

ThermaCote

THERMAL INSULATION COATING

DESCRIPTION

ThermaCote® is a high-performance thermal barrier using ceramic technology to prevent heat and cold transfer.

BASIC USES

- ThermaCote® is used on walls and roofs.
- Residential, commercial, and industrial sectors.
- Suitable for all types of surfaces including metal, brick, cement, concrete (including slab), facing stone, old adherent paint, plaster and derivatives, wood and derivatives, bituminous, steel deck, waterproof membranes, fiber cement tiles, slates, PU foam, rigid PVC, etc.
- ThermaCote® is used for industrial protection: silos, containers, refrigeration cells, insulation...

PROPERTIES


- Flexible, semi-thick coating for protection and/or decoration.
- High reflectivity: Approved Cool Roof & Cool Wall.
- Eligible for Energy Savings Certificates. **
- New construction or renovation.
- All-season effectiveness.
- Optimises the insulation performance of buildings, homes, and industrial components.
- Improves thermal comfort.
- ThermaCote® adheres to any surface.



FINISH	FORMAT	USAGE	APPLICATION TOOLS
Matt - Tintable	19L	Interior / Exterior	AirLess spray only

TECHNICAL CHARACTERISTICS

Classification	NF T 36-005: Family 1 - Class 7b2. NF P 84-403: Class D3 and I1 NF EN 1062: European EVWA Classification: G3E4V2W2A1 / G3E5V2W2A1
Binder	Specific acrylic
Solvent Type	Water
Odour	Neutral
Specific Gravity	0.62 +/-0.05
Solid Content	54.6% +/-2%
Viscosity	20-100 Poise
Gloss Level @ 60°	Matt
Appearance	Semi-thick coating - Smooth.
Colours	White and colours from the ThermaCote® French colour chart (Contact Us).
Flash point	Not classified as flammable
Shelf Life	12 months in original unopened packaging
Application Tools	Airless Spray only
Dilution	Ready to use. Do not dilute
Coverage	Approximately 1.3m²/L at 500µm. Coverage may vary according to substrate and quality of application.
Drying Times @ 21°C and 60% RH	Dry: 2h Recoat: 12 to 24 hours Climatic conditions and application settings can significantly alter drying times.
Thermal Conductivity	$\lambda = 0.0345 \text{ W/mK}$ according to EN 12667:2002
In situ measurement of energy consumption	Energy consumption reduced for air conditioning by 38% according to EU ISO 9869 Energy consumption reduced for heating by 26% according to EU ISO 9869
Thermal Resistance	$R = 1.49\text{m}^2\text{K/W}$ for 500µm according to EU ISO 9869 $R = 1.87\text{m}^2\text{K/W}$ for 1mm to EU ISO 9869
Thermal Emissivity	88% according to ASTM C-1371
Solar reflectance	83% according to ASTM C-1549
Solar Reflectance Index (SRI) According to ASTM E-1980-11	104 when new 100 when aged to ISO 16474-3:2020 after 4000 hours
Air Permeability	0.0001 L/s.m² at 75 Pa according to ASTM E-2178
Water Vapour Permeability	$S_d = 1.69\text{m}$ or 3.617 perms exterior to interior. $S_d = 0.87 \text{ m}$ or 6.779 perms inside to outside.
Gross Heat Of Combustion(QPCS)	1,91 MJ/m² according to NF EN ISO 1716 maintain Fire resistance classification***
Clean-up	Water. Ideally warm, soapy water.
VOC	EU limit value for this product (cat. A/c): 40g/l (2010). This product contains max. 5.3g/L
Storage	Store in a dry place between 5°C and 40°C. Keep from freezing, high temperatures and direct sunlight (prolonged exposure to direct sunlight may cause 'hardening', rendering the product unusable).

	DESCRIPTION	STANDARD	VALUES
	Water-vapour transmission	EN ISO 7783	Sd=1,0m – CLASSE I
	Determination and classification of liquid-water transmission rate	EN 1062-3	0,011 W
	Measurement of bond strength by pull-off	EN 1542	1,23 Mpa
	Thermal cycling without de-icing salt impact	EN 13687-3	1,11 Mpa
	Permeability to CO2	EN1062-6	59 m

GOOD APPLICATION PRACTICE

Cover everything you do not wish to paint.

Apply between 10°C and 40°C, Substrate temperature should be between 10°C and 40°C

Relative humidity must be below 80%

Ensure substrate is at least 3°C above dew point.

For a slope of less than or equal to 3%, contact us.

Do not apply if rain is expected within 24 hours.

SURFACE PREPARATION

Surfaces must be clean, dry and free of oil, grease, rust and any other surface contamination.

Remove all loose and flaking material back to a sound surface and edge

Clean surface with ELIXCLEAN* or SOAPCLEAN* depending on the level of soiling

Surfaces with moss, mould and/or algae should be treated with ATM PRO* or PROXYNET*.

Surfaces with localised damage should be repaired with THERMACOTE ROOF REPAIR TAPE, COSMOFER* or CHOUKROUT*.

Friable or powdery surfaces must be treated with ELIXFOND* or ELIXIMPRESS*.

METAL SURFACES

- Ferrous

Remove all signs of corrosion by sand or grit blasting to SIS-Sa 2½.

If blasting is not possible surfaces should be manually prepared to SIS-St3 and primed with OWATROL PID 60 or OWATROL CIP

- Non-ferrous (Aluminium, Copper, Galvanised...)

Treat with OWATROL OWAPHOS

DIFFICULT SURFACES

Very old and dirty bituminous coatings. Temporary water retention areas on flat roofs i.e. areas subject to puddling.

Prime with PRIMTHERM*.

For all the above scenarios refer to the THERMACOTE Equipment and Application Guide for additional information.

SPECIFIC SURFACES

These types of surfaces must be coated with a suitable primer. Contact us for advice.

For a slope of less than or equal to 3%. Contact us.

APPLICATION

The application of ThermaCote® requires an Airless pump capable of maintaining a spray output flow of 8 L/min.

Refer to the operating instructions and safety information of your Airless pump.

The resulting weight is always to be adjusted to the substrate, its relief, and the desired aesthetics.

In case of a strong colour contrast, an additional coat (ThermaCote or primer*) may be necessary.

Recommended application pressure 150 to 200 bar. Check the spray quality and adjust your pressure if necessary.

ThermaCote® should be applied in layers of 250µm to 500µm WFT

Application is done in cross passes. 2 cross passes on smooth to slightly rough surfaces, 4 cross passes on very rough surfaces.

Allow ThermaCote® to dry completely between coats (minimum 12h) when applying multiple coats.

Refer to the THERMACOTE Equipment and Application Guide for additional information or contact us.

RESTRICTIONS

Not suitable for the application of pools, tanks, water tarpaulins, etc., and more generally for any work where there is a possibility of permanent contact with water.

Cannot be applied to surfaces that have been treated with a water repellent e.g. Silicone. If in doubt contact us.

Do not apply on old waterproofing systems (Coatings. Membranes).

SAFETY

Refer to the safety data sheet available (SDS) on our website www.owatrol.com and the text on the label. Keep out of the reach of children.

**Same manufacturer.*

*** BAT-EN-112 / Reflective coatings for roofing For France / CAE for Spain...*

**** 2000/553/EC: Commission Decision of 6 September 2000 implementing Council Directive 89/106/EEC as regards the external fire performance of roof coverings (notified under document number C(2000) 2266):*

Any external covering must have a GCV $\leq 4 \text{ MJ/m}^2$

This Technical Data sheet cancels and replaces any previous Technical Data sheet for the same product. Its purpose is to inform the user about the product. The information contained within this Technical Data sheet is based on our current knowledge. However, the information contained within this document cannot replace a specification appropriate to the nature and conditions of the substrate to be coated. Due to ongoing technical advances, it is the responsibility of the user to establish that this document has not been superseded by a more recent edition. The information contained within this document is for guidance only and the manufacturer is unable to guarantee or accept responsibility for the results as it has no control over the conditions under which its products are applied. **Publication Date: 29/07/24.**