

ICO-QUARTZ TROWELLED™

Product Description

ICO-Quartz Trowelled™ flooring is a three part, trowel-applied epoxy floor that combines the high wear characteristics of our clear **ICO Coat** resin system with the beauty of decorative quartz angular sand. Normally applied at 3/16" - 1/4" thickness, it is a resin rich mix that can be applied in a single step, although a sealer coat of **ICO Sealer** or **ICO Ure Guard 100** is recommended for attaining a more uniform, high gloss finish. A variety of textures can be achieved by broadcasting into this optional clear sealer coat. **ICO Quartz Trowelled** flooring has excellent adhesion to concrete, tile and brick, wood and metal surfaces.

Product Application

ICO-Quartz Trowelled™ floors are used in heavier wear areas where conventional broadcast floors, normally applied at 1/16" - 1/8", will not provide the necessary long term wear resistance. Such areas could include post office floors, entryways, aisle ways and auto service centers. With addition of a top clear coat, these quartz floors are much easier to maintain and will hide scuff marks and tire marks much more effectively than a pigmented quarter inch floor. **ICO Quartz Trowelled** systems are a far more economical choice than terazzo floors or quarry tile. For higher chemical resistance and thermal shock conditions, our **ICO Guard Quartz Trowelled** floor system would be the preferred choice when a decorative look is required.

Chemical Resistance

ICO-Quartz Trowelled™, with the **ICO Coat** base resin, provides good resistance to caustics, low to moderate concentrations of acids, and most fuel, oils, lubricants and gasoline. Addition of our **ICO Sealer** or **ICO Ure Guard 100** will enhance chemical resistance. See respective Product Data Sheets for specific information.

Physical Properties

Tensile Strength (ASTM C-307)	: 1690 psi	Flammability (D-635)	: Self Extinguishing
Tensile Elongation (D-638)(resin only)	: 2.8%	Vapor Transmission Rate (E-96)	: .03 perms
Compression Strength (C-579)	: 10,360 psi	Coefficient of Thermal Expansion (D-696)	: 1.7×10^{-5} per °F
Hardness, Shore D (D-2240)	: 80	Gardener Impact	: >160 inch pounds
Bond Strength to Quarry Tile	: >1000 psi	Water Absorption	: 0.2% (24hrs.)

Physical Characteristics (Unless otherwise noted, all figures are for regular cure).

Density, lbs./gal	Viscosity @ 77°F,cps	Mixing Ratios	By Volume	By Weight
Pt. A : 9.3	Pt. A : 800	Pt. A : Pt. B	3 : 1	2.7 : 1
Pt. B : 8.3	Pt. B : 50	Aggregate : Liquid	2.4 : 1	4 : 1
A&B Mixed : 9.0	A&B Mixed : 450			

Curing Times @	50°F	70°F	90°F
Pot Life	75min	40min	30min
Work Time	100min	80min	60min
Tack Free	32hrs	10hrs	4hrs
Hard, Foot Traffic	48hrs	22hrs	8hrs
Hard, Truck Traffic	64hrs	30hrs	12hrs

· Maximum Hardness achieved after 7 days @77°F.

Packaging and Coverage Rates

Basic Kit	: 30 SF @ 1/4"
Bulk Pack	: 300 SF @ 1/4"
Drum Kit	: 3000 SF @ 1/4"

Shelf Life

1 year at 77°F in unopened containers

Color Availability

It is available in nine pre-mixed color combinations, as well as twelve solid colors. Custom color combinations are available at a slight extra charge.

Installation

Please refer to our Installation Guide for detailed instructions. Particular care must be taken to follow these instructions precisely to assure proper installation. Do not apply below 50°F.

1. New concrete should normally be allowed to cure for a minimum of 28 days. It should always be checked with a rubber mat test and calcium chloride to detect the presence of moisture. Contact manufacturer if questions.
2. All surfaces should be shot blasted or otherwise mechanically prepped to provide a clean, sound substrate to which to bond. Remove any oils, greases, etc., first by suitable degreasers.
3. No priming is necessary on concrete of average porosity. However, on new concrete, wood, or concrete of excess porosity, use of **ICO Primer LV** or **LVFC** applied at 200-250 SF/gallon is recommended to minimize outgassing. Allow to dry tack free.
4. Mix the ingredients in the prescribed ratios, using a low speed (< 750 rpm) paddle-type mixer. Mix Parts A and B for 30-60 seconds, then add **ICO Fill** angular quartz filler and mix for another 30-60 seconds until uniform in color and consistency.
5. The prepared mix is normally applied to the prescribed thickness by a screed box, gauge rake, or screed bar.
6. Allow the rough mix to set a few minutes before lightly finishing with a hand trowel or power trowel.
7. After trowelling, the surface should be back-rolled with a fine nap roller dipped in isopropyl alcohol to eliminate trowel marks. Aggregate can be broadcast in for achieving an anti-slip surface.
8. To provide a smoother, easier to clean finish, apply a top coat of **ICO Sealer** or **ICO Ure Guard 100** at about 160-200 SF/gallon.

Precautions

Avoid skin contact with Part A and Part B liquids as they may cause skin irritation to some people. Protective hand creams and/or gloves should always be used. No special ventilation is needed. Clean-up can be done before material has set hard with toluene, xylene or MEK. If set hard, then a paint stripper must be used. **Always consult the MSDS** before use.

Product Specification

The specified area shall receive an application of **ICO-Quartz Trowelled™** as manufactured by **International Coatings, Inc., Franklin Park, Illinois**. The material shall be installed by precisely following the manufacturer's published recommendations pertaining to mixing, application, and preparation. It shall be a resin-rich mixture, not exceeding 4:1 (by weight) of aggregate:liquid. It should be applied in a single application with no primer or top coat necessary. The compressive strength shall be 10,360 psi when tested in accordance with ASTM C-579, and should have a minimum tensile elongation of 2.8%. The system shall resist chemical attack for at least 24 hours from: oil, grease, gasoline, 50% sodium hydroxide, 20% sulfuric acid, and 10% nitric acid for 7 day immersion.

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 customer the highest possible quality products and services and by so doing, build long term relationships based on mutual trust and respect.