

CERAMIC INSULCOAT WALL

Product Description

Ceramic InsulCoat Wall is a strong, tough coating, formulated with hollow-core Cerylum™ performance ingredients in a complex 100% acrylic suspension with superior adhesion and abrasion resistance. Provides significant resistance to cracking, chalking, fading, peeling and weathering. Exhibits exceptional adhesive and thermal properties.

Benefits

- Goes Further and Costs Less
- Easy to Apply and Easy to Clean Up
- Product may be recoated as early as 2 - 4 hours after first coat has been applied in moderate to low ambient humidity.
- Green Product that Meets Increasingly Strict Environmental Guidelines
- Weatherproof and High-Breathability
- Year-Round Thermal Barrier (Warmer in the Winter and Cooler in the Summer)
- Provides Significant Life-Cycle Cost Savings
- Valuable Component of Emerging Sustainable Design Programs

Intended Uses

Ceramic InsulCoat Wall is an extremely versatile, high-build architectural coating intended for Commercial, Industrial, Government, and Residential exterior applications. It may be applied on most typical construction surfaces including:

- Cast or Poured in Place Concrete
- Tilt-Ups
- Cinder/Concrete Block
- Stucco
- Brick
- Wood
- Masonry
- Fiberglass
- Aluminum
- Galvanized Steel
- Vinyl
- Specialized Substrates

Ceramic InsulCoat Wall can be tinted to any color.
It is available in Pastel, Medium, Deep, and Accent bases.

Product Data

Characteristics	Test Method	Observation							
Weight per US Gallon (3.78L)	FTMS 141 – Method 4184	11 LB (4.99Kg)							
Non-Volatile Solids	FTMS 141 – Method 4041	By weight: 69.1% By volume: 60.9%							
Viscosity	FTMS 141 – Method 4281	Stormer Viscosity: 100 revolutions in 8 seconds at 500 grams							
Toxicity	FTMS 141 – Method 511	Material is non-toxic & requires no special ventilation during application. Contains no materials considered to be health hazards.							
Flammability	ASTM 1360 – DOT – MVSS 302	In container: Non-flammable. On concrete: Self-extinguishing – does not support flame spread.							
Package Stability		One year + after opening: no settling or other undesirable effects. Materials completely dispersed after stirring.							
Abrasion Resistance	FTMS 141 – Method 6192 Tabor C17 Wheel - 100 grams - 1000 cycles	Weight loss in grams: InsulCoat Wall with aggregate 41 g InsulCoat Wall without aggregate 14 g Epoxy floor coating without aggregate 9 g (Typical)							
Hardness	ASTM D2370	6H – This is the hardest value measured by this test and compares to a typical 2H hardness of hardwood floor finishes.							
Impact Resistance	ASTM D2794	28 inch-pounds of impact with no break in the film surface. Typically, 20 inch-pounds of impact is considered to be a high performance test result.							
Flexibility	FTMS 141 – Method 6222	Withstood deformation of 1.5” – 38mm to 1/8” – 3.2mm on a metal substrate with no loss of adhesion, cracking, chipping, or flaking (mandrel test).							
Elongation	ASTM D2370	12 mils – 0.31mm dry film thickness stretched 160% with 100% full memory. This was the full extent of the elongation and the film never did break.							
Water Resistance (wind-driven rain)	TTC-555 Time for water to penetrate: Water driven against test surface at a dynamic pressure equivalent to 98 mph	Time for water to penetrate:							
		<table border="0" style="width: 100%;"> <tr> <td>One Coat</td> <td>6.3 mils</td> <td>30 minutes</td> </tr> <tr> <td>Two Coats</td> <td>10.0 mils</td> <td>11 hours</td> </tr> <tr> <td>Two Coats</td> <td>12.0 mils</td> <td>none at 24 hours</td> </tr> </table>	One Coat	6.3 mils	30 minutes	Two Coats	10.0 mils	11 hours	Two Coats
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Moisture Vapour Transmission	ASTM E96 – Procedure B	20.0 perms A “perm” is a unit of measure expressing a coating’s ability to allow moisture vapour to pass through the film, or its “ability to breathe.” The lower the “perm” rating, the more likely the coating will blister over time.							
High Humidity Resistance	FTMS 141 – Method 6201.1 100% condensing humidity at 107° F – 41.67° C	336 hours with no evidence of film deterioration, blistering or peeling from substrate (250 hours required to pass Federal Specifications).							
Salt Spray	FTMS 141 – Method 811.1 100% condensing 5% salt fog at 95° F – 35° C	336 hours with no evidence of film deterioration, blistering or peeling from substrate. (250 hours required to pass Federal Specifications).							
Artificial Weathering	ASTM E42 – Carbon Arc Weatherometer. 250 hours equivalent to 5 years.	After Weatherometer testing (simulated rain, heat, ultraviolet ray and normal weather cycling) the coating showed no evidence of chalking, blistering or peeling, cracking or checking and only slight yellowing of the 100% titanium dioxide white colour.							
Fungus Resistance	FTMS 141 – Method 6271	No fungus growth when material tested in an environment of three organisms.							

VOC by SCAQMD 304 / EPA 24

V.O.C. gm/l (Less Water)	SCAQMD Method 304 (Equation 5.2)	79.0 gm/l
Volatiles, %	ASTM D2369	32.77
Water, %	ASTM D4017	27.14
Density, lb/gal	ASTM D1475	11.65 lb/gal
Density, gm/ml	ASTM D1475	1.397 gm/ml

ASTM – (American Society for Testing and Materials)
 EPA – (Environmental Protection Agency)
 FTMS – (Federal Test Method Standard)
 SCAQMD – (South Coast Air Quality Management District)
 TTC – (Federal Specification TT-C-555B)

Application Characteristics

Material	Single component, ready-to-use from container with little or no stirring required.	
Approximate Coverage	Rough, porous surface	100 to 175 sq. ft./gallon
	Smooth, tight surface	175 to 225 sq. ft./gallon
Dry Base Film Thickness	One coat	5 to 7 dry mils
	Two coats	10 to 12 dry mils
Substrate Preparation	Use proper envelope or substrate preparations systems. Prepare in accordance with Master Painters Institute guidelines. Apply Ceramic InsulSeal to porous and/or weathered substrates. Apply appropriate primers on metal and wood surfaces. Surface must be clean, dry and sound before applying Ceramic InsulCoat Wall.	
Application Temperature Range	39° F – 4° C substrate to 80° F – 29° C ambient air in direct sunlight.	
Application Method	1.5" nap roller – brush – airless sprayer (0.023" – 0.584mm tungsten-carbide tip).	
Initial Cure (tack-free)	Air dry, 15 to 30 minutes with moderate to low ambient humidity.	
Primary Cure	Air dry, 48 hours at 60° F – 15.5° C or greater surface temperature with moderate to low ambient humidity.	
Final Cure	90 to 120 days	
Solvent (before curing)	Water	
Cohesion Strength	Outstanding bond to dry or slightly damp surfaces. Strong cohesion to any clean, dry concrete, masonry, asphalt, brick, primed metal or wood surfaces, and various flexible membrane systems. Hydrostatic pressure will disrupt this bond.	
Specification for Application	Envirocoatings requires a two-coat system of 10-12 dry mils over a clean, dry, sound substrate. In some cases where minor dusting off is occurring and the substrate has been properly cleaned according to Master Painters Institute guidelines, Ceramic InsulSeal may be applied as a penetrating conditioner to help solve this problem. Due to the nature of dusting off this system will only work where minor dusting off is occurring.	