

Product Data Sheet
ThermaCote®



| CHARACTERISTIC | DESCRIPTION | | |
|--|--|---|---|
| Appearance | Creamy Liquid | | |
| Color | Bone White | Contact us for the availability of Cool Colors | |
| Coverage (@20 mils) | 50 ft ² /gallon | | |
| 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 | | |
| pH | 8.45-9.50 | | |
| Solids by Volume | 80% ±4 | | |
| Specific Gravity | 0.594 | | |
| Thickness | 0.020" | | |
| Viscosity | 2,000-10,000 cps | Using Brookfield viscometer with #3 spindle at 12 rpm | |
| VOC | 0.0099 lbs/gallon (1.186 g/l) | | |
| Weight of Non-Volatiles | 43% | | |
| Weight per Gallon | 5 lbs | | |
| 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 | |
| Moisture Vapor Barrier | ASTM D-1653 | 0.0755 | |
| 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 | |
| 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 0.75 3 year | |
| Solar Reflectance Index | ASTM E-1980 | 96 | |
| Tensile Strength (lb/in ²) | ASTM D-882 | 66.7 | |
| Water Resistance | AATCC 127 | No water leakage at 55 cm | |



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. DO NOT APPLY if heavy dew and or rain are expected within 24 hours and temperatures are less than 50° F. First coat should be applied on all seams, joints, corners, and should be approximately 15 to 20 mils. Second coat should be applied perpendicular to first coat. Apply the product based on NRCA guidelines. Use of proper 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. Regarding roof applications, greater energy savings are realized when product is not tinted. Interior applications normally require one +/- 20 mil coat. ThermaCote® is ideal as a primer or topcoat, or all in one.

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. 3000 + psi , at least 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. Before ordering or specifying ThermaCote contact ThermaCote Inc. to verify the information. Liability, if any, is limited to replacement of product. 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.