

# Termo Rasante Aerogel

Nanotechnological lime thermal insulation plaster

RASANTE TERMO RIFLETTENTE MGN is a low thickness super-insulating thermal plaster coat. Anti-condensation, anti-mould, highly reflective and breathable. It can raise the temperature of the surface in a room by 3 to 5 °C by applying only a few millimetres. Thanks to its excellent reflectance, reflects the heat back into the room, providing high thermal comfort.

## AREAS OF APPLICATION

As a low thickness high performance thermal plaster  
Thermal bridge regulator, such as in window reveals  
Anti-mould and anti-condensation  
Reflective insulation for underfloor heating applications

## COMPOSITION

Hydrated lime powder, certified to UNI EN 459-1 CL90S, with more than 90% calcium hydroxide  
NHL3.5 Natural hydraulic lime - desalinated white  
Lightened amorphous micro silica  
Nanotechnological aerogel

## CHEMICAL-PHYSICAL PROPERTIES

Granulation	0 – 1 mm
Thermal conductivity $\lambda$	0.016 W/mK
Equivalent thermal conductivity* $\lambda_{eq}$	<b>0.010</b>
Solar reflectance (ASTM C151549-09)	0.82 SR
Infrared emission (UNI EN 15976: 2011)	0.914 IE
Solar reflectance index (ASTM E1980-11)	102.3%
Increased resist. thermal (UNI EN1934: 2000)	0.31 $\Delta R$ (m <sup>2</sup> K/W)
Water vapor permeability (UNI EN ISO 7783)	V1 (high)
Liquid water permeability (UNI EN ISO 1062-3)	W2 (medium)
Fire resistance	Class B (s2, d0) <a href="#">what this means</a>
Specific heat	1000 J/kgK
Adhesion (UNI EN 1542)	> 0.5 N/m <sup>2</sup>
Compressive strength**	NPD (not determined)

\* data obtained by interpolation from the solar reflectance and infrared emission values

\*\* according to [other independent research papers](#), the compressive strength of various silica aerogels ranges between 0.8 - 1.1 N/mm<sup>2</sup>

## **SUITABLE FOR**

Restorations and renovations, including listed buildings  
Full insulation upgrades to modern standards  
Special structure buildings (e.g. solid stone walls)  
Passivhaus projects

## **APPLICATION**

Wash and clean the substrate to remove dust, dirt and any loose particles. Remove any paint residues.

Add the content of the bag to a mixer with the necessary water, mixing it for 3-5 minutes until a homogeneous-looking workable creamy consistency is obtained.

Before application, thoroughly wet the masonry.

Apply the product in a 10 mm thick coat using a stainless-steel trowel. Once the first coat has sufficiently hardened, apply a second coat of 10 mm. Continue applying additional coats of 10 mm each until the desired thickness is achieved.

The application should take place at room and substrate temperature between +5 and +30 °C and with R.H. not exceeding 70%, in the absence of wind. The treated surfaces will be protected from rain and humidity until the surface drying of the applied product (3 - 10 days depending on weather conditions).