

CERAMIC INSULCOAT WALL™

Product Description

Ceramic InsulCoat Wall™ is a strong, tough coating, formulated with hollow-core ceramic micro spheres, strands and irregular particulate in a complex 100% acrylic suspension with superior adhesion and abrasion resistance. Provides significant resistance to cracking, chalking, peeling and weathering. Exhibits exceptional adhesive and thermal properties.

Intended Uses

Ceramic InsulCoat Wall™ is an extremely versatile, high-build architectural coating intended for Commercial, Industrial, Institutional and Residential exterior applications. It may be applied over cast or poured concrete, tilt-ups, cinder/concrete block, brick, wood, aluminum, galvanized steel and vinyl. It is available in over 1,001 colours resistant to fading.

Product Data

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Characteristics	Test Method	Observation								
Weight per US G (3.78L)	FTMS 141 – Method 4184	11 Lbs (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: Waterproof, 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 17 Wheel – 100 grams – 1000 cycles	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">Weight loss in grams:</td> <td style="width: 20%;"></td> </tr> <tr> <td>InsulCoat Wall with aggregate</td> <td style="text-align: right;">41 g</td> </tr> <tr> <td>InsulCoat Wall without aggregate</td> <td style="text-align: right;">14 g</td> </tr> <tr> <td>Epoxy wall coating without aggregate (typical)</td> <td style="text-align: right;">09 g</td> </tr> </table>	Weight loss in grams:		InsulCoat Wall with aggregate	41 g	InsulCoat Wall without aggregate	14 g	Epoxy wall coating without aggregate (typical)	09 g
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Hardness	ASTM D3363	6H – This is the hardest value measured by this test and compares to a typical 2H hardness of hard-wood 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	Withstands 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 Water driven against test surface at a dynamic pressure equivalent to 98 mph	Time for water to penetrate:		
		One Coat Two coats Three coats	6.3 mils 10.0 mils 12.0 mils	30 minutes 11 hours none at 24 hours
Moisture Vapor Transmission	ASTM E96 – Procedure B	20.0 perms A “perm” is a unit of measure expressing a coating’s ability to allow moisture vapor 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, ultra-violet 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.		

Application Characteristics			
Material	Single component, ready-to-use from container with little or no stirring required		
Approximate Coverage	First coat	Rough porous surface	100 to 150 sq. ft./gallon 8.1 to 13.9 sq. meters/3.78L
		Smooth, tight surface	150 to 200 sq. ft./gallon 13.9 to 18.6 sq. meters/3.78L
	Subsequent coats		200 to 275 sq. ft./gallon 18.6 to 25.6 sq. metres/3.78L
Dry Base Film Thickness	One coat	4 to 6 dry mils – 0.1 to 0.152mm dry film	
	Two coats	10 to 12 dry mils – 0.254 to 0.305 mm dry film	
Substrate Preparation	Dry, clean, tight surface with no gloss. – will bridge hairline cracks up to 1/16” – 1.6mm		
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 50° 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 or wood surfaces. Hydrostatic pressure will disrupt this bond.		