

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.

Pt. A	: 9.1
Pt. B	: 8.2
A&B Mixed	: 8.85

Viscosity @ 77°F, cps

Pt. A	: 5400
Pt. B	: 450
A&B Mixed	: 2400

Mixing Ratios

A:B

By Vol

2:1

By Wt

2.3:1

Curing Times@

	<u>50°F</u>	<u>70°F</u>	<u>90°F</u>
Pot Life	30 min	25 min	18 min
Working Time	40 min	35 min	25 min
Tack Free	15 hrs	6½hrs	3 hrs
Hard, Foot Traffic	39 hrs	10 hrs	5 hrs
Hard, Fork Truck	45 hrs	20 hrs	9 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(@25SF/gal)

4 Gallon Kit	: 100SF
30 Gallon Bulk Kit	: 750SF
120 Gallon Drum Kit	: 3000SF

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. 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 ¼" 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 at approximately 100SF/4 gallons. 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: 1/8"
6. Sweep off excess sand. For best results, repeat steps #4 and #5 to achieve a total minimum thickness of one quarter inch.

Precautions

Avoid skin contact with Parts A and Part B as they may cause skin irritation to some people. Cleanup can be done with MEK, mineral spirits, toluene or xylene. Do not allow material to cure; otherwise, paint strippers will be required. Refer to MSDS for more detailed instructions.

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 10 hours @ 70°F. It shall have a minimum bond strength of 450psi to concrete with cohesive failure.

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.