



## ComposiCoat XD™ Floor Finish

Durable, industrial grade, chemical and abrasion resistant urethane topcoat with antimicrobial protection.



**ComposiCoat XD™ Floor Finish** is the ideal choice for chemical and abrasion resistant applications, with biologically impervious properties that reduce the growth of microorganisms. The aliphatic moisture cured urethane can be applied with satin or high gloss finishes in clear or colored tint options for aesthetic preferences. Zirconia's ComposiCoat XD™ Floor Finish provides exceptional wear protection from abrasion, chemicals and solvents and is easy to clean and maintain. When used with Zirconia's CeramyGuard™ coating as a base coat you have a composite flooring system that has an inorganic base which chemically reacts or "cross-links" with the concrete. Adding Zirconia's CrossLinker™ as a primer for ComposiCoat XD™ creates a cross-linked connection with the urethane final coat. This means you have created a composite flooring that takes advantage of the best characteristics of both inorganic and organic coatings.

**Satin Finish Kit** – 1 gallon clear base, Satin powder, Optional Colorant. Note: total mixing capacity of 1 gallon pigmented satin finish. Satin finish provides a harder surface with better slip resistance than the high gloss finish.

### CORE COMPETENCIES:

- Superior abrasion resistance and durability
- Easy to clean, non-yellowing, UV stable protection
- Chemically resistant to many types of acids including hydrochloric, phosphoric, sulfuric, citric acid and others. Resists fuels, ammonia hydroxide and many other chemicals listed on the chart on page 4
- Biologically Impervious™: eliminates habitat, water, and oxygen microbes need for survival and growth
- Composite system that chemically bonds with the concrete to make a composite coating that is resistant to moisture in the concrete
- High solids, low odor for safe indoor and outdoor application
- Light reflective properties increase brightness of area
- Colors include yellow, red, and grey
- Meets all current VOC compliance regulations for industrial maintenance coatings of North America

### SAMPLE USES

ComposiCoat XD™ Floor Finish is an excellent choice for protecting and preserving concrete surfaces in commercial, industrial, and institutional applications including but not limited to:

- Commercial: manufacturing, distribution, hangers, maintenance areas, parking garages, loading docks, and heavy traffic areas
- Food: processing, manufacturing, and cold storage
- Farming: agriculture, dairy, livestock
- Health Care: waiting rooms, surgery rooms, laboratories, and bathroom floors
- Health and Fitness: gym and exercise facilities, and locker rooms
- Public buildings: Schools, dormitories, malls, airports, fire stations bus stations, and office spaces.

Cured Physical Properties			
Description	Test Method	Gloss A+B	Gloss A+B+C
Abrasion resistance, Taber Abrader CS-17 Wheel, 1000 gm Load, 1000 cycles	ASTM D4060	19 mg. loss	18 mg. loss
Gloss, Clear, 60 Degree	ASTM E97	90	25 – 35
Gloss, Pigmented 60 Degree	ASTM E97	90	45 – 55
Koenig Hardness 3 mil film	ASTM D4366	171	171
Coefficient of Friction James Friction tester	ASTM D2047	> 0.61	>0.63
Tensile Strength	ASTM D2370	6,300 psi	6,300 psi
Tensile Elongation	ASTM D2370	6%	6%
Dry Film Thickness	Per Coat	2.9 mils	2.9 mils

**Application method:** 3/8" nap polyester roller cover. DO NOT USE a high-capacity cotton blend fiber roller.

**Recommended application:** one or two coats applied over Zirconia CeramycGuard™ and CrossLinker™.

Note: must sand between coats if applying a second coat of ComposiCoat XD™ Floor Finish.

**Surface preparation over CeramycGuard™:** apply over CeramycGuard™ Ceramic Surface Treatment after the initial application has cured for a minimum of 24 hours (at >55°F and >45% relative humidity). Remove all dust, debris, loose aggregate (if applicable) and make sure surface is free of oils, paint or other contaminants that may be present. Testing ComposiCoat XD™ in an inconspicuous area to ensure proper results is recommended. Refer to the CeramycGuard™ Technical Data Sheet for instructions on preparing concrete surfaces before ceramic surface system application begins. Caution: new concrete must have a minimum 28-day cure time before application unless Zirconia's Accelerator is applied per instructions.

**Coverage:** up to 400 sq ft per gallon for smooth floor. Reduced coverage may occur depending on the porosity and absorption rate of the substrate.

**Mixing Instructions:** a Jiffy mixing blade and slow speed drill is recommended.

**Satin Finish:** Combine Part A and Zirconia Satin Powder and mix for 3 minutes until fully incorporated in an appropriate size clean, dry mixing container. Then add part B and mix 30 to 60 seconds and make sure the liquids are thoroughly mixed. If applicable, add colored pigment and mix for 30 to 60 seconds or until solid matrix of color is achieved.

**NOTE:** Only mix enough product to apply right away. Calculate approximately 400 sq. ft. per gallon.

**IMPORTANT:** when using *Satin Powder* - Do not mix product and allow to set in container, it will begin to firm up and become unstable. When using *Satin Powder* be sure to remix the mixture if it sits in a container for more than 15 minutes, use a slow speed drill and Jiffy mixing blade for 60 seconds to ensure proper suspension of *Satin Powder*.

**Ambient Temperature** – DO NOT APPLY when substrate temperature is above 90°F or below 55°F. DO NOT APPLY when the temperature is within 5°F of the dew point (if the temperature is 76°F, the dew point must not be 71° or higher) or if the temperature will drop to the dewpoint during the 24 hour curing window.

**Application** – Apply about 3 mils with a 3/8” nap roller out of a roller pan or screen. Too much material will create “blisters” and application too thin will create a “uneven” appearance. Cut in edges with a brush. Uniform coverage ensures professional results. Apply in a W pattern and then back roll in an M pattern. After about 5 minutes, using spikes cross roll the surface in a 90 degree angle to the last direction of rolling. If adding aggregate, we recommend broadcasting and back rolling the aggregate into floor finish to ensure that the aggregate adheres to the surface. DO NOT apply aggregate to the first coat of two coatings of ComposiCoat Floor Finish. You must sand the first coat with 60 – 80 grit sandpaper, sweep/vacuum up all dust and wipe surface down with Xylene for adhesion promotion prior to applying a second coat.

**Finished Surface Maintenance** – Keep dust and debris off surface with broom, vacuum, or method of choice. Clean on a regular basis with a mild environmentally approved surfactant.

**CURED PHYSICAL PROPERTIES**

**ComposiCoat Floor Finish Application Standards**

400 sq. ft. per gallon

Substrate and air temp. must be 55°F - 90°F

Minimum Recoat (foot traffic) 12 – 16 hrs.

Dry to Touch at 70°F – 12 hrs.

Maximum Recoat Time – 24 hrs.

**\*DESIGNED FOR PROFESSIONAL USE ONLY!** All applicators should have proper training before applying Zirconia ComposiCoat XD™ Floor Finish. Always use product in the manner in which it was designed to be used.

Read Material Safety Data Sheet and all product instructions before use. Test product in an inconspicuous area before placement over large areas.

Avoid contact with eyes and prolonged exposure to skin. Where proper safety equipment to protect eyes skin from exposure. Use approved barriers and signage to block area off from any foot traffic or unintended entry for a minimum of 16 hours.

\*\*\*Second coat must be applied within 12 to 24 hours after the first coating is applied\*\*\*

**Liquid Physical Properties**

Property	Test Method	ComposiCoat AMC Resin Only
Viscosity A/B	ASTM D2196	1200/ 35 cps
Flash Point	ASTM D3278	230°F
N.V.W., A+B	ASTM D2369	91%
VOC, lbs/gal	ASTM D3960	0.07 lbs/gal
VOC, grams/ltr	ASTM D3960	8.4 gpl

**Chemical Resistance – Clear Granite AMC Resin**

<b>Reagent</b>	<b>1 Hour</b>	<b>24 Hours</b>
Hydrochloric Acid 10%	E	E
Hydrochloric Acid 30%	E	E
Nitric Acid 10%	E	E
Phosphoric Acid 50%	G	G-S
Sulfuric Acid 25%	E	E
Acetic Acid 10%	E	E
Citric Acid 10%	E	E
Oleic Acid	E	E
Ammonia Hydroxide 10%	E	E
Ethylene Glycol (Antifreeze)	E	E
Isopropyl Alcohol	G	G
Methanol	E	E
D-Limonene	E	E
JP-4 Jet Fuel	E	E
Gasoline	E	E
Mineral Spirits	E	E
Xylene	G	G
Methylene Chloride	P	P
MEK	E	E
Betadine®	E	E-S
Ammonium Nitrate	E	E
Brake Fluid	E	E
Bleach	E	E
Motor Oil	E	E
Skydrol® 500B	E	E
Skydrol® LD4	E	E
Sodium Chloride 20%	E	E
Tide® Laundry Soap	E	E
Trisodium Phosphate 10%	E	E

ComposiCoat system cured two weeks prior to testing. Test results are based on 1 hour and 24-hour exposures with 2-hour recovery.

E = Excellent, No change in pencil hardness  
 G = Good, 1-2 units change in pencil hardness  
 F = Fair, 3 units change in pencil hardness  
 P = Poor, 4 or more units change in pencil hardness  
 S = Stains, surface stains when exposed to substance

**Warranty**

Zirconia warrants (i) its title to the product, (ii) that the quality of the product conforms to Zirconia's standards at the time of manufacture and (iii) that the product shall be delivered free of rightful claim of any third person for infringement of any U.S. patent covering the product. THESE ARE THE ONLY WARRANTIES THAT ZIRCONIA MAKES AND ALL OTHER EXPRESS OR IMPLIED WARRANTIES, UNDER STATUTE OR ARISING OTHERWISE IN LAW, FROM A COURSE OF DEALING OR USAGE OF TRADE, INCLUDING WITHOUT LIMITATION, ANY OTHER WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR USE, ARE DISCLAIMED BY ZIRCONIA. Any claim under this warranty must be made by Buyer to Zirconia in writing within five (5) days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life of the product, or one year from the date of delivery of the product to the Buyer, whichever is earlier. Buyer's failure to notify Zirconia of such a non-conformance as required herein shall bar Buyer from recovery under this warranty. Liability for products proven defective, if any, is limited to replacement of the defective product or refund of the purchase price paid for the defective product as determined by Zirconia. Zirconia is not responsible for any incidental or consequential damages.

**Disclaimer**

All statements, technical and recommendations are based on test we believe to be reliable as of at the date hereof, but the accuracy or completeness thereof is not guaranteed. Please ensure before using the product that it is suitable for your intended use. Since the conditions and methods of use of the product and of the information referred to herein are beyond our control, other than for fraudulent misrepresentation, Zirconia Incorporated expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information.

**Dispose of in accordance with city, county, state, federal and/or country rules and regulations.**