

THERMO-REFLECT®

REFLECTIVE THERMAL INSULATION COATING
USABLE INDOORS AND OUTDOORS



PRODUCT DESCRIPTION

THERMO-REFLECT® is a ready-to-use, water-based thermal insulation coating that increases the thermal comfort of buildings for domestic or professional use in summer and winter.

THERMO-REFLECT® is formulated from the latest generation mineral resins, aerogels and ceramic and glass microspheres for maximum efficiency. **THERMO-REFLECT®** colors are obtained using essentially natural reflective mineral pigments.

THERMO-REFLECT® reduces the energy costs of buildings and allows you to **savings of up to 40%**.



In hot weather, **THERMO-REFLECT®**, thanks to its reflective power, returns most of the solar radiation to the atmosphere and prevents heat from entering the building.



In the cold period, **THERMO-REFLECT®**, thanks to its insulating power, slows down the propagation of cold in the heart of materials and retains the heat accumulated in the building.

THERMO-REFLECT® is very easy to apply and does not require any special hardware.

THERMO-REFLECT® adheres to all types of materials: concrete, wood, metal, stone, plastic, brick...

THERMO-REFLECT® can be applied outside, on facade or roof but also inside to achieve an indoor thermal insulation, without thermal bridge and without encroaching on the living area.

Applied outdoors, **THERMO-REFLECT®** has excellent resistance to attacks (polar cold or extreme heat waves, humidity, pollution, dust, dirt of all kinds...). Its exclusive formulation also provides it with algacide and fungicide protection.

Insensitive to UV, **THERMO-REFLECT®** does not turn yellow, does not degrade over time. It has a longer life than traditional coatings.

Applied indoors, **THERMO-REFLECT®** cancels the cold wall effect and prevents condensation of the water vapor present in the air.

3 in 1, **THERMO-REFLECT®** makes it possible to beautify, strengthen the thermal insulation and regulate the humidity of your building in a single operation.



THERMAL
INSULATION



WATERPROOF



BREATHABLE



REFLECTIVE



INDOOR



OUTDOOR


BENEFITS

- **Energy saving:** Reduced heating and cooling costs **up to 40%**.
- **Ease of application:** **THERMO-REFLECT®** is applied like a classic paint, without any specific material.
- **THERMO-REFLECT®** is suitable for all types of climates and temperatures.
- **THERMO-REFLECT®** is resistant to water, snow, ice, hail, sun and wind and provides protection 12 months of the year.
- **Variable permeability:** Waterproof, **THERMO-REFLECT®** is nevertheless “breathable” and thus allows the evaporation of water vapor and moisture.
- **Exceptional durability:** UV-insensitive, **THERMO-REFLECT®** does not turn yellow, does not degrade over time.
- The **THERMO-REFLECT®** composition prevents the growth and growth of molds and foams, avoiding the need for algacides.
- When applied to roofing terraces, **THERMO-REFLECT®** will withstand stagnant water and ensure that your roof is waterproof. In addition **THERMO-REFLECT®** can withstand pedestrian traffic without losing its efficiency.
- **THERMO-REFLECT®** solves thermal bridging problems and improves interior comfort.
- **THERMO-REFLECT®** eliminates condensation in humid atmospheres and cold walls.
- Washable finish paint, **THERMO-REFLECT®** is easy to clean with water.
- Applied as a reflective roof coating, **THERMO-REFLECT®** is eligible for EWC funding (Certificate of Energy Conservation).

PACKAGING

Bucket 15 liters of recycled plastic.

FEATURES

Characteristic	Value	Accuracy
Resin type	Silicates	100% mineral resins
Type of loads	Insulating and reflective loads	Silica aigrel + glass microspheres + ceramic microspheres + reflective natural mineral pigments
Appearance of the film	Matte	
Pot-like appearance	Semi-thick	
Reflective	YES	Report LED
Insulating	YES	Report LED
Anti-humidity	YES	Report LED
Airtight	YES	Report LED
Color	8 colors available	White, sand, stone tone, terracotta, light gray, basalt, sofia blue, fern green
Density	0.75 +0.05	EN ISO 2811-1:2002
Consumption	4 m ² /L/ layer on a smooth support 3 m ² /L/layer on support irregular	For irregular supports, consumption can vary between 0.6 L and 1 L per 1 m ² for the 2 layers, depending on the nature and possible porosity of the support. Therefore, it is difficult to provide an accurate estimate without prior testing
Dry extract in weight	66%	EN ISO 3251: 2019
Conductivity thermal	$\lambda = 0.141W / m.K.$	EN12667:2002
Compounds Organic Volatile (VOC)	<10 g/L for this product	 Compliant with VOC Directive 2004/4 EC (2010) - (Cat A/i: 140g/L max)
Emissivity Thermal	91%	ASTM C-1371
Reflectance Solar	83%	ASTM C-1549
Index of solar reflection NIS	111	ASTM E1980
SRI After Test QUV at 4000 h	No loss	EN ISO 16474-3
Eligible for EWC (Certificate of Economy of Energy)	Yes	No loss of NIS after 4000 Aging hours
Ranking at fire	M0	NF EN 13501-5
Testing adhesion	Test of gridlines: conforming	EN ISO 2409:2007

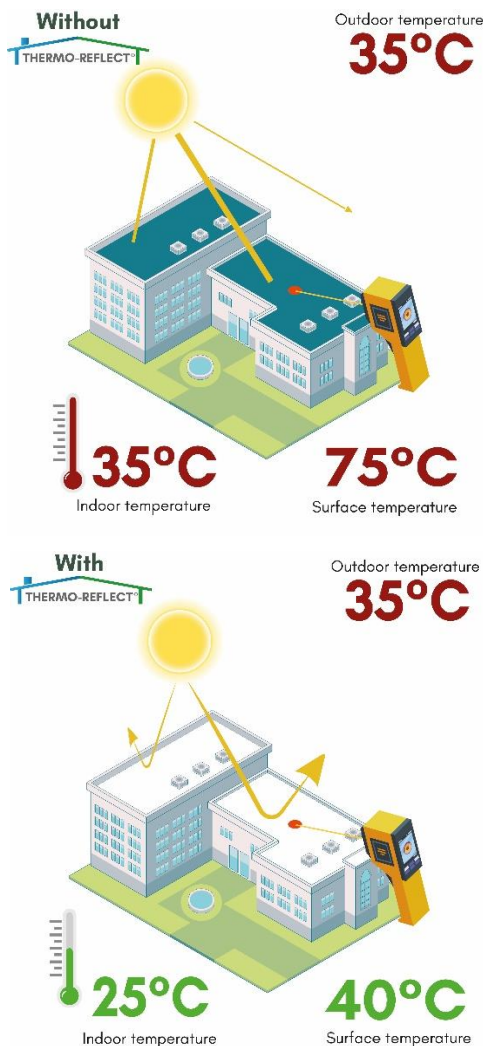
TECHNICAL INFORMATIONS

The high thermal emissivity (91%) and high solar reflection (83%) values of **THERMO-REFLECT®** allow it to perform cool roofing.

Cool roof technology is the application of a reflective, high-emissivity coating on the roof of buildings that avoids the absorption of solar radiation. As the roof remains cooler, the amount of heat transmitted into the building is reduced, thus maintaining a cooler and more constant indoor temperature.

This process applies to any type of building: commercial, industrial, residential...

In the summer, **THERMO-REFLECT®** will keep buildings cool and achieve significant energy savings from air conditioning.



In winter, however, only reflective paints provide no energy benefit.

THERMO-REFLECT®, meanwhile, is a **reflective and insulating** coating that allows it to improve the thermal comfort of buildings and achieve energy savings throughout the year.

THERMO-REFLECT® brings the advantages of Cool Roof and thermal insulation in one product.

Interest in ITI (INDOOR THERMAL INSULATION).

- The insulation properties and performance of **THERMO-REFLECT®** allow exclusive or complementary indoor use.
- **THERMO-REFLECT®** can advantageously replace any finishing paint.
- **THERMO-REFLECT®** can be tinted with a simple universal dye.
- **THERMO-REFLECT®** allows an easy, quick and clean work.
- **THERMO-REFLECT®** makes it possible to avoid thermal bridges and regulates the hygrometry of homes.
- **THERMO-REFLECT®** is washable and easy to maintain.
- Thanks to its small thickness, **THERMO-REFLECT®** avoids the loss of m² of living space, unlike conventional insulation.
- Its composition in aqueous phase, gives **THERMO-REFLECT®** an A+ classification in indoor use, with practically no release of VOCs into the atmosphere, accentuating its eco-virtuous side.



INSTRUCTIONS FOR USE

MEDIA PREPARATION:

Inside :

Prepare the media in accordance with DTU 59-1.

- On already painted backgrounds (old shiny or satin paintings): sanding to break the shine, washing, rinsing, then letting dry.

Outside :

In accordance with DTU 59-1 and 42.1: the media shall be healthy, cohesive, clean and dry.

- Oxidizable metals: Remove and treat traces of rust beforehand.

APPLICATION :

- Product ready to use.
- Homogenize **THERMO-REFLECT®** before application.
- The application temperature should be between 5°C and 35°C.
- Application in two layers while respecting the overlap times.

1-Manual application with roller:

Inside :



For irregular surfaces, use rollers with long bristles, greater than 15 mm.

For smoother surfaces, use short bristle rollers (15-5 mm).

- For a stretched result, use a short-haired roller to apply the second layer.

Outside :



Use a 18 mm Polyamide Facade Wick type roller.

2 Airless App :



Dilution with 10% water maximum. Blue nozzle 523. Working pressure 180 bars.

- Apply the product in 2 successive crossed passes without loading.

DRYING TIME:

Drying time	5°C	20°C	30°C
Touch Dry	1 hr	30mn	20mn
Layer Overlay supplementary	24 hours	6 am	4 hours
Re-release pedestrian	24 hours	12 noon	6 am



CONSUMPTION

- **THERMO-REFLECT®** is applied in two layers, respecting the overlap times, at the rate of:
 - 4 m² /L/ layer on smooth support.
 - For irregular and/or porous supports, a prior testing is recommended.

Either consumption of:

- 0.50L for 1 m² for the 2 layers on smooth support. (2 m²/L).
- For irregular supports, consumption can vary between 0.6 L and 1 L per 1 m² for 2 layers, depending on the nature and possible porosity of the support. Therefore, it is difficult to provide a precise estimate without prior testing.



A 15L bucket of **THERMO-REFLECT®** covers up to 30 m².



STORAGE

- Store away from freezing and heat in a dry place: temperature between 5°C and 30°C.
- Maximum storage time: 1 year in the original package.

HANDLING & SAFETY

- Product classified as non-hazardous.
- Consult the Safety Data Sheet before use.
- Store away from freezing.
- Do not apply if rain or frost is expected within 48 hours.
- Recycle the empty package.

Product made and manufactured in France



Company in Mission for the Environment

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