Therma Cote®

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

> THERMAL BARRIER AIR PERMANENCE BREATHABILITY EMISSIVITY CORROSION INHIBITOR ULTRA LIGHTWEIGHT ULTRA LOW VOCS WATERPROOF FIRE RETARDANT ELASTICITY ADHESION

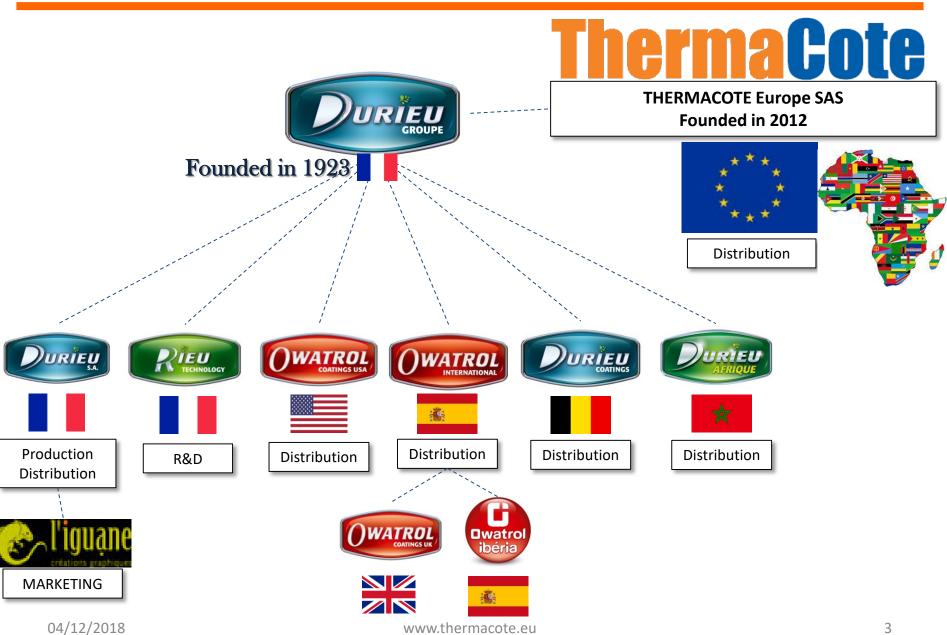


Protects valvs and pipes from moisture, thermal transfer, thermal bridging and conduction. Significantly reduces heat buildup, wich increases energy efficiency and helps lower maintenance costs. Versatile uses include water tanks, asphalt roads, parking structures, cars & trucks, and railroad. Built-in corrosion inhibitors protect pipes, storage tanks, jetties, structural steel, factory roofs & vessels.





Developed & Created in 1985 Atlanta - Georgia



They trust in **ThermaCote** [®] :



ThermaCote meets all the criteria for good insulation:



ThermaCote is an insulating paint & thermal barrier

- •ThermaCote Thin Insulation offers excellent thermal insulation. One of its main advantages lies in the gain of living space that it allows, for an efficiency equivalent to a conventional insulation.
- •ThermaCote is a **thin reflective insulator**, using the principle of thermal reflection to make any surface a "mirror with heat". The heat of the heating will be reflected to stay inside your home in winter, and reflect the heat outdoors in the summer.
- As a survival blanket for your home, ThermaCote[®] improves the thermal insulation of the walls while treating most of the thermal bridges, bringing you comfort and energy savings.

ThermaCote is an anti-humidity paint

- •ThermaCote will remove most of the residual moisture from the wall, knowing that moisture is an aggravating factor of heat loss and the condition of your home.
- •If water infiltration and condensation are dangerous for your home, humidity in the surrounding air can also lead to the development of fungi, mildew, mold and mites.
- •As many risks for your health and that of your family, since these undesirable ones cause particular asthma and allergic reactions.
- •ThermaCote is like a Gore-Tex protection for your home. It protects from the outside moisture but allows to escape that coming from inside and supports, from where a restoration found between 3 and 6 months after the application.

ThermaCote enhance airtightnessa

- •ThermaCote enhances the airtightness of the building, which is an essential key to thermal performance and insulation.
- •High performance air tightness is essential for energy-efficient construction and optimal comfort in summer and winter.
- In addition to thermal losses generating discomfort and excessive energy consumption, parasitic air leaks are also a source of pathologies damaging to the building structure (moisture, mold, degradation of coatings, etc.).
- •The airtightness of the building envelope is therefore also an essential stake for its conservation and durability.

Other Benefits of ThermaCote

•Economic

- Respect the environment
- Flexible
- •All suports
- •Speed of implementation
- •No need to leave the building
- Lightweight
- phonic
- Increase real estate value
- Universal
- •No loss of space
- •No architectural changes
- Possible in limit of ownership
- Possible at the edge of the street
- AirLess Application
- •10 years warranty

Industrial achievements with ThermaCote[®] :

ThermaCote can be applied on many different pieces of equipment and machinery in any number of environments and facilities. These coatings are designed to thermally insulate, prevent Corrosion Under Insulation (CUI), provide energy savings and protect personnel from burns and heat-related injuries.



External storage



Steam pipe & valve



Oil & Gaz



Airport gateway



container



AC system



refrigirated chamber or trailer



machine

Reduces surface temperatures and increases usable space

Replacing fiberglass with ThermaCote reduces pipe sizes and increases usable space. ThermaCote can be applied directly to hot surfaces with minimal surface preparation and without plant shutdown.



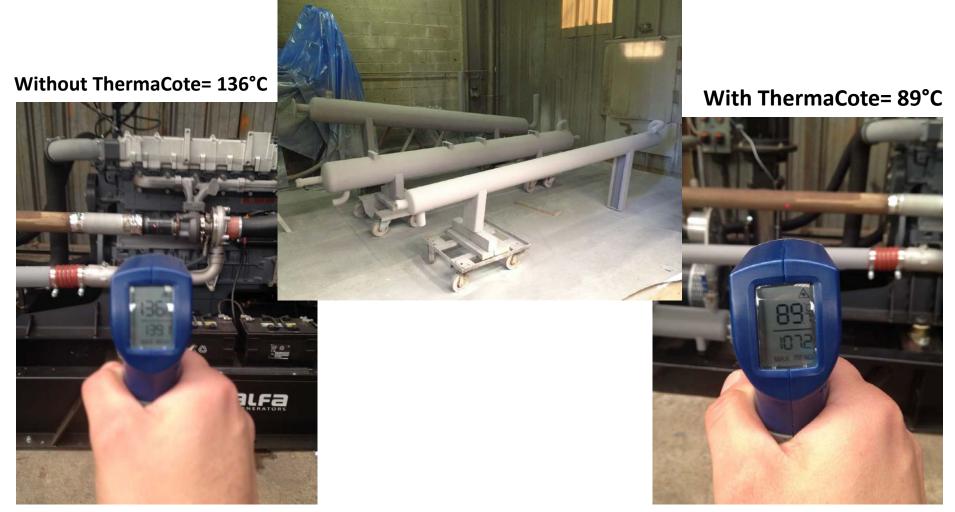
Steam pipe at 200°F / 93°C, on washing machine for Coca-Cola Bottling Co in Atlanta **ThermaCote Solution:** Insulation for employee safety and energy conservation

"The thin layer of ceramic insulation you applied to 93C plus degrees steam pipe on our washing system is performing amazingly well. I couldn't believe that I could place my bare hand on it without injury." Mickey Fulcher, Maintenance Manager.





Exhaust tube and pipe insulated with Thermacote On a high-efficiency generating sets. Using a thermodynamic cycle using thermal loses engines, to reduce fuel consumption. With ThermaCote a thermal difference of 47°C





Due to curve and form it's not possible to insulate with traditional material Initial surface temperature : 172°C





With 0,5 mm of ThermaCote Surface Temperature is at: 135°C





With 0,7 mm of ThermaCote Surface Temperature is at: 85°C



04/12/2018



With 1 mm of ThermaCote Surface Temperature is at: 69°C







Costly maintenance repair exits when insulation is removed and an outage takes place. Costs of up to \$140,000.00 per hr. exist to the end user when systems are not operating. Most valves are uninsulated due to these losses incurred. Insulating valves is simplified with ThermaCote and is positively maintenance friendly. ThermaCote and their Certified Applicators work hand in hand with the end-user's maintenance teams. ThermaCote being applied at 1mm to reduce existing temperature of 172°C to less than 70°C. If maintenance is needed, insulation will not be breached.







Reduces surface temperatures and increases usable space

ThermaCote conserves energy by containing the heat while reducing the surface temperature providing safety and reducing risk of burns. In addition, ThermaCote serves as a protective coating against corrosion eliminating problems from saturation and sagging which are typical characteristics of fiberglass.

200 150 100 50 0 0,5 1 1,5 2 0 2,5

Delta T in Celsius / mm Thickness

Oil & Gaz achievements with ThermaCote® :

"Applied to one oil well pipe line in Florida with temperatures exceeding 130 degrees. With ThermaCote temperature was reduced by 38 degrees plus. Previously Exxon had problems keeping any type of paint coating on this well, because of extreme temperature."



Oil & Gaz achievements with ThermaCote[®] :

Shell Western has also used ThermaCote to an oil well with highly concentrated heat with temperatures reduced by at least 100 degrees."

"We have applied ThermaCote on a metal office building for Shell Western E & P, Inc. Monitoring the building the temperature dropped 6 degrees. We also applied 0,5mm of ThermaCote to the bottom of metal with eyewitnesses the temperature dropped 3 degrees within a hour."



Oil & Gaz achievements with ThermaCote® :





"Since our work was done we have no further leaks and have reduced cooling costs considerably. It is really a fine product that performs as promised." Robert M. Herring, Atlanta Gas Light Company





ThermaCote on steam traps, valve bodies, pipe flanges or even boiler fire doors Client: HCA Midwest Health healthcare in Kansas City "Note to express my amazed high level of satisfaction. I use the product for areas where standard insulation is difficult to near impossible-to-apply areas frequently access such as steam traps, valve bodies, pipe flanges or even boiler fire doors...... I am retaining enough heat in my equipment to lower the room temperature approximately 20 to 30 degrees." Aaron Robison, Property Manager, Health Midwest Office Facilities Corporation

External storage, tank cuve with **ThermaCote**[®] :

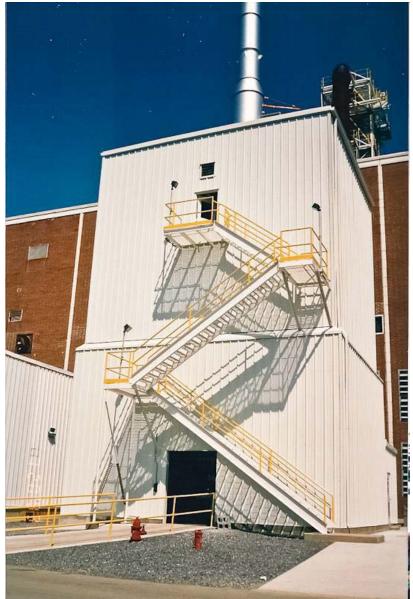




Cereal tank and Conveyor with **ThermaCote**[®] :







04/12/2018

Roofs & Metal Buildings with ThermaCote[®]:

A radiant heat barrier that provides insulation and UV protection

One of the excellent uses for ThermaCote is a roof coating. The product forms a radiant heat barrier providing insulation qualities and protection from ultra violet rays. In addition, the ceramic insulating properties keep heat expansion and cold contraction of metal roofs to a minimum, thus, eliminating many causes of water damage, uncomfortable wind drafts or costly maintenance problems.



Industrial roof achievements with ThermaCote® (Sweden): click on the image

HVAC Ductworks / Hot Air Ducts with **ThermaCote**[®] :

Eliminates radiant heat and impedes condensation in air ducts

ThermaCote is an excellent application for insulation on HVAC Ductwork and Hot Air Duct. The product eliminates radiant heat on hot duct and impedes condensation on cold air duct. In addition, ThermaCote contains the temperature inside by controlling BTU losses Furthermore, the elimination of fiberglass reduces the size of space needed for installation and totally eliminating hiding and breeding space of insects and rodent particularly in the food and beverage industry.







www.thermacote.eu

Bts cabinet, electrical equipment, electronic enclosure with **ThermaCote**[®] :



Before

After







Rail, train and other Industry with **ThermaCote**[®] :

Protect cars from corrosion, hazardous chemicals, and weather

ThermaCote has become very beneficial to the railway industry by providing a product that would help protect car surfaces from corrosion, hazardous chemicals, and weather conditions. It is also known to help smooth-out interior car surfaces for faster removal of content. And the cosmetic aspects of the coatings can't be overlooked when working to achieve the functional goals.







Description / Initial Condition:

Test for application of ThermaCote reflective insulation was carried out on SCADA Container, on a non-air conditioned containers and glass area was covered.

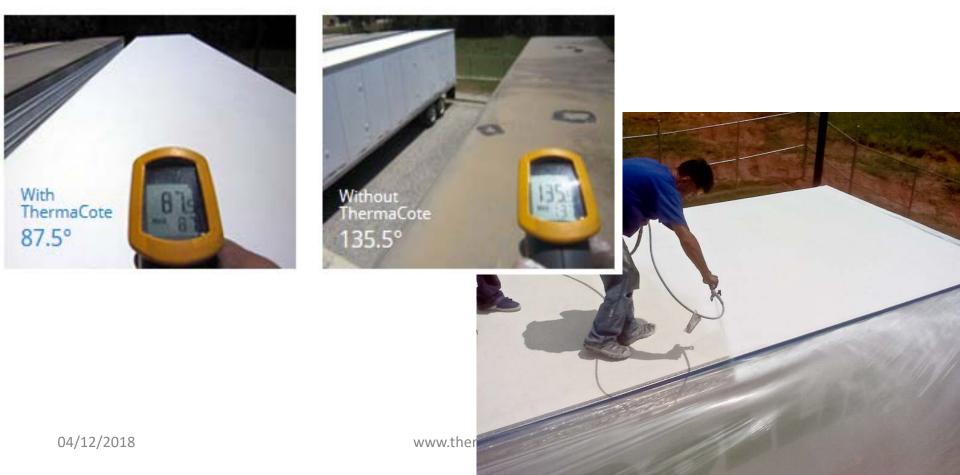
	ThermaCote container	Jotun container	Delta of Température
Side wall exposed to sun	40.56°C	46.11°C	5,55°C
Top side exposed to sun	47.78°C	61.67°C	13,89°C
Average Temperature inside	38.89°C	42.78°C	3,89°C

Refrigerated Warehouses / Trucks / Trailers achievements with ThermaCote® :

Insulation that retards condensation and prevents corrosion

ThermaCote differs from competitive insulation products because it has no air spaces only tiny ceramic particles. These ceramic particles reflect all energy rays hot or cold; therefore, maintaining temperatures as needed in cold storage. Additional benefits of ThermaCote over standard insulators is its ability to retard condensation and prevent corrosion.

With ThermaCote on a refrigerated truck trailers you can save more than 30% of gasoline



Marine Industry with ThermaCote[®] :

Increase fuel economy and performance while decreasing harmful emissions

ThermaCote has become very beneficial to the marine industry by providing a product that would help increase the speed and fuel economy of their vessels while also decreasing harmful emissions.

Applying ThermaCote on engine parts significantly increases performance and life of the parts. More importantly, their coatings have been successfully proven to reduce harmful emissions – an unprecedented breakthrough to help combat this EPA-enforced issue plaguing the marine industry.







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