TECHNICAL DATA SHEET
HEAT REFLECTIVE PAINT -10ºC +60 ºC
INTERIOR

Scope of application:

HELIO-HOUSE Heat Reflective Paint is a product from the HELIO - REFLECTIVE product group. The paint improves heat distribution indoors, changing the temperature by 5-6°C with identical heating or cooling parameters. In standard conditions, the distribution of heat in a room heated by a heater is usually done using convection.

On getting close to the heater, the air heats up and starts to rise. It then begins to lose heat and consequently falls. The mechanism described is an example of uneven heat distribution in the movement of air masses. The moving air carries dust, mites, and pollen, which have a negative effect on our health. Due to convection, the average temperature difference between the ceiling and the floor is 4°C. **In a room painted with heat reflective paint, heat moves as a result of radiation generated by heaters. It is then reflected from the walls in all directions, which makes the thermal system more homogeneous and any temperature differences are limited to 1.5°C.** Other advantages include high thermal comfort inside the room, improved mood, reduced allergic reactions and lack of static electricity. Another benefit of using heat reflective paint is the prevention of condensation of water vapour on thermal bridges, which inhibits the development of mould and bacterial spores on kitchen and bathroom walls. Thermal uniformity allows to reduce the maximum heating temperature and the minimum cooling temperature, which contributes to saving more than 30% of heat energy. In short, a surface covered with heat reflective paint acts as a mirror by reflecting radiation, stabilising humidity and distributing heat. Thanks to its elasticity, the coating mends any microcracks on the surface, making the walls more breathable in relation to water vapour, and eliminates thermal bridges, which hinders the formation of mould spores.

Product characteristics:

Properties	Technical parameters
Colour (coat)	White (matt) – Base for colours
Type	Heat reflective paint
Application	Residential and office buildings
Temperature range	-10ºC +60ºC
Level of reflection	85-90%
Savings in energy consumption	30%
Dry matter content	50%
Resistance to wet scrubbing	Class 1 (PN-EN 13300:2002)
Paint density 20°C	0.75-0.80 g/cm3
Coat thickness	0.40-0.50 mm
Paint coverage at 0.40-0.50 mm	2-3 m^2 – 1 L
Weight	0.6 kg – 1 L
Application temperature	Maximum 5-40°C Optimal 15-30°C
Relative humidity during application	60%

"HELIO"
42-274 Aleksandria I
Ul. Górna 47
Poland
Tax Id. No (NIP): PL 949-187-40-60
www.helio.com.pl
Phone: +48 537-444-653 Kamil Nowacki email: kamil@helio.com.pl

HELIO – HEAT REFLECTIVE PAINT
HELIO - HOUSE

Method of application

Surface preparation:

Remove any cracks, dust, and residue of old paint coats from the surface, fill in any gaps and prime the surface using acrylic primer. When the surface is dry, apply the heat reflective coat with a roller, brush or low-pressure paint sprayer (Graco or other).

Painting:

Before painting, mix the paint slowly and thoroughly and paint the walls two or three times to obtain the final thickness of the coating of min. 0.40 - 0.50 mm. When the first coat is dry, i.e. after 2-3 hours, you can apply another coat. The drying of the paint coat depends on the application temperature – the recommended application temperature is 15-30°C. This temperature range is conducive to achieving an excellent quality of the paint coat. The primary colour is white, which can then be tinted with tinting pastes to any light hues.

Application temperature:

Paint can be applied in the temperature range of 5-45°C. However, the recommended application temperature range is 15-30°C, with relative humidity of 60%, as these parameters contribute to achieving excellent parameters of the heat reflective coat.

Cleaning of tools:

Brushes and rollers should be washed with water after the work is finished, while the sprayer should be washed in accordance with the manufacturer's recommendations.

Protective measures:

During painting, observe the general OHS principles and prevent the presence of children inside the rooms which are being painted. Use a face mask (compliant with EN 166).

Wear protective clothing.

Product storage:

Store heat reflective paint at a temperature between +5 and +35°C.

The product's shelf life is 24 months.

IMPORTANT INSTRUCTIONS

Do not allow paint to freeze. The product is unsuitable for use if it was subjected to minus temperatures.

Packaging:

20 L

Environmental protection

Level of reflection 85-90%
Savings in energy consumption 30%

Easy to apply

Temperature range -10ºC +60 ºC
Change in temperature 5-6 ºC

Prevention of condensation

Ability to obtain any colour

HEAT REFLECTIVE PRODUCTS - HELIO

HELIO - INDUSTRY – GRAY -50ºC + 250ºC
HELIO - EVERYWHERE -50ºC + 150ºC
HELIO - HOUSE -10ºC + 60ºC
HELIO - ROOF

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