



ThermaCote®

SPRAY-APPLIED THERMAL BARRIER
WATERPROOFING, PRIMER & TOP COAT, ALL-IN-ONE APPLICATION

ADVANCED CERAMIC TECHNOLOGY SAVES ENERGY
SUPERIOR CORROSION PROTECTION
FOR COMMERCIAL, RESIDENTIAL, EXTERIOR AND INTERIOR

THERMACOTE CLIENTS

United States Army
Coca-Cola
BASF
ARAMCO
ABB
Samsung C&T
Exxon
Shell
NASA
Johnson Controls
United States Navy
Nestle
Northrop Grumman
Princess Cruise Lines
Dole, Chiquita
Budweiser Racing
Dubai Airports Company
SIKORSKY
State Farm Insurance
Thermo King
AMMROC
Emirates Airlines
Baker & Hughes
Hartsfield International Airport
UAE Air Force
GAC Logistics
Habitat for Humanity
United States Coast Guard
Kharafi National
Atlanta Gas Light Company
Siemens
Kempinski Hotel
International Drilling Co
University of Georgia
University of Mississippi
Margaritaville Beach Hotel
Moorehouse College
Alabama State Department of Education
HCA Midwest Medical Research Center
Walker Construction
XERVON

RATINGS AND ACCREDITATIONS

Intertek ISO 9001:2008
UL® Classified
USGBC Member
Abu Dhabi Quality & Conformity Council
Better Business Bureau Member
CRRC Rated Product
MAS Certified Green
US Department of Commerce
Collaborative for High Performance Schools
ENERGY STAR Certified Roof Product



**tested,
approved**

EU ISO 9869 ENERGY MEASUREMENTS

Electricity Reduced By 38%

SI Units

R Value up to 1.87 m²K/W

U Value up to 0.53 W/m²K

Estimated Average Lambda Value 0.0026

Imperial Unit

Variable R Value to 11

Variable U Value to 0.09 Btu/(h ft²° F)

*Report Available By Request

ISO 9001:2008 QUALITY MANAGEMENT SYSTEM



Intertek

CALIFORNIA DEPARTMENT OF PUBLIC HEALTH INDOOR AIR QUALITY

Adds No Harmful VOCs To The Indoor Or Outdoor Environment



UL 723 CLASS (A) FIRE RETARDANT

Flame Spread Of 0 (zero)



invention and innovation

ThermaCote, Inc. was founded in 1985 to manufacture a durable and energy saving thermal barrier for the construction industry. During the 1970s foam insulation products were used without any real knowledge or understanding about VOCs (volatile organic compounds) and off-gassing chemical fumes within the interior environment. It was decided that the most environmental and economical products could be developed and insulating coatings were the primary objective. The search for better materials led to the creation of a lightweight concrete block that floated on water while maintaining its structural qualities, and this discovery led to the invention of ThermaCote.

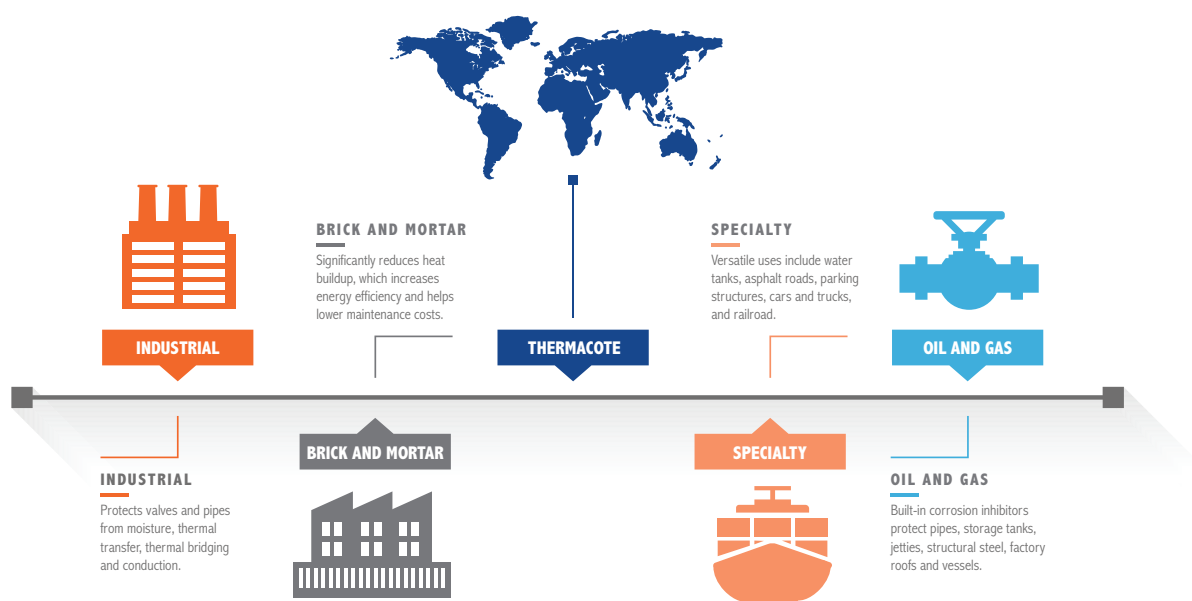
Advanced spray-applied ceramic technology with ultra-low VOCs. Seals the envelope of commercial, residential, interior and exterior structures and saves energy.

Thermal Barrier
Air Permanence
Breathability
Emissivity
Corrosion Inhibitor
Ultra Lightweight
Ultra Low VOCs
Waterproof
Fire Retardant
Elasticity
Adhesion

SERIOUS PERFORMANCE

ThermaCote is a high-performance thermal barrier coating for commercial, residential, exterior, and interior applications. The advanced ceramic technology conserves energy, looks just like flat latex paint when dry, and has ultra-low VOCs (5.3 grams/liter). ThermaCote spray-applied coating is Certified Green to California's standard (DHS 01350) for indoor air quality in classrooms and offices,

an ENERGY STAR qualified product, and is also a CRRC (Cool Roof Rating Council) "Rated" product. With built-in corrosion protection, ThermaCote is the perfect primer or topcoat on new or existing sheetrock, wood, glass, plastic, concrete or steel projects, and helps seal the envelope of any structure. A UL® Classified product with a 0 (zero) Flame spread, ThermaCote is the professional's choice.





the spray-applied thermal barrier

ThermaCote is a paint-like single component spray-applied water-based acrylic material that incorporates Ceramic Technology. Its ease of application for new or retrofit construction allows for the performance enhancement of insulation of Floors, 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.

ThermaCote is a superior spray-applied reflective thermal barrier which in its simplest definition can be described as an 'energy saving

paint'. When dry, ThermaCote looks just like any flat latex paint, yet it helps to significantly conserve energy. Technically, ThermaCote is a high performance thermal barrier, which incorporates ceramic technology to prevent the transfer of heat (or cold). It also has corrosion protection and control properties in addition to condensation control.

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 this provides an environment close to 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.

ThermaCote is a high performance thermal barrier, which incorporates ceramic technology to prevent the transfer of heat or cold and minimise solar and radiant heat gain.

industrial

ThermaCote incorporates advanced ceramic technology to prevent the transfer of heat and cold and save energy and maintenance costs in industrial applications.

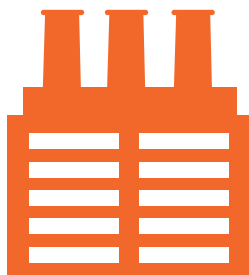


WAREHOUSES, HVAC, CHILLERS, STEEL, ALUMINUM, STEAM LINES, STEEL BEAMS, FRAMING, STEEL CONTAINERS, SILOS, PIPES, VALVES

ThermaCote is the perfect solution for insulating valves and pipes in an industrial line. For hot applications ThermaCote can be applied while the unit is operational and at temperatures to 149C/300F and with special training up to 210C/410F. Since ThermaCote incorporates corrosion inhibitors, no primer is necessary in most cases.

Industrial applications utilizing ThermaCote are applied in approximately 0.25mm coats, allowing for complete drying before recoating until proper thickness or 'build' is achieved. Without complete drying between coats, moisture encapsulation will ultimately result in product failure. Cryogenic applications must be performed at ambient temperature and fully dried and cured before returning to cold service.

Protects against moisture, thermal transfer, thermal bridging and conduction, and self primes. Apply directly to freshly blasted steel as well as stainless steel and aluminum.



INDUSTRIAL

INDUSTRIAL

Protects valves and pipes from moisture, thermal transfer, thermal bridging and conduction.



brick and mortar

ROOF AND WALL SYSTEMS, BRICK, CEMENT BLOCK, CONCRETE, WOOD, SHEETROCK, TILES, ASPHALT

On exterior surfaces ThermaCote is a weather barrier, providing additional insulation and a breathability component that allows entrapped moisture to escape. With ThermaCote a building or structure will perform closer to its assigned “R” value throughout its life. On interior surfaces ThermaCote acts as an air barrier sealing leakage and entrapping cold or warm air. This significantly reduces the run time for air conditioners or heaters, produces energy savings, and reduced maintenance costs.

ThermaCote reflective and emissivity attributes will significantly reduce heat build up, increase energy efficiency and reduce maintenance costs. ThermaCote can be used as a waterproofing solution, primer & top coat. ThermaCote will aid in insulation efficiency, reduce application time and costs. ThermaCote will also remove the need to regularly repaint.

The product is non-toxic, environmentally friendly, and approved under the California Department of Public Health’s standard for indoor air quality in classrooms and offices.

Easy to use ceramic-based insulation (not a “reflective paint”) for new or retrofit construction. Breathability allows entrapped moisture in wall systems to escape. Reduces expansion and contraction, minimizes leaks and damage, and adds life to buildings.

BRICK AND MORTAR

Significantly reduces heat buildup, which increases energy efficiency and helps lower maintenance costs.

BRICK AND MORTAR





oil and gas

PIPES, STORAGE TANKS, JETTIES, VESSELS, STRUCTURAL STEEL, FACTORY ROOFS

ThermaCote was the first fluid applied water based coating used to combat CUI (corrosion under insulation) in the mid-80s. With built in corrosion inhibitors ThermaCote can protect fresh blasted steel from 'flash' or surface rust by applying it as a primer & topcoat all in one product. Areas that already have corrosion issues or that are extremely prone will require an additional primer prior to application. ThermaCote has been used in North America for decades to prevent heat loss on industrial pipe systems (oil pipelines) which carry materials that must maintain temperatures at or above 325F/161.5C.

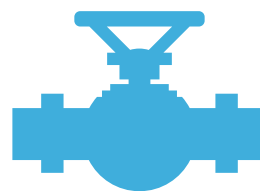
ThermaCote is a product that protects substrates, and personnel from contact burns. As well, this product delivers all of the insulation needed in most cases for piping, tanks and other vessels for temperatures up to 410F/210C in continuous operation while systems are hot.

LNG Gas 'balls' (storage tanks) and all other related equipment can benefit from the lowered surface temperatures which will remain closer to the ambient temperature conditions with ThermaCote. A simple 1-1.5mm thickness is all that is needed to control temperature 'heat gain'. ThermaCote on a substrate controls the temperatures inside a LNG gas system during storage and transport as well.

Can be applied to surfaces as hot as 410° F/ 210C. No harmful fumes emitted at any point before, during or after application. Flame spread of 0 (zero).

OIL AND GAS

Built-in corrosion inhibitors, personnel protection, and consistent flow through piping.



OIL AND GAS

specialty

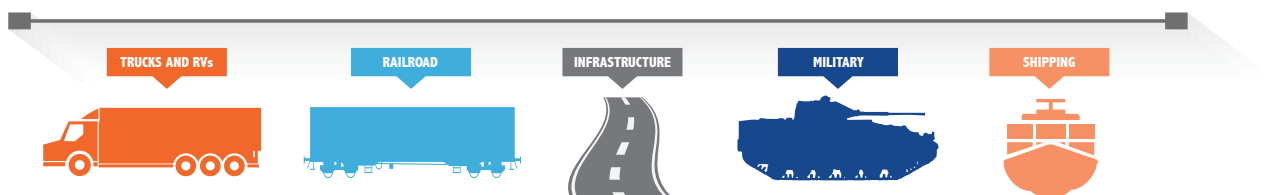
ThermaCote is half the weight of water, has low shrinkage and seals air leaks.



COLD ROOMS, WATER TANKS, ROADS, POOL DECKS, TRUCKS, CARS/RACE CARS, BUSES, CAMPERS/RVs, FEED CONTAINERS, RAILROAD CARS, BARNS/STABLES, CEMENT DRUMS, INTERIOR BOAT HULLS, PLASTIC, GLASS, SKYLIGHTS

ThermaCote is versatile and has many different uses, from industrial applications, interior and exterior of buildings and structures, and specialty applications including parking structures, asphalt roadways, refrigeration vehicles, etc. ThermaCote will adhere to all and any other coatings with no special abrading or primers necessary to achieve adhesion.

Rooftop water storage tanks are another specialty application as these surfaces become heated when exposed to light and can have excessive heat build up. Once the sun sets, this heat build up is slowly released back into the surrounding air and environment. This contributes to elevated temperatures in urban areas and increases the demand use of energy to cool surrounding buildings and structures. ThermaCote has excellent traction. The product has been tested to globally recognized traction standards; Australian pool deck, McDonald's slip standard and the international runway standard.



thermacote data

SPRAY-APPLIED WEATHER BARRIER, SUPERIOR CORROSION PROTECTION

CHARACTERISTIC	DESCRIPTION		
Appearance	Creamy Liquid		
Color	Bright White	Contact us for the availability of Cool Colors	
Coverage (@20 mils)	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	0.594		
Thickness (typical)	0.020" (0.5 mm)		
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%		
Weight per Gallon	5 lbs	(0.6 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	
Insulation	ISO 9869	Variable R & U Value	Energy Usage Reduce up to 38%
	SI Units	R Value up to 1.87 m ² K/W	U Value up to 0.53W/m ² K
	IMPERIAL Units	R Value = 11	U Value = 0.0909090 Btu/(h ft ² °F)
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	

Ultra Low VOCs, MAS Certified Green DHS 01350

Certified R Value-Enhances the Performance of Insulation Systems

Energy Star Qualified Product, UL® Classified

Outperformed R20 (R-5/in) Styrofoam

California Department of Public Health Indoor Air Quality approved

thermacote colors

ORIGINAL BRIGHT WHITE AND 18 'COOL' CUSTOM COLORS



Sand Beige #26



Buff #45



Latte #47



Oyster #42



Slate #43



Dusk #25



Cappuccino #41



Mocha #40



Charcoal #24



Primrose #39



Sienna #46



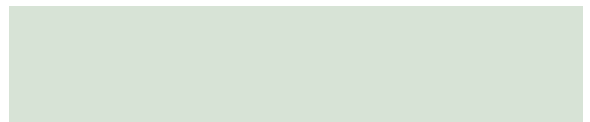
Silk Grey #49



Mountain Fog #48



Light Sky #37



Sonoma Green #38



Miami Green #32



Buttercup #44



Safety Yellow #23

Advanced Ceramic Technology Seals the Envelope of Any Structure

Insulates, Protects and Saves Energy in Hot and Cold Climates

Cool Roof Rating Council (CRR) Rated Product

Easy to clean

ThermaCote®

SPRAY-APPLIED THERMAL BARRIER

Reduces Heat Gain: Saves Energy

Easy Care: Reduces Maintenance Costs

Non-Toxic Easy to Apply: Eliminates Health Risks of Other Insulation Material



Emirates ThermaCote
P.O. Box 9806 Sanaiyah Musaffah,
Abu Dhabi, United Arab Emirates
+971569443345
contact@thermacote.me
thermacote.me

Xervon Industrial Services LLC
P.O. Box 47616 Abu Dhabi,
United Arab Emirates
T: +971 25500670 F: +971 25504133
abudhabi@xervonmena.com
xervongulf.com