

ComposiCoat™ XD Floor Finish



Product Data Sheet



Creating Material Change

www.haydale.com  HaydaleGraphene

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.

Haydale's ComposiCoat Flooring System provides exceptional wear protection from abrasion, chemicals and solvents and is easy to clean and maintain.

When used with Haydale's CeramycGuard™ coating as a base coat you have a composite flooring system that has an inorganic, base that chemically reacts or "cross-links" with the concrete.

Adding Haydale's CrossLinker VB™ as a primer for ComposiCoat™ XD it 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

One 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 5
- 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
- Colours include yellow, red, and grey
- Meets all current VOC compliance regulations for industrial maintenance coatings

Sample uses

ComposiCoat 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, hangars, 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.



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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 fibre roller.

Recommended application

One or two coats applied over Haydale CeramycGuard and CrossLinker VB.

Note: Must sand between coats if applying a second coat of CompositCoat Floor Finish.

Surface preparation over CeramycGuard

Apply over CeramycGuard Ceramic Surface System 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 CompositCoat 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 Haydale'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 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.



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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 CompositCoat 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

CompositCoat 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 Haydale CompositCoat 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	CompositCoat 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



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Chemical Resistance – Clear Granite AMC Resin		
Reagent	1 Hour	24 Hours
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-S
Betadine®	E	E
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



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