



**Resilient
Epoxy
Flooring
and
Grouting
Systems**

PRODUCT DATA SHEET

ICO FLEXI-COAT

Product Description

ICO Flexi-Coat is a 100% solids, two part, flexibilized epoxy coating that provides an impervious barrier to moisture, salt and chemical penetration to the underlying concrete substrate, thereby preventing freeze/thaw cracking as well as corrosive attack of the rebars. As an epoxy, it has inherently superior adhesion, both to damp as well as dry substrates, compared to elastomeric membrane coatings and with an elongation of 30%, **ICO Flexi-Coat** has much better crack and impact resistance than more brittle conventional epoxy overlays.

ICO Flexi-Coat is applied by roller, squeegee or spray over a clean abraded substrate and dries hard in 8 - 10 hours at 70°F. For enhanced wear resistance, silica

aggregate is normally seeded into the freshly laid resin. The coating is normally applied at the rate of 25SF/gal for a total thickness, including aggregate, of 1/8" , or in two coats, for a 1/4" thickness.

Typical Applications

ICO Flexi-Coat is specifically designed for resurfacing bridges and other outside concrete structures that must be protected from salt corrosion, wear and cracking. It is also an excellent wear surface in areas such as mezzanines seeing moderate to heavy wear and vibration.

Physical Properties

Tensile Strength	ASTM D-638	: 2507 psi	Compressive Strength	D695, filled	: 18,000psi
Tensile Elongation	D-638 (neat resin)	: 30%	Compressive Strength	D695, unfilled	: 10,000psi
Bond Strength to Concrete		: >450psi (concrete failure)	Hardness, Shore D		: 72
Water Absorption	ASTM D-570	: 0.2% loss in 7 days	Gardner Impact Strength		: 160 inch lbs

Physical Characteristics

Density, lbs/gal.	Mixing Ratios			<u>By Vol</u>	<u>By Wt</u>	
	Pt. A : 9.1	A:B	2.4:1	2.6:1		
Pt. B : 8.4						
A&B Mixed : 8.9						
Viscosity @ 77°F, cps	Curing Times@			<u>50°F</u>	<u>70°F</u>	<u>90°F</u>
	Pt. A : 5400	Pot Life	30 min	20 min	10 min	
Pt. B : 450	Working Time	40 min	35 min	15 min		
A&B Mixed : 2400	Tack Free	12 hrs	5 hrs	1 1/2 hrs		
	Hard, Foot Traffic	24 hrs	8 hrs	5 hrs		
	Hard, Fork Truck	30 hrs	15 hrs	6 hrs		

Color Availability

Normally sold in clear, but available in our standard colors.

Shelf Life

One year if stored between 60 and 80°F in unopened containers.

Packaging and Coverage Rates(@16mils)

4 Gallon Kit	: 400SF
20 Gallon Bulk Kit	: 2,000SF
100 Gallon Drum Kit	: 10,000SF

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. Mechanically shot blast floor to provide a minimum 30 - 40 grit profile.
2. Fill all spalled areas at least ½" in depth with **ICO Quick Patch** (for holes <½" in depth use **ICO Gel** or **Flexi-Coat** w/aggregate). Allow to dry tack free.
3. All cracks ⅛" in width or greater should be routed out in a V-notch and filled flush to surface with **ICO Gel**. Allow to dry tack free
4. Add Parts A and B together in the prescribed ratio in a mixing bucket and mix for at least 30-60 seconds at low speeds (<750rpm), then immediately pour onto floor in a ribbon pattern then spread with a notched rubber squeegee Do not mix more than can be spread and seeded (see#5) in 20 minutes at 70°F
5. Use porcupine roller to smooth out floor, followed by immediately broadcasting to refusal with single-size aggregate pre-selected by customer. Seeding can be done by hand or with a blower; make sure aggregate floats down onto surface rather than being thrown down into resin, as this will cause lumps in finished surface. Continue to broadcast aggregate until the entire liquid is covered. Allow to dry hard, foot traffic. Total thickness of filled system: ¼", when liquid applied at 25SF/gal.
6. Sweep off excess sand. To achieve ¼" thickness, apply second coat at 20-25SF/gal and again, seed to refusal with pre-selected aggregate

Failure to follow the above instructions, unless expressly authorized by an ICO Technical Service Representative, will void our material warranty

Precautions

1. **Do not apply below 50°F**
2. **Not designed to bridge open cracks; fill first with ICO Lastic**
3. **Recoat window at 70°F : 24 hours**
4. **For better UV resistance, coat with one of our urethane top coats**

Product Specification

The specified area shall receive an application of **ICO Flexi-Coat** 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, two part, 100% solids epoxy coating with a minimum tensile elongation of 30% (neat resin) and a minimum tensile strength of 2500psi, as measured under ASTM D-638. It shall be capable of being applied up to 60mils per application and cure hard within 8 hours @ 70°F. It shall have a minimum bond strength of 450psi to concrete with cohesive failure.

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.

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.

WARRANTY - All products manufactured by us are warranted to be first class material and free from defects in material and workmanship.

Liability under this warranty is limited to the net purchase price of any such products proven defective or, at our option, to the repair or replacement of said products upon their return to us transportation prepaid. All claims hereunder on defective products must be made in writing within 30 days after the receipt of such products in your plant and prior to further processing or combining with other materials and products. WE MAKE NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE SUITABILITY OF ANY OF OUR PRODUCTS FOR ANY PARTICULAR USE, AND WE SHALL NOT BE SUBJECT TO LIABILITY FROM ANY DAMAGES RESULTING FROM THEIR USE IN OPERATIONS NOT UNDER OUR DIRECT CONTROL.

THIS WARRANTY IS EXCLUSIVE OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, AND NO REPRESENTATIVE OF OURS OR ANY OTHER PERSON IS AUTHORIZED TO ASSUME FOR US ANY OTHER LIABILITY IN CONNECTION WITH THE SALE OF OUR PRODUCTS.



2925 Lucy Lane • Franklin Park, IL 60131 • 847.451.0279 • 800.624.8919 • FAX 847.451.0379

www.InternationalCoatings.com