

ICO-FLOOR

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 antislip 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 **International 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)	:1940psi		

Physical Characteristics

Density, lbs/gal.	Mixing Ratios	ICO Floor		ICO Floor FC		
		<u>By Volume</u>	<u>By Weight</u>	<u>By Volume</u>	<u>By Weight</u>	
Pt. A : 9.7	Pt. A : Pt. B	2.3:1	2.7:1	2.1:1	2.5:1	
Pt. B : 8.5	Aggregate:Liquid	5:1	8:1	5:1	8:1	
A&B Mixed : 9.3						
Viscosity@77°F, cps		ICO Floor	Curing Times@	50°F	77°F	90°F
Pt. A : 680		Pot Life	60 min.	50 min.	25 min.	
Pt. B : 420		Working Time	40 min.	30 min.	20 min.	
A&B Mixed : 550		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.	

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 - 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. Do not apply below 50°F

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 **ICO 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** to a wet or tacky primer.
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 powdered 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 an ICO Technical Service Representative, will void our material warranty.

Precautions

Avoid skin contact with liquid Part A and Part B as they may cause skin irritation to some people. Protective hand cream and/or gloves should always be used. No special ventilation is needed as there are no solvents. Clean up can be done with toluene, xylene or MEK. Once material has set it can be removed with a paint stripper. **Always consult the MSDS sheets prior to use.**

Product Specification

The specified area shall receive an application of **ICO-Floor** as manufactured by **International Coatings, Franklin Park, Illinois**. 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.

Technical Assistance

Our many years of installation experience enable us to provide valuable input on not only proper material selection but also installation techniques that will help assure your satisfaction. We have qualified personnel to inspect your floors, analyze the cause of the problems and design procedures and specifications to prolong the useful life of your floors. We furnish detailed application specifications including drawings of necessary details to be used. We are prepared to offer job site instruction for your in-house maintenance crews or to work closely with your preferred applicator. We can also furnish a list of a network of **ICO** trained certified contractors.

Mission Statement

Our mission is to provide our customers the highest possible quality products and services and by so doing, build long term relationship based on mutual trust and respect.