



DESCRIPTION:

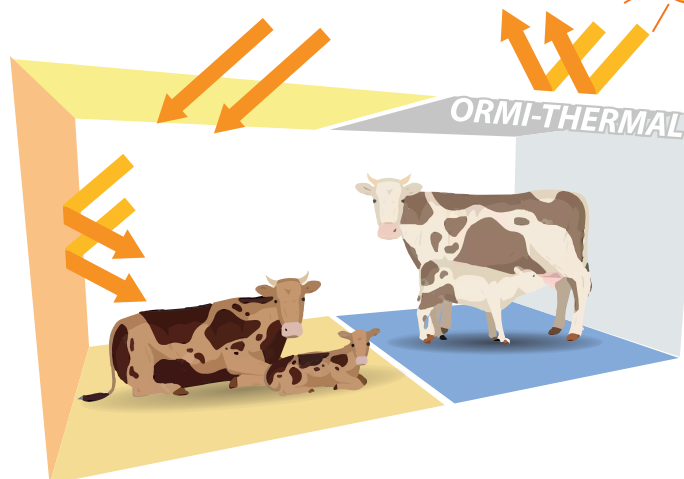
ORMI-THERMAL is a water dispersion coating, containing spherical, non-porous and hollow with exceptional strength and clarity glass particles. Once the solution dries, it creates a highly reflective, waterproof membrane with a high SRI (Solar Reflectance Index).

APPLICATION FIELD:

Roofs and terraces made of mortar, metal sheet, tiles, fiber cement, etc. Homes, commercial buildings, warehouses, livestock buildings for sheep, pigs, or cattle, caravans, temporary site offices for electrical and electronic equipment, electrical cabinets, and any other place where you want to quickly and economically reduce the interior temperature by eliminating roof or ceiling heating.

BENEFITS:

1. Reduces the temperature of roofs and ceilings by 15 to 22 °C.
2. Reduces energy expenses.
3. Easy to apply using a brush or roller, although it can also be applied with a spray gun.
4. ORMI-THERMAL has waterproofing properties on the surface where it is applied.
5. Reduces thermal stress on materials, extending their useful life.
6. By reducing the thermal temperature inside the building, it increases comfort and improves productivity in both the agricultural and industrial sectors.
7. Prevents internal overheating in electrical and electronic equipment inside cabinets and buildings.
8. Does not emit odors or chemicals that can be harmful to health when applied.



ANIMAL WELFARE:

Committed to animal welfare, we know that maintaining an adequate temperature in the spaces where they live is essential for their health and well-being.

ORMI-THERMAL helps to maintain a comfortable temperature and reduce thermal stress in your animals.

INTRODUCTION:

There is a trend in building construction to incorporate so-called "cool roofs," which significantly improve the energy efficiency of buildings and their energy-saving capacity. Cool roofs are designed to keep the surface temperatures low when the sun shines on them. The main source of heat accumulation on roofs is sunlight.

Most conventional roofs can heat up to nearly 70°C and absorb 90% of the incident solar radiation. Due to the increased heat transfer to the interior of the building caused by these high roof surface temperatures, the energy consumption of air conditioning systems has increased. In contrast, cool roofs reduce the roof temperature and demand for air conditioning inside by absorbing less than 50% of the incident solar radiation.

The following advantages are derived from the use of cool roofs:

- Reduces energy costs.
- Increases thermal comfort in rooms without air conditioning.
- Since materials suffer fewer thermal shocks, the lifespan of the roof is increased by lowering the temperature it withstands.

HOW DO COOL ROOFS WORK?

To prevent the heating of these surfaces and, consequently, significantly reduce the heat supplied to the interior of the building, cool roofs have surfaces that can effectively reflect and release a large portion of the absorbed solar radiation. SRI is a parameter that represents an indicator of the degree of cooling of a surface (Solar Reflectance Index).

CHARACTERISTICS:

| | |
|---|---|
| Nature | Aqueous dispersion |
| Cleaning solvent and thinner | Water |
| Application | Brush, roller or airless gun |
| Application temperature | Between 10°C to 35°C |
| Surface drying time (EN ISO 1517) | 1 hour |
| Recommended consumption | One liter per 1.5 to 1.7 square meters. |
| Water vapour permeability (EN ISO 7783-1/-2) (Equivalent air barrier) | $S_D < 5$ metres Class I (EN 1504-2) Water vapour permeable |
| Water permeability (EN 1062-3) | $< 0,1 \text{ kg/ m}^2 \cdot \text{h}^{0.5}$ Waterproof (EN 1504-2) |
| Adhesion to concrete bases (EN 1542) | $>0.8 \text{ MPa}$ |
| Hazardous substances (EN 1504-2) | In line with point 5.3 of the EN 1504-2 |
| Hollow spheres conductivity | 0,07 W/m K |
| Colour | White |
| SRI index (ASTM E 1980-01) low convection rate(0-2 m/s) | 107, 6 |
| SRI index (ASTM E 1980-01) average convection rate (2-6m/s) | 108 |
| SRI Index (ASTM E 1980-01) high convection rate (6-10 m/s) | 108 |

ACCREDITATIONS:

Product with the European Conformity Mark: Product compliant with the European standard EN 1504-2 and Directive 89/106/EEC on construction products.

SURFACE PREPARATION:

The surface must be clean, dry, and free from contaminants such as dust, adhered particles, grease, or oil. On cementitious substrates, the surface slurry must be removed by mechanical sanding with wire brushes, rotary brushes, etc. Use anti-corrosive primers on bare steel metal supports to increase adhesion and anti-corrosive qualities after thoroughly brushing off any rust residues. The product adheres well to painted and galvanized steel surfaces without the need for priming.

If the surface has algae, fungi, or mold, it should be first cleaned with a chlorine alkaline cleaner suitable for all types of surfaces before rinsing it off and letting it air dry.

For the coating to adhere well to cementitious substrates, the surface must be sufficiently rough and porous.

INSTRUCTIONS FOR USE:

For cementitious surfaces, apply a layer of primer or apply a first coat thinned with 10-15% water to allow the coating to penetrate into the substrate.

Any other type of substrate, such as primed sheet metal, etc., requires a clean application of the product with at least two or three coats. It is recommended to use 0.35 to 0.70 l/m² to achieve a reflective effect.

To obtain excellent waterproofing and help insulate the surface, it is recommended to apply one liter per 1.5 to 1.7 square meters.

SPECIAL RECOMMENDATIONS:

- Avoid application when the relative humidity is over 80% and the temperature is below 10°C.
- If rain is expected before the product has dried, avoid applying it outdoors (for at least 6 to 8 hours).

PRESENTATION AND STORAGE:

ORMI-THERMAL is available in plastic containers of 5, 10, and 20 liters.

The product should be stored in a cool place, free from frost and extreme heat.

The product can be stored for at least one year if kept in its original containers, tightly closed, and maintained between 5 and 25 °C.

ORMI-THERMAL is manufactured in accordance with ISO 9001:2015 and ISO 14001:2015 standards.

UNITS PER PALLET:

| Format | American pallet (US) | European pallet (EU) |
|--------|----------------------|----------------------|
| 5L | 120 | 96 |
| 10L | 75 | 55 |
| 20L | 40 | 32 |

The information contained in this technical data sheet, as well as our advice, both verbal and written or through tests carried out in our internal or external laboratories, is given in good faith based on our experience and the results of the tests, without serving as a guarantee. Our recommendations do not exempt from the obligation to thoroughly understand the application of the product to be used before proceeding with its use and to carry out prior tests if there is doubt about their suitability for any work or application. The application, use, and handling of our products are beyond our control and therefore the responsibility of those who proceed with their implementation. The person who uses the product without observing the instructions indicated here will be responsible.