Therma Cote Energy Saving/Corrosion Protection

SPECIFICATION SHEET

Physical & Mechanical Characteristics

Density (g/cm ³) @24 mil Dried Film	ASTM D-792	0.41
Specific Gravity		0.594
Weight Per Gallon		5 lbs.
Coverage (20 mils layer)	Depends on Topography and surface	50 ft² /gallon
	For corrugated metal add 25% for pitches and ribs	
Solids By Volume		80% ±4
Weight of Non-Volatiles		43%
Reflectivity	ASTM C-1549	0.83 initial / 3 year : pending
Emissivity	ASTM C-1371	0.88 initial / 3 year : pending
VOC		1.2g/lt.
Flash Point		No flash to boil
Flame Spread	ANSI/UL 723	0
Smoke Developed	ANSI/UL 723	5
pH		8.70-9.30
Maximum Surface Application Temperature		300° F/ 149° C
Adhesion - Cross Hatch		100%
Tensile Strength (lb/in ²)		66.7%
Elongation (Elasticity)	ASTM D-562	65%
Moisture Vapor Barrier	ASTM D-1653	0.0755
Thickness		0.020
Color		Bone White / Tintable
Application Method		Spray (recommended), Roller, Brush(touch-ups)
Drying Time		ThermaCote [®] is dry in 1 to 2 hours at temperatures of 70^{0} F or higher with relative humidity at 60% or less

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.



ThermaCote®: Saves energy by boosting the performance level of insulation in Commercial and Residential Buildings. When used as the Primary Thermal Envelope (PTE), ThermaCote® seals the structure and minimizes Solar/Radiant Heat Gain. 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 a single stage spray applied latex/acrylic material (paint-like) which incorporates Ceramic Technology. Its ease of application for new or retrofit construction allows for the performance enhancement 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. Therma-Cote® accelerates the "Return on Investment" (ROI) and expands the sustainability of interior applications for the life of the structure. ThermaCote® is a superior reflective and thermal barrier which gives the additional benefit of protecting roofing materials from further deterioration and extending the life of a roof. Lowering built-up heat due to solar heat gain results in lower roof temperatures and reduced cooling costs.

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^o 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 300° F.

EQUIPMENT :

Professional quality sprayer such as or similar to GRACO 7900. 3000 + psi , 2 GPM and tip based on the application.

PRIMER :

NOT NEEDED IN MOST CASES

CLEAN UP :

Use warm soapy water to clean tools and spatters

STORAGE :

DO NOT store in direct sun light,. Protect 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 or a Lead Certified Contractor.



ThermaCote[®] is a spray applied Thermal/Radiant Barrier which in its *simplest* definition could be described as an "*energy saving paint*". When dry ThermaCote[®] looks like flat latex paint, yet conserves energy. *Technically, ThermaCote[®] is a high perform-ance Thermal/Radiant Barrier which incorporates ceramic technology to prevent the transfer of heat or cold.*

ThermaCote[®]:

- Energy Star Qualified product / Energy Star Partner
- Cool Roofs Rating Council (CRRC) Rated product
- MAS Green Certified Passes California Indoor Air Quality Standards for Classrooms & Offices (DHS-01350)
- UL[®] Class A Fire Retardant 0 (zero) flame spread ; 5 smoke development (UL-723 Test)
- Virtually no VOCs 1.186 g/l Water based latex acrylic formulation that is friendly to the environment
- Lightweight 5 pounds per gallon (<2.5 kilos per 4 liters) in its wet stage. 28.6 lbs per 5 gallon bucket
- Self-Priming Contains built in rust/corrosion inhibitors which protects against corrosion and makes it self-priming (Harsh or large areas of rust require special training)
- Breathable Vapor Barrier allows moisture to escape from behind it, also retards Water Infiltration
- Air Barrier Seals the Envelope of any structure making existing insulation perform closer to its rated R-value
- ISO 9001:2008 Registered Firm Assures consistent quality when product is received
- Expansion and Contraction Reduced or eliminated
- Condensation Reduced or eliminated
- Low Shrinkage
- High Solar Reflectance
- High Emittance
- Low Dry Fall Rate
- Foam Encapsulator / UV Blocker
- Max White Brightness Can be tinted any color or painted over

Use ThermaCote[®] to seal the "Envelope" of any residential or commercial structure and thereby reduce to a minimum the loss of energy through the structure. Apply ThermaCote[®] on roofs (including existing or asphalt shingles) to repel the radiant energy of the sun and dramatically lower the roof and attic temperature and decrease the heat island affect of dark roofs. Add Therma-Cote[®] to both the interior and exterior walls of a building to improve the building "sealant" quotient, reduce and/or eliminate thermal bridges and enhance the effectiveness of base load insulation; Insulate any exposed piping (geothermal hydronic copper infrastructure) to keep the heat in, ensure protection from over exposure and to eliminate condensation.

Apply ThermaCote[®] to:

- modular classrooms
- mobile homes
- primer/topcoat on sheetrock
- plastic
- concrete
- steel containers

- steel
- wood
- storage tanks
- silos
- R/V and camper tops, cars, trucks, buses
- glass, skylights
- steel beams and framing
- railroad cars
- boat interior hulls
- race cars
- trailers with heat sensitive gear

Use for control of corrosion, condensation, heat retention and to reduce or eliminate hot/cold transmission (Thermal Bridging) into interiors. ThermaCote® is the solution anywhere hot or cold presents a problem to be solved.