

ICO-QUARTZ FLOOR SYSTEM™

Product Description

ICO-Quartz™ is a seamless epoxy floor system that combines the durability of high performance epoxy resins with the beauty of colored quartz aggregate. **ICO Quartz 60™** is a 60 mil single broadcast system and **ICO-Quartz 120 DB™** is a double broadcast system both sealed with **ICO-Sealer™**. **ICO Quartz 120 SB™** is a 120 mil single broadcast system using a self-leveling base coat and a top coat of **ICO-Sealer™**. It is an easily installed broadcast system that gives a lower installation cost than a trowelled system but with many of the same advantages as to wear and durability.

In comparison to competitive systems, **ICO-Quartz™** has superior chemical resistance, has excellent resistance to thermal shock and the crystal clear surface gives an appearance of depth to the beautiful quartz aggregate colors. The clear finish coat has the added advantage of being virtually odorless in comparison to the pungent odor of competitive urethane sealers. The **ICO-Quartz™** surface is easy to clean and maintain because it's non-porous finish means it's resistant to staining and penetration by most cleaners. It also does not require waxing or buffing. When the surface is worn down it can be quickly and easily recoated with a new coat of sealer, restoring the surface to its original high gloss finish. **ICO-Quartz™** floor can vary in surface texture from an anti-slip profile to a silky finish.

Product Application

The **ICO-Quartz™** system is ideal in food processing areas, restrooms, locker rooms, kitchens, laboratories, hallways, offices, showrooms, and anywhere else a decorative floor finish with excellent chemical and abrasion resistance is desired or required.

Chemical Resistance

The **ICO-Quartz™** system is recommended for areas subjected to such chemical solutions as 10% nitric acid, 30% phosphoric, 50% sodium hydroxide, and 50% sulfuric acid. See **ICO-Sealer™** data Sheet for more complete data.

Physical Properties (All properties assume use of **ICO-Sealer** regular cure)

Tensile Strength (ASTM C-307)	: 1810 psi	Flammability (D-635)	: Self Extinguishing
Tensile Elongation (C-307)	: 9%	Vapor Transmission Rate (E-96)	: .03 perms
Compression Strength (C-579)	: 6170 psi	Water Absorption (D-570)	: 0.2% in 24 hours
Hardness, Shore D (D-2240)	: 80	Taber Abrasion, CS17	:
Bond Strength to Quarry Tile	: >1000 psi	1000 cycles at 1 kg.	: 106 mg. loss

Physical Characteristics (Unless otherwise noted, properties are for **ICO-Quartz Base Coat**)

Density, lbs./gal	Mixing Ratios		Curing Times @		
	By Volume	By Weight	50°F	77°F	90°F
Pt. A : 10.3	Pt. A : Pt. B (base coat)	3.7 : 1	40 min.	25 min.	10 min.
Pt. B : 8.0	Pt. A : Pt. B (sealer coat)	2 : 1	14 hrs.	4 hrs.	3 hrs.
A&B Mixed : 9.8			60 min.	50 min.	25 min.
Viscosity @ 77°F,cps	Curing Times @		35 hrs.	15 hrs.	5 hrs.
Pt. A : 2,000	ICO-Quartz Base\Slurry Coat, Pot Life		25 min.	15 min.	10 min.
Pt. B : 30	ICO-Quartz Base Coat, Hard, Foot Traffic		24 hrs.	10 hrs.	5 hrs.
A&B Mixed : 1,500	ICO-Quartz Sealer, Pot Life				
Shelf Life 1 year at 77°F in unopened containers	ICO-Quartz Sealer, Hard, Foot Traffic				
	ICO-Quartz Sealer FC, Pot Life				
	ICO Quartz Sealer FC, Hard, Foot Traffic				

Maximum Hardness achieved after 7 days @77°F.

Packaging and Coverage Rates

Basic Kit	: 100 SF
Bulk Pack	: 1000 SF
Drum Kit	: 10,000 SF

Color Availability

It is available in nine pre-mixed color combinations and twelve solid colors. There are any number of custom color combinations at a slight extra charge. Please refer to our **ICO Color Chart**.

Installation

Please refer to our Installation Guide for detailed instructions. Particular care must be taken to follow those instructions precisely to assure proper installation. Do not apply below 50°F unless using the FC version.

1. New concrete should cure a minimum of 28 days and be checked with a rubber mat or plastic sheet test. All surfaces to be covered should be power washed, shot-blasted, acid washed, scarified or sanded to present a clean, sound substrate to which to bond to.
2. Mix the ingredients in the prescribed ratios, using a low speed mixer of 750 rpm or less. Mix Part A and Part B for 1-2 minutes then add filler and mix until uniform in color and consistency. Do not change the ratio of A to B or add any solvent to the mix.
3. No priming is necessary on concrete of average porosity. On new concrete or very porous concrete and on wood surfaces apply **ICO-Primer™LV** at 200-300 SF per gallon to prevent outgassing, pinholing and bubbling from escaping entrapped air.
4. **ICO-Quartz 60™**
 - a. Base Coat- Apply a liberal coat of **ICO-Quartz Base Coat™** at the rate of 80 SF per gallon.
 - b. Broadcast the **ICO-Quartz™** aggregate from chest high, throwing it up so it can drop vertically onto the wet resin coat. The aggregate can also be blown onto the surface with a sand blast hopper. Apply about 50 lbs per 100 SF. After a dry time of approximately 8 hours, sweep or vacuum the surface. Touch up any missed areas with **ICO-Quartz Sealer™** and granules and allow to dry for 30 minutes.
 - c. Apply **ICO-Quartz Sealer Coat™** to the surface at one gallon per 100 SF. Allow to dry 12-15 hours for foot traffic and 24 hours for heavier traffic. For smoother finish apply a second coat of **ICO-Quartz Sealer Coat™** at approximately one gallon per 100 SF.
5. **ICO-Quartz 120 SB™**
 - a. Apply a liberal coat of the mixed **ICO-Quartz Slurry Coat™** by gauge rake or notched squeegee at 25 SF/gallon.
 - b. Broadcast the **ICO-Quartz™** aggregate from chest high, throwing it up so it can drop vertically onto the wet resin coat. Apply about 100 lbs. per 100 SF. After a dry time of approximately 8 hours, sweep or vacuum the surface. Touch up any missed area with **ICO-Quartz Sealer™** and granules and allow to dry for 30 minutes.
 - c. Apply **ICO-Quartz Sealer Coat™** to the surface at one gallon per 100 SF. Allow to dry 12-15 hours for foot traffic and 24 hours for heavier traffic. For smoother finish apply a second coat of **ICO-Quartz Sealer Coat™**.
6. **ICO-Quartz 120 DB™**
 - a. Base Coat-Apply a liberal coat of **ICO-Quartz Base Coat™** at the rate of 80 SF per gallon.
 - b. Broadcast **ICO-Quartz™** aggregate from chest high, throwing it up so it can drop vertically onto the wet resin coat. Apply about 50 lbs. per 100SF.
 - c. After a dry time of approximately 8 hours, sweep or vacuum the surface and repeat steps "a" and "b".
 - d. After a dry time of approximately 8 hours, sweep or vacuum the surface and apply **ICO-Quartz Sealer Coat™** to the surface at the rate of one gallon per 100 SF. Allow to dry 12-15 hours for foot traffic, 24 hours for heavier traffic.
 - e. For smoother finish apply a second coat of **ICO-Quartz Sealer™** at approximately one gallon per 100 SF.

Precautions

Avoid skin contact with liquid Part A and Part B as they may cause skin irritation to some people. Protective hand creams and/or gloves should be used. Clean-up can be done with hot soapy water before the material starts to set. Once the material has set it can only be removed with a paint stripper. Please consult Material Safety Data Sheet for detailed information.

Product Specification

The specified area shall receive an application of **ICO-Quartz™** floor system as manufactured by **International Coatings, Inc., Franklin Park, Illinois**. The system 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, solvent free 100% solids, high gloss flexibilized epoxy system with good resilience to resist thermal and mechanical shock. The system must adhere to damp as well a dry concrete, wood, metal, tile, terrazzo, and sound existing epoxy and urethane coatings. It shall have an elongation of 10% in the unfilled form, when tested using ASTM D-638. The film hardness shall be a Shore D of 80. The system shall be usable down to 32°F by specifying the the fast cure version. It shall have water wipeability and have excellent damp adhesion. It shall be self-priming on surfaces of average porosity. The system shall be unaffected by oils, greases, and resist such chemicals as 36% hydrochloric acid, 10% nitric acid, and sodium hydroxide.

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.

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.

