

Product Data Sheet
ThermaCote®



CHARACTERISTIC	DESCRIPTION		
Appearance	Creamy Liquid		
Color	Bright White	Contact us for the availability of Cool Colors	
Coverage (@20 mils/ 0.5mm)	50 ft ² /gallon	1.2 m ² /l (@ 0.5mm)	
Drying Time	1 to 2 Hours at 70° F with Humidity <60%		
Flash Point	No Flash to Boil		
Maximum Surface Application Temperature	300° F/149° C	*Temperatures over 300°F with special training	
pH	8.45-9.50		
Solids by Volume	80% ±4		
Specific Gravity	0.556-0.680		
Thickness (typical application)	0.020" (0.5 mm)	20 mils (0.5mm) WFT = 16 mils (0.41 mm) DFT; 12 mils (0.30 mm WFT = 10 mils (0.25 mm) DFT	
Viscosity	3,500-8,000 cps	Using Brookfield viscometer with #3 spindle at 12 rpm	
VOC	5.3 g/L		
Weight of Non-Volatiles	43%		
Pounds per Gallon	4.64 -5.66 lbs/gal	(0.54 – 0.66 kg/L)	
ENVELOPE	TEST METHOD	RESULTS	
Air Permeance	ASTM E-2178	0.0001 L/(s·m ²) at 75 Pa	(0.00002 cfm/ft ² at 1.56 lb/ft ²)
Flame Spread	ANSI/UL 723	0	
Smoke Developed	ANSI/UL 723	5	
Water Vapor Permeance (Desiccant Method)	ASTM E-96	207 ng/(Pa·s·m ²)	3.617 perms
Water Vapor Permeance (Water Method)	ASTM E-96	387 ng/(Pa·s·m ²)	6.779 perms
GENERAL PROPERTIES	TEST METHOD	RESULTS	
Accelerated Aging	ASTM G-53	200 Hour	Passed
Cross Hatch Adhesion	ASTM D-3359	100	
Density (g/cm ³)	ASTM D-792	0.41	
Elongation (Elasticity)	ASTM D-882	65%	
Emissivity	ASTM C-1371	0.88 initial 0.86 3 year	(3 year numbers aged no wash)
Normal Emittance	ASTM E-408	.94	
Pull Adhesion (Method B-Concrete)	ASTM D-4541	1,447 kPa	209.9 psi
Pull Adhesion (Method B-Plywood)	ASTM D-4541	1,348 kPa	195.6 psi
Reflectivity	ASTM C-1549	0.83 initial 0.64 3 year	(3 year numbers aged no wash)
Solar Reflectance Index (SRI)	ASTM E-1980	104 initial 77 3 year	(3 year numbers aged no wash)
Tensile Strength (lb/in ²)	ASTM D-882	66.7	
Water Resistance	AATCC 127	No water leakage at 55 cm	

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Description

ThermaCote® is a single component spray applied thermal barrier coating encompassed of ceramics and acrylics (water based). This product is easy to apply in new or retrofit construction and enhances the performance of insulation, HVAC Duct Work, Wall Systems, and Roof Systems for all types of substrates including metal, brick, cement block, concrete, wood, or sheet rock. ThermaCote® is MAS Certified Green and UL® Classified as a Class A Fire Retardant with a 0 (zero) Flame Spread. When used as the Primary Thermal Envelope (PTE), ThermaCote® seals the structure and minimizes Solar/Radiant Heat Gain. Lowering built-up heat due to solar heat gain results in lower roof temperatures and reduced cooling costs. ThermaCote® guards insulation against moisture, thermal transfer, thermal bridging, and conduction; it also allows entrapped moisture to escape all of which provides an environment closer replicating the lab conditions where insulation is assigned its “R” value. ThermaCote® is sustainable as it lowers the energy consumption of a structure, prolongs the life of the building materials and adds no harmful VOCs to the indoor or outdoor environment during installation, service or dismantling and recycling.

Application

Best results will be realized if product is applied using a commercial quality airless paint sprayer (see EQUIPMENT SPEC). Roof applications are best with two coats of 15-20 mils each for total +/- 35 mil DFT (dry film thickness). Allow first coat to dry completely. DO NOT APPLY if temperatures are less than 50° F. Follow the guidelines outlined in the Application Guide for further instruction. Apply the product based on NRCA guidelines and follow all applicable OSHA procedures. Use of proper PPE gear is mandatory, eyewear and respirator as well as sun block is recommended to be used during roof applications. Respirators and proper ventilation required for interior applications. If specific colors are desired please contact ThermaCote, Inc. Interior applications normally require one +/- 20 mil coat. ThermaCote® has excellent performance as a primer/topcoat on many surfaces and substrates.

Surface Preparation

Surface needs to be thoroughly clean and dry; free of dirt, dust, oil, peeling paint and other foreign material. Thoroughly pressure wash area and repair all leaks and cracks. ThermaCote® can be used to repair small cracks and leaks. Rust should be cleaned with a wire brush; use suitable metal primer-sealer where significant amounts of Rust are identified is also recommended. Product can be applied on surfaces from 50° F up to 400° F (10° C-204° C) with special training

Equipment

Professional quality sprayer such as or similar to GRACO 7900, with a pick up of at least 1.5-2 GPM and tip size based on the application.

Clean Up and Storage

Use warm soapy water to clean tools and spatters. Product should be stored between 40° F and 120° F (4° C-- 48 °C) DO NOT store in direct sun light and protect the product from freezing.

Warranty and Disclaimer

The technical information contained herein is true and accurate at the date of issuance and can be changed without notice. Specific product warranty is available upon request. Specially trained contractors in accordance with ThermaCote, Inc. can provide warranty.

- **Roofs: 10 years to Life of the structure (Ask about our Maintenance Program)**
- **Interior walls, ceilings: Life of the Structure**

Warnings

For applications that involve, scraping, sanding, and or removing old paint please contact the National Lead Information Hotline 1-800-424-LEAD or a Lead Certified Contractor.