

## TECHNICAL DATA SHEET

# NANO COAT HOME®

### thermal skimming plaster

Indoor thermal plastering solution employing new nanotechnologies



LONG LIFE



UP TO 35%  
ENERGY SAVE



HEALTHY  
ROOM CLIMATE



ECOLOGICAL  
PRODUCT

## TECHNICAL PROPERTIES

NANO COAT HOME® is a white, vapour permeable, indoor thermal skimming plaster. It reduces the time required to heat and cool rooms, reduces thermal bridges and creates a healthy living environment. The surface temperature of the plaster will rise above the dew point thus preventing the formation of condensation and mould. NANO COAT HOME® contains vacuum-coated glass nanoscale, these slow down the heat transfer through the structure, it creates a heat shield and removes radiant cold or heat from the walls. This makes sure the air in the room is heated or cooled faster and the required room temperature is maintained for a longer period of time. This saves on heating and cooling costs and creates a healthy living room environment.

## AREAS OF APPLICATION

NANO COAT HOME® is very versatile and can be applied to walls, ceilings and floors. It can be used in rooms with a high levels of humidity, historic listed buildings, medical buildings, offices etc. It is suitable for use in damp areas. It prevents the spread of mould and mildew and stops the growth of microorganisms. It alleviates allergy and asthmatic issues and is suitable for use in out-patient departments and indoor public spaces.

## COMPOSITION

It is a white plaster of acrylic dispersion with a high content of vacuum glass beads.

## APPLICATION THICKNESS

1.5 mm to 2 mm

## ADVANTAGES

- ✓ ENERGY EFFICIENT, UP TO 35% SAVING ON HEATING AND COOLING COSTS
- ✓ **REDUCES THERMAL BRIDGES**
- ✓ ELIMINATES MOULD AND MILDEW
- ✓ **CREATES A HEALTHY LIVING ENVIRONMENT**
- ✓ REGULATES MOISTURE AND CONDENSATION
- ✓ **ALLEVIATES ALLERGY ISSUES**
- ✓ VAPOUR PERMEABLE

## APPLICATION

1. Add water to dilute, 0.25lt to 5lt
2. Mix by hand or with the aid of an electric mixer, set at a low speed
3. Apply by trowel with a 4x4 serrated edge or by a plaster spray machine, with a maximum pressure of 5 bar
4. With the smooth side of the trowel, finish the plaster to the desired effect
5. When dry, after 12 to 24 hours, sand the surface, with grade 400 sandpaper
6. Any defects, such as unevenness or cracks should be refilled with NANO COAT HOME and resanded after drying

## DRYING TIME

12 -16 hrs at a temperature of 23 °C and 50% relative humidity

## PACKAGING

1 l, 5 l, 10 l, 30 l

## COVERAGE

1 l to 0.5 m<sup>2</sup>

## TECHNICAL SPECIFICATIONS

### Water vapour permeability

(V): 153.5 g/m<sup>2</sup>.d\*

**Diffusion thickness (sd):** 0.144 m at layer thickness - 3 mm (23 °C and 50 % relative humidity)

### Diffusion resistance factor

(μ): 47.76\*

**Fire resistance:** B s1 d0 VOC

(EN ISO 11890-2): <0,02 g/l

### Dry bulk density (pd)\*:

180 kg/m<sup>3</sup>

**Emissivity (ε):** 0.83

### Thermal conductivity

**coefficient (λ):** 0.0396 W/mK\*

**Bond strength:** >0.6 Mpa

\* Layer thickness - 3 mm (23 °C and 50 % relative humidity)

## STORAGE

After opening, store sealed in a dry location, away from direct heat and sunlight, in a temperature of between 5 - 30 °C

## SHELF LIFE

24 months in unopened buckets, stored as per recommendations

## PRODUCT CERTIFICATION

EN 15824, NF EN 15804 + A1, EN 12667, EN ISO 7783, EN 1542, DIN EN 13501-1, STN EN ISO 11890-2



INDOOR USE



ECO



QUICK DRYING



THERMAL COMFORT



NANOTECHNOLOGY



LOW VOC

## PRECAUTIONS

Although NANO COAT HOME® is not considered to be a hazardous product, it may occasionally cause an allergic skin reaction. Avoid inhalation of dust/smoke/mist/aerosols when using, wear protective gloves and clothing. Wash your skin with plenty of water after contact. Maximum content of volatile organic compounds in the condition where the product is ready for use: <0.02 g/l. VOC: A/g, WB, 30 g/l.

## CAUTION

The information contained in this Technical Data Sheet, is, to the best of our knowledge, correct at the time of publication. The information herein should not be read in isolation, as it is meant only as guidance for the user, who should always ensure that they are fully conversant with the Material Safety Data Sheet, in conjunction with the Product Data Sheet. It remains the sole responsibility of the user to ensure current information is used at all times, that you are compliant with current regulations and legal requirements, prior to the commencement of work. We assume no responsibility for the quality and the condition of the substrate, or for any factors affecting the use or the application of the product. We assume no liability for any loss or damage resulting from the use of the product for any purpose other than what is specified on the Technical Data Sheet or the Material Safety Data Sheet. All products supplied and technical advice given are subject to Helske Energy Save Ltd general trading terms and conditions. The information contained in this document is subject to change at any time. More detailed information on health and safety is provided in the Material Safety Data Sheet. For a comprehensive and up-to-date library of information please visit the Helske website at [www.helskeenergysave.ie](http://www.helskeenergysave.ie)