ThermaCote®

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

INDUSTRIAL

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

BUILDING

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

SPECIALITY

Versatile uses include water tanks, asphalt roads, parking structures, cars & trucks, and railroad.

OIL & GAS

Built-in corrosion inhibitors protect pipes, storage tanks, jetties, structural steel, factory roofs & vessels.

Developed & Created in 1985 Atlanta - Georgia

Our company Profile:

ThermaCote

DURIEU GROUPE

Founded in 1923

THERMACOTE Europe SAS
Founded in 2012

Distribution

DURIEU S.A.

Production
Distribution

RIEU TECHNOLOGY

R&D

OWATROL COATINGS USA

Distribution

OWATROL INTERNATIONAL

Distribution

DURIEU COATINGS

Distribution

DURIEU AFRIQUE

Distribution

l'iguane créations graphiques

MARKETING

OWATROL COATINGS UK

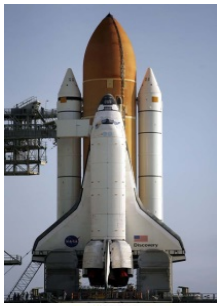
Owatrol ibéria

ThermaCote is an universal insulating coating:

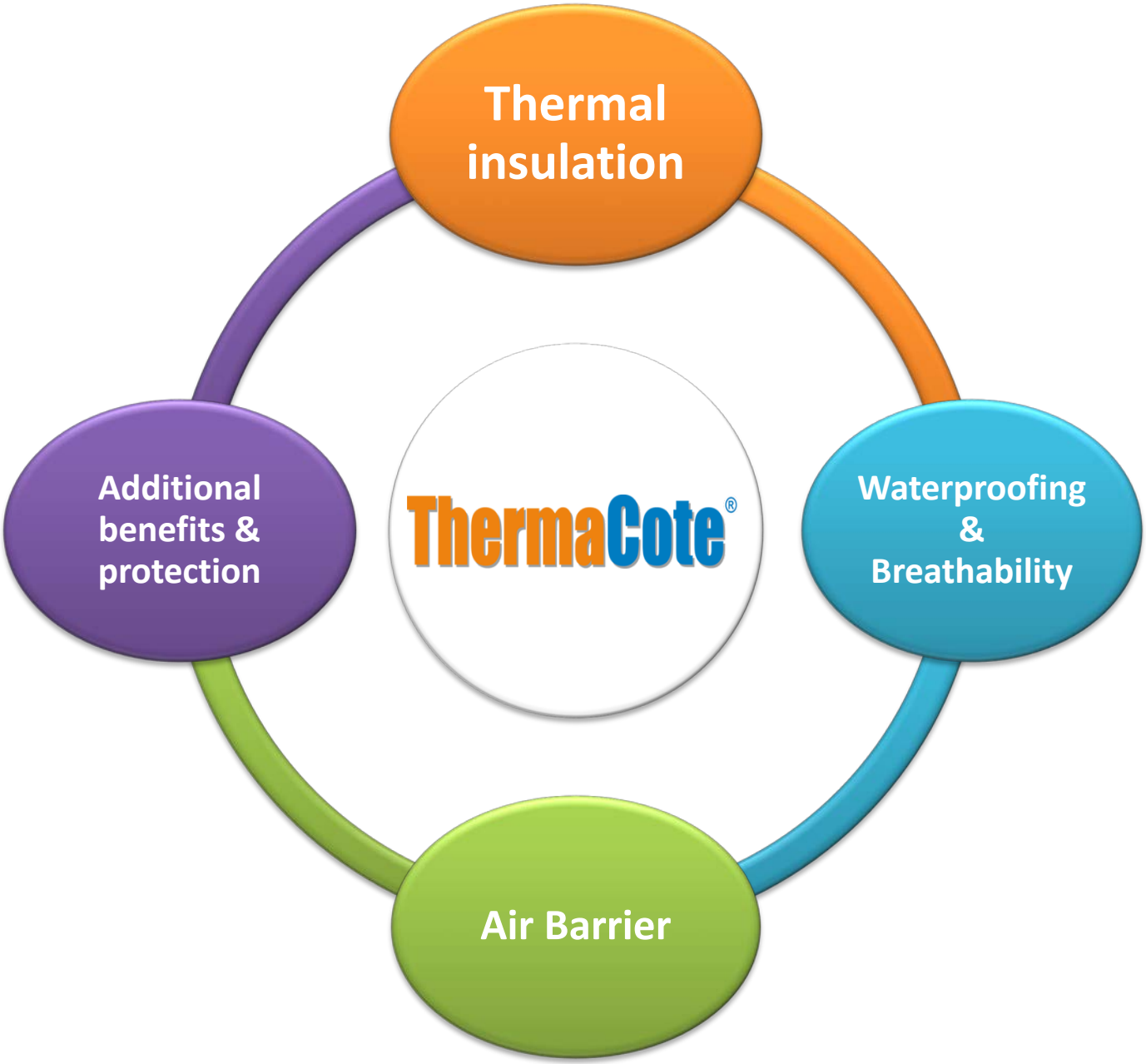
ThermaCote

- Wall
- Roof
- Industrial

ThermaCote® is a high performance thermal barrier that uses ceramic technology to prevent the transfer of heat or cold, which comes in a liquid sealant form endowing it with a host of additional useful properties.



ThermaCote meets all the criteria for good insulation:



Les caractéristiques de ThermaCote:

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

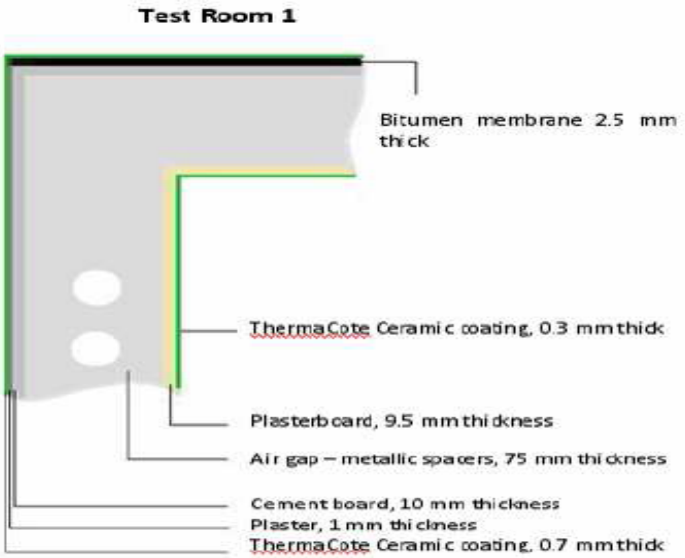
ThermaCote : Thermal protection and summer comfort

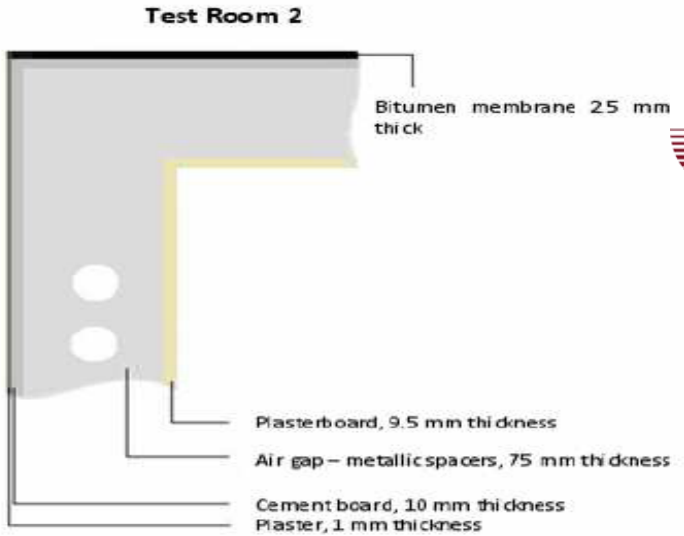
ThermaCote keeps the place and its occupants cool despite the outside heat, thus limiting the use of air conditioning.

38% Energy saving withThermaCote :

Norme: EU ISO-9869	Reduced energy consumption of 38%	R Valeur jusqu'à 1,87m²K/W	U Valeur jusqu'à 0,53W/m²K

Test according to standard: **EU ISO 9869**: This measurement protocol, study and test was carried out in **Europe** by **CRES** (Center for Renewable Energy Sources and Saving), equivalent in Greece of **ADEME**, during the summer of 2015 in a Mediterranean climate..





КАПЕ
CRES

WithThermaCote

energy consumption= 35,9 kWh

Save to 38 %

Without coating

energy consumption= 57,8 kWh

ThermaCote and summer comfort:

By reducing the temperature of the walls or roofs by more than 37% between the outside and inside surfaces, ThermaCote allows you to **win some degrees**, more than precious in case of hot weather for you to get a **better summer comfort and avoid the use of the air conditioner**.

At a time when Europe has reach an absolute record of hot temperature, ThermaCote ® is the solution to anticipate these hot weather and **reduce the temperature of his house in summer**.

On walls or roof exposed to infrared solar rays, surface temperatures can reach extreme levels as shown below. This experiment demonstrates **the reduction of solar heat transfer** in the walls or roof.

ThermaCote thermal test				
Outside Temperature	60,18 °C	70,14 °C	80,01 °C	90,04 °C
Underface temperature	37,41 °C	43,29 °C	50,38 °C	56,41 °C
Delta T	***22,77 °C***	***26,85 °C***	***29,63 °C***	***33,63 °C***
Thermal Gain in %	***37,84%***	***38,28%***	***37,03%***	***37,35%***

Type de mesure et expérimentation: application d'une couche de ThermaCote dune épaisseur de 5/10èmes de mm sur une plaque de tôle de 3mm.

Source de chauffage: rampe infrarouge, Mesure du transfert thermique directe, précision /tolérance: 1/10ème de degré.

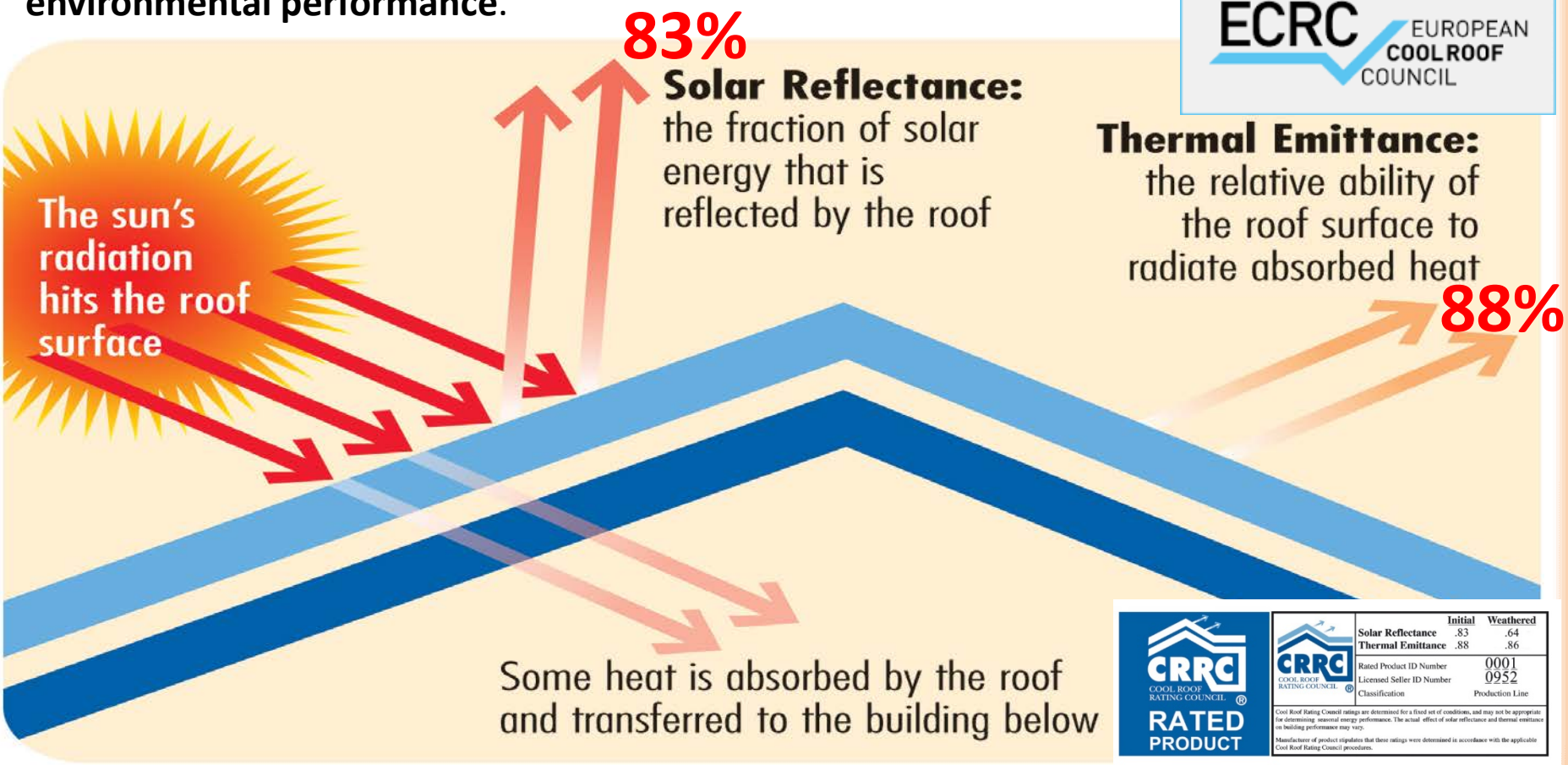
Test et Mesure réalisé par: CRESTEB

CRESTEB
Centre de recherches et d'études scientifiques sur la thermique de l'enveloppe du bâtiment

AEREBAT
Architectes & Experts en Rénovation Energetique du Bâtiment
Bâtiments Passifs-Positifs -Innovation

ThermaCote Accredited as roof insulation by the **European Cool Roofs Council**:

After being a partner and recognized by the Cool Roof Rating Council for many years in USA, **ThermaCote** is also a partner and accredited product by the European Cool Roofs Council (ECRC) which is a further recognition of its thermal capabilities.
The ECRC is an independent agency that tests, measures and compares the reflective properties of rooftop products to minimize heat loss. ECRC-approved products limit solar heat gain by keeping roof surfaces cooler under the sun to **optimize energy and environmental performance**.

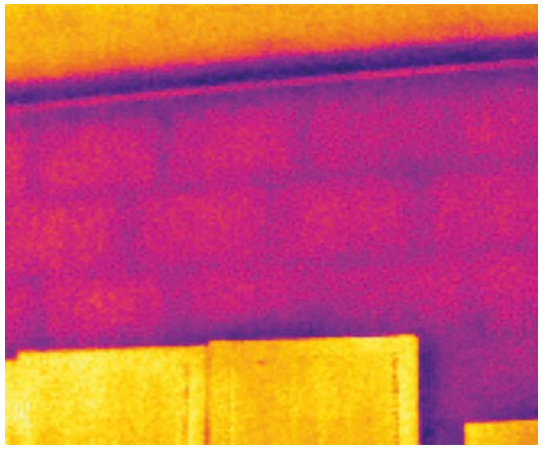


Principle of the thermal barrier **ThermaCote** in winter:

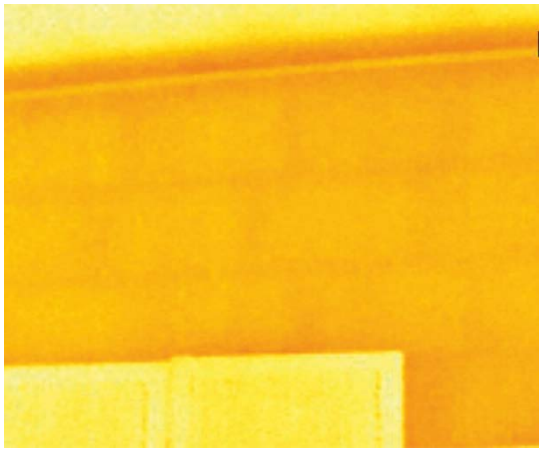
Because of its high reflection capacity, the heating heat will be reflected to stay inside your home in winter.

ThermaCote en action:

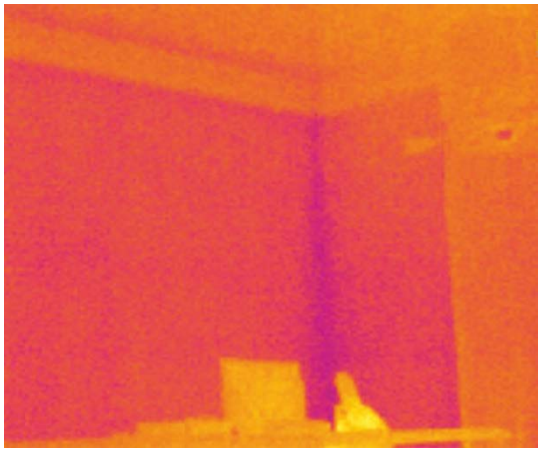
CéVeS
Conseils et Etudes pour la Valorisation de l'Environnement et de la Sécurité



BEFORE



With ThermaCote®

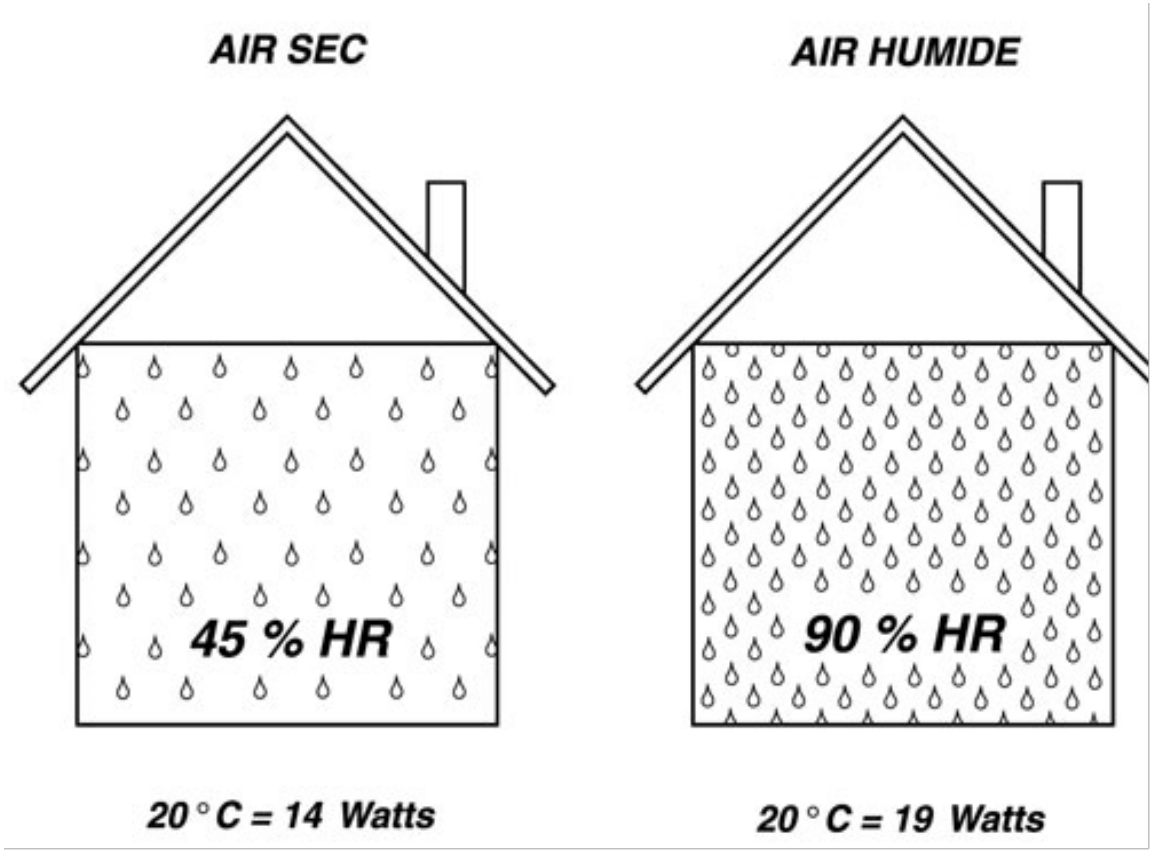


ThermaCote en action:

Sources of external humidiy &moisture:

ThermaCote is an anti-humidity paint = Energy saving

ThermaCote naturally extract moisture away from the structure. ThermaCote cleans the building, extends its life and significantly improves its thermal performance.



- The action of ThermaCote: remove most of the residual moisture from the wall, knowing that humidity is an aggravating factor of thermal transfer, microbial development and responsible for pathologies that are harmful to the frame structure (humidity, mold, degradation coatings, etc.)

ThermaCote - Anti-Humidité = Amélioration de la résistance thermique d'un mur

ThermaCote improves the thermal resistance of a wall, in situ measurements made by CRESTEB

Centre de recherches et d'études scientifiques sur la thermique de l'enveloppe du bâtiment

AEREBAT Architectes & Experts en Rénovation Energetique du Bâtiment Bâtiments Passifs-Positifs -Innovation

- Location: Alençon region - Year of construction: 1980 (34 years)

Composition of the wall: 15 mm cement coating, 200 mm hollow block, 100 mm Lambda 0.046 glass wool (new value), plaster boulder coated with plaster 50 mm.

- Finding: Strong hygrometry in the wall, cold felt.
- Value calculated as new: R = 2.527.

- Value mesure before coating: **R = 1.59** (liée à la vétusté et à la forte hygrométrie).
- **Measured value after work (12 months after ThermaCote application) R = 3.08**
- **Normal measured hygrometry.**

- **Findings of CRETEB** : *"We can formally highlight the undeniable ability of this coating to sanitize the support by removing moisture which gives old walls these original properties plus a coefficient of thermal resistance of 0.50 R approximately. "*

- Explications : **ThermaCote** has removed most of the residual hygrometry of the wall, knowing that moisture is an aggravating factor of heat transfer. The water vapor permeance of ThermaCote is 6.779 Perms in the inner to outer direction while it is only 3.618 Perms in the outward inward direction. It is therefore normal for the residual humidity of a wall to migrate towards the outside, **from which sanitation is found between 3 and 6 months after application.**

Extraction of moisture, the solution**ThermaCote** ®

ThermaCote remove most of the residual hygrometry of the wall, knowing that moisture is an aggravating factor of heat transfer. The water vapor permeance of ThermaCote **is 6.779 Perms in the inner to outer** direction while it is only 3.618 Perms in the outward inward direction. It is therefore normal for the residual humidity of a wall to migrate towards the outside

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In addition to acting as a thermal insulator, ThermaCote ® is specially formulated to prevent condensation and its effects

If the indoor air passes through the thermal insulation without being braked, it is would cool more and more as it approached the outside and eventually formed condensation.
However, this condensation may cause considerable damage to the building. Statically important building elements can decay and
lose their bearing strength.

ThermaCote ® - Anti-Humidity = Healthy Habitat

ThermaCote ® significantly improves the quality of the ambient air and guarantees a pleasant and healthy climate in the home.

- **ThermaCote** is:
  - Universal
  - Healthy
  - Anti mold
  - Hypo-allergenic
- The action of ThermaCote regulates the humidity of the support and avoids the condensation which are responsible for the proliferation of the molds.

➢ Many molds release, as secondary metabolic products, toxins, including MOCs (microbial volatile organic compounds) and spores, which are harmful to humans. Molds are at the top of the list of allergens. In this respect, MOCs or spores enter the body with ingestion of food, ie through the stomach or with breathing through the lungs. It is absolutely necessary to avoid any contact with the molds.

ThermaCote is **breathable**, it reinforces the airtightness of the building

ThermaCote reinforces the airtightness of the building. Airtightness is an essential key to energy performance,

- **High performance air tightness** is essential for **energy-efficient** construction and **optimal comfort** in summer and winter.

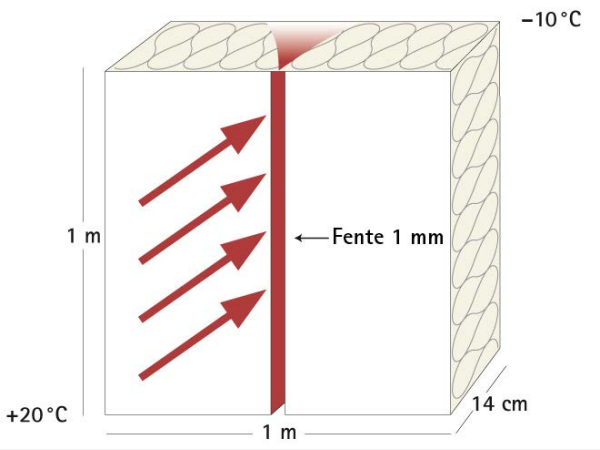
For the insulation to play its role, the envelope must be free of any air leak (a sweater full of holes will not keep you warm even if it is thick)

- In addition to thermal losses generating discomfort and excessive energy consumption, parasitic air leaks are a source of pathologies that are harmful to the structure of the building (moisture, mold, degradation of coatings, etc.).
- The airtightness of the building envelope is also an essential stake for its conservation and its durability.
- Thermal insulation separates indoor and outdoor climates. The difference in temperature between these two climatic zones tends to equilibrate by airflow. Therefore, in winter, warm air tends to escape from the building to the outside through the building. The airtight layer prevents this flow, called convection, and therefore the loss of hot air to the outside.
- But sealing is not about hermetically isolating the interior space from the outside air, as a plastic bag would do, it's about airtightness and not water vapor!

ThermaCote is **breathable**, it reinforces the airtightness of the building

ThermaCote ® reinforces the airtightness of the building.
Airtightness is an essential key to thermal performance.

- Living in a healthy habitat: the **airtightness protects** the structure of the mold, prevents the drying of the ambient air in winter and prolongs the freshness of living rooms in summer.



Comparison between sealing and non-airtightness

The Institute of Building Physics Stuttgart has studied a thermal insulation structure of 1 x 1 m, with an insulation thickness of 14 cm. The study allowed
confirm insulation performance of 0.30 W / m²K, previously calculated, with airtight performance, without any slits. On the other hand, if the same structure has a wide slot of only 1 mm in the airtight layer, the U value deteriorates and climbs to 1.44 W / m²K.

This structure therefore causes **heat loss almost five times greater** than that of the airtight structure.

ThermaCote Seals and reinforces the airtightness of the building

ThermaCote is breathable, it reinforces the airtightness of the building

ThermaCote reinforces the airtightness of the building.
Airtightness is an essential key to thermal performance.

Materials	Average leakage rate at75 Pa in L/s.m² of surface
Polyéthylène de 0,15 mm (6 mil)	no measurable leak
Polystyrène expansé de 25 mm	4,7
Revêtement de panneaux de fibres de 12 mm	1,6
Membranes de construction perméables à la vapeur d'eau	between 0.011 et 3,6
Isolant de mousse à alvéoles fermées	0,001
Mur de briques non enduit	1,6
Blocs de béton non enduits	2,1
ThermaCote	0.0001

The fields of application and different markets with**ThermaCote:**

Wall	Roof	Industrie
• Painting • cleaning • Insulation • Anti-humidity • Airtightness	• Painting • Insulation • Anti-humidity • Anti corrosion • UV protection	• Painting • Insulation • Corrosion protection • UV protection • Flame retardant • Protection of property and persons

ThermaCote liquid form compares favorably to other thermal barrier alternatives **Without loosing any space**

- Rigid panels
  - More expensive than other types of insulation;
  - Thermal bridging due to lack of seal.
- Spray foam
  - Contain hazardous chemicals such as benzene and toluene;
  - Isocyanates are hazardous;
  - Release toxic material when burned;
  - Require protection from sunlight and solvents;
  - Require protection with a thermal barrier;
  - Can shrink slightly while curing;
  - R-value will diminish with age.
- Batts and blankets (fiberglass, wool, cotton, etc)
  - Do not completely seal the cavity against air movement;
  - Still requires a vapor retarder or barrier;
  - Will settle over time, losing some of its effectiveness;
  - May absorb moisture and be hard to dry.

ThermaCote Respecte de l'Environnement

ThermaCote is based on 80% of **ceramic and water** = acrylic in aqueous phase

- Virtually no volatile organic compounds:

=>ThermaCote= 1,186 g/L , Maximum 5,3g/L (teinté)

(Directive Européenne de 2010 pour Peinture extérieur mate murs et plafonds <40g/L)

VOCs are dangerous elements that evaporate permanently with ordinary paints, contaminating the air we breathe

- Absence or little smell,
- Dry quickly,
- Less toxic than solvent phase paints,
- Cleaning with water,
- No "gaseous emissions",
- No harmful fumes emitted before, during or after use

- **ThermaCote** can be used on all types of supports:

walls, roofs, in the building and also in the industry.

- **ThermaCote** provides a healthier and more comfortable environment

ThermaCote can protect of Fire and extreme temperatures

Applicable and effective on all substrates, ThermaCote meets all the criteria of good insulation: thermal barrier insulating, anti-humidity and airtightness.

- **ThermaCote** is UL Certified
  - Propagation de flamme: 0
  - Développement de fumée: 5 (UL-723)
- **ThermaCote** is Euro Test(on OSB)
  - EUROCLASSES: D-s2,d0 (EN13501-1:207)
- **ThermaCote** can be used for cryogenic applications
- **ThermaCote** can be applied on hot surfaces up to 150 ° C and withstands up to 250 ° C (and more depending on conditions)

OSB structure panel covered with ThermaCote takes 15 minutes to burn

ThermaCote held in fire and extreme temperatures

OSB structure covered with ThermaCote that takes 15 minutes to burn

ThermaCote Cutting Edge Advantage – Durable & Lightweight

ThermaCote is the original lightweight insulation coating as **ThermaCote** pioneered these products in the mid 1980's and has been an innovation leader ever sincele, the only coating with 80% of ceramic

- **ThermaCote** is very light and does not affect the bearing capacity of the support. ThermaCote weighs only 600 g per liter from 290 to 590 g per square meter

- High ThermaCote grip and coverage is only applicable to Airless sprayers by qualified professionals on any surface
  - Without primer
  - No other finish
  - No need for additional corrosion protection
- **ThermaCote** is easy to use for new construction or renovations:
  - It improves **thermal performance** on walls and roofs
  - It reduces heating and cooling costs
  - It applies to **all substrates** (metal, concrete, plaster, wood, bricks, slates, tiles, stones, ...)

- **ThermaCote** can serve as the first **thermal envelope**. It **seals the structure** and minimizes thermal bridging.

ThermaCote is guaranteed, tested and certified

ThermaCote offers you the best guarantees: Exterior walls and roofs: 10 years.

Interior Walls: For Life, By ThermaCote Approved Applicator

ThermaCote tested and certified:

- Tested for energy savings
- Certifications: International, European and American

CE	CE
ThermaCote, Inc. 1369 Herrington Road Lawrenceville, GA 30044 USA	**ThermaCote, Inc.** 1369 Herrington Road Lawrenceville, GA 30044 USA
16	**16**
EN 1504-2 **Surface Protection Product** **Protective Coating**	**EN 1504-2** **Produit de Protection de Surface** **Revêtement de Protection**
Permeability Water Vapour : SD = 1,0m Class I	Perméabilité à la vapeur d'eau: SD = 1,0m Class I
Adhesion Strength by pull of test : = 0,8 MPa	Adhérence par essai d'arrachement : = 0,8MPa
Thermal Cycling w/o De-Icing Salt Impact: = 0,8 MPa	Adhérence après compatibilité thermique : = 0,8MPa
Capillary absorption and Permeability to water: w< 0,1 Kg/m2 . h0,5	Absorption capillaire et perméabilité à l'eau: w< 0,1 Kg/m2 . h0,5
Dangerous substances comply with 5.4	Substances dangereuses : conforme avec 5.4

CRRC COOL ROOF RATING COUNCIL RATED PRODUCT

	Initial	Weathered
Solar Reflectance	.83	.64
Thermal Emittance	.88	.86
Rated Product ID Number	0001	
Licensed Seller ID Number	0952	
Classification	Production Line	

Cool Roof Rating Council ratings are determined for a fixed set of conditions, and may not be appropriate for determining seasonal energy performance. The actual effect of solar reflectance and thermal emittance on building performance may vary.

Manufacturer of product stipulates that these ratings were determined in accordance with the applicable Cool Roof Rating Council procedures.

ECRC EUROPEAN COOL ROOF COUNCIL

CRESTEB Centre de recherches et d'études scientifiques sur la thermique de l'enveloppe du bâtiment

LNE Le progrès, une passion à partager

CLASSIFIED C UL US

INTERTEK ISO 9001:2008

QAS INTERNATIONAL ISO 9001:2008 REGISTERED FIRM

BBB

CHPS COLLABORATIVE FOR HIGH PERFORMANCE SCHOOLS Better buildings. Better students.

AQ

ICC ES LISTED

MAS CERTIFIED GREEN for a healthier indoor environment

ENERGY STAR

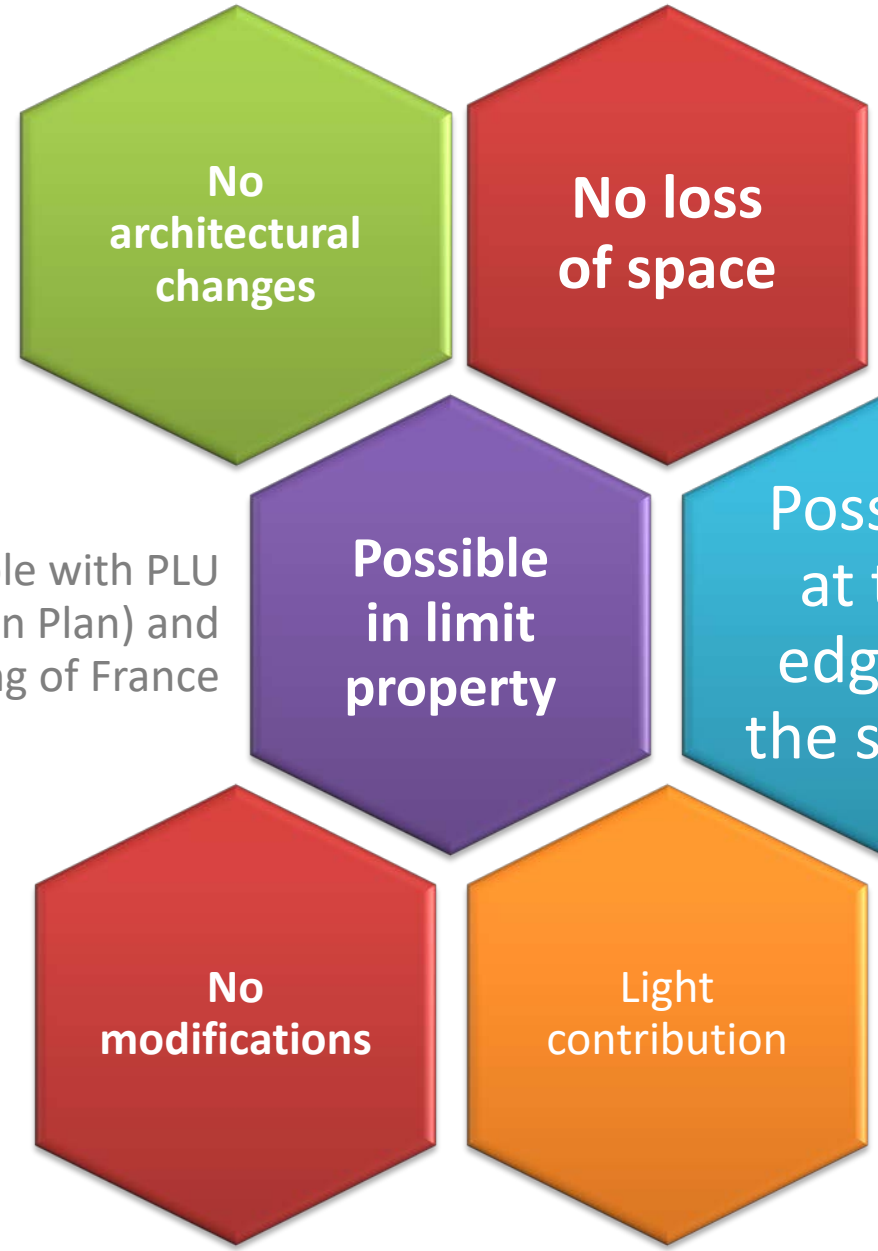
LEAD-SAFE EPA CERTIFIED FIRM

GREEN CHAMBER OF THE SOUTH MEMBER

U.S. GREEN BUILDING COUNCIL MEMBER

KILOWATT KILLER OFFICIAL BLOG OF THERMACOTE

With **ThermaCote** no modifications:



Does not increase the ground load factor on the ground

Compatible with PLU (Local Urban Plan) and building of France

No lose ligth around opening space

Other functions of **ThermaCote:**

Economic	Respect the environment	No primer
All Supports	Fast application	No need to leave the building
Lightweight	Flexible	phonic

Some realisations with ThermaCote









ThermaCote, It's our customers who speak it best ..." :

“In the summer, it's still a lot cooler. I saw myself like that summers working here and tell me: I did not get hot! ***I think it's not bad when it's 32 ° outside, to have 24 °*** *when you come back. We say to ourselves: Whew! what is it cool! Before the work, it was very hot ...”*

"The savings on heating ... I was really surprised!"
With the house insulated by the ***ThermaCote*** *coating, they* ***went from a bill of more than 300 euros to 125 euros last winter!***

"I advise people who like me have houses that are four winds, I advise them to do it, ***as well as for the cold than for the hot****."*

"I noticed one thing: the difference in temperature between the inside and the outside. I have 0.5 ° difference in the morning, ***while in the evening I have 7 ° or 8 °,*** *so the heat that is inside does not stand out. This is a sign that* ***ThermaCote*** *is valid. "*

Since the application of **ThermaCote** coating "the roof is protected from heat**. Our client has gained up to 5** ° difference "which allows it **to no longer cool at night**, and to sleep in a room with a **pleasant temperature**.

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

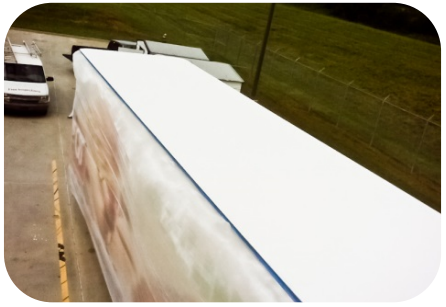
Steam pipe & valve

Oil & Gaz

Airport gateway

container

AC system



refrigirated chamber or trailer

machine

They trust in ThermaCote ® :

Steam Lines / Tanks / Boilers / Valves with **ThermaCote®** :

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.

BUCHAREST AIRPORTS®

Steam Lines / Tanks / Boilers / Valves with **ThermaCote®** :

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.

Steam Lines / Tanks / Boilers / Valves with **ThermaCote®** :

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

Without ThermaCote= 136°C

With ThermaCote= 89°C

Insulating valves with **ThermaCote®** :

Due to curve and form it's not possible to insulate with traditional material

Initial surface temperature : 172°C

Insulating valves with **ThermaCote®** :

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

Insulating valves with ThermaCote® :

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

Insulating valves with ThermaCote® :

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

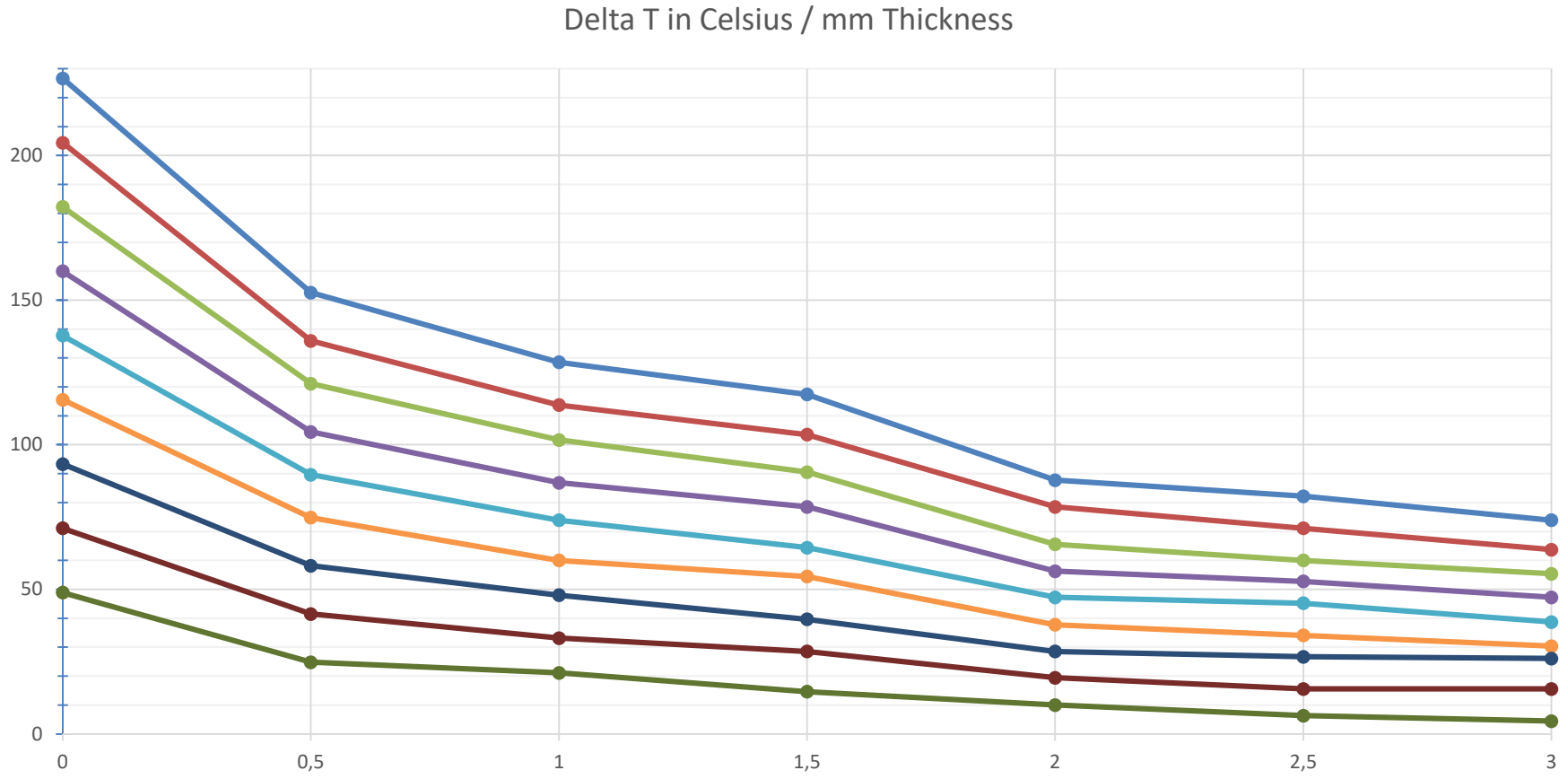
Insulating valves with ThermaCote® :

Insulating valves with **ThermaCote®** :

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.



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®** :

Atlanta Gas Light®
An AGL Resources Company

"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

HCA MIDWEST HEALTH RESEARCH MEDICAL CENTER

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

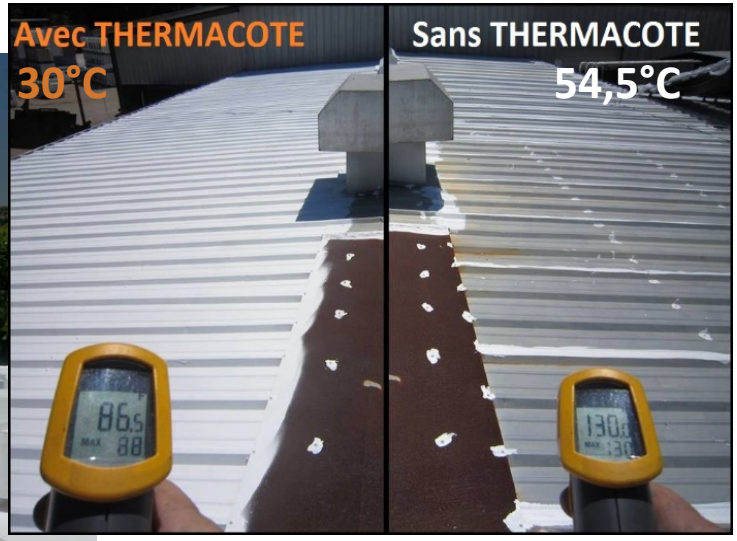
External storage, tank cuve with **ThermaCote®** :

External storage, tank cuve with ThermaCote® :

Cereal tank and Conveyor 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):

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.

Bts cabinet, electrical equipment, electronic enclosure with ThermaCote® :

Before

After

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.

Temperature readings at ThermaCote® coated container versus Jotun painted container:

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.

Range of product: ThermaCote ® :

ThermaCote®

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

INDUSTRIAL

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

BUILDING

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

SPECIALITY

Versatile uses include water tanks, asphalt roads, parking structures, cars & trucks, and railroad.

OIL & GAS

Built-in corrosion inhibitors protect pipes, storage tanks, jetties, structural steel, factory roofs & vessels.