5:1	8:1	5:1	8:1

Density, lbs. /gal.	
Part A:	9.5
Part B:	8.5
A&B Mixed:	9.3

Viscosity @ 77°F, cps	
Part A:	750
Part B:	850
A&B Mixed:	800

Maximum hardness and chemical resistance are achieved after 7 days cure.

### Color Availability

Standard colors: gray, dark gray, beige, blue, red, yellow, green, brown and black.

### Shelf Life

1 year at 60°F - 80°F in unopened containers.

### Packaging and Coverage Rates

Basic Kit : 23 SF at 1/4" depth  
 Bulk Pack : 230 SF at 1/4" depth  
 Drum Kit : 2300 SF at 1/4" depth

## 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 Calcium Chloride test to insure adequate curing time has occurred. Consult Milamar Tech Services when results obtained.
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. Prime the surface with ICO-Primer LV or ICO-Primer LVFC at a coverage rate of 200-300SF/gallon, depending on porosity. Apply ICO Floor over wet or tacky primer only.
4. Mix Part A Resin and Part B Hardener for at least 30 seconds in a paddle-style or mortar mixer then slowly add **ICO Fill**, along with powder tint, and mix for another 30 - 60 seconds until uniform in color and consistency. Do not mix less than the prescribed amount of liquid.
5. The prepared mix may be spread using a screed box or a screed bar.
6. **ICO Floor** is primarily a power trowel mix; power trowelling can start as soon as the material has been spread.
7. To seal the floor, apply ICO Floor Coating XT at about 160SF/gallon with a squeegee and work into the pores, followed by a sealer coat of ICO Floor Coating applied at the same coverage rate. Broadcast silica sand or aluminum oxide into the ICO Floor Coating for anti-slip texture.

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

## Precautions

1. Must be applied over wet or tacky primer
2. Do not apply in heavy wear, constant wash-down environments
3. Two top coats needed to "seal" the floor; first coat should be ICO Floor Coating XT, followed by regular ICO Floor Coating
4. Do not apply below 50°F

## Product Specification

The specified area shall receive an application of ICO-Floor as manufactured by Milamar Coatings LLC, 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% solids four part epoxy (including tint) that can be applied in a single

application in any thickness down to 3/16". It must have a maximum aggregate: liquid loading ration of 5:1 by volume or 8:1 by weight. It must have a maximum Shore D hardness of 75 and maximum compressive strength of 4750 psi as measured under ATSM C-579. It must have a minimum Gardner Impact of 160 inch-pounds as measured under ATSM D-2749.

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, 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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