

# AEROPAN

Minimum space, maximal insulation

**Aeropan®** is a panel designed for the heat insulation of those building structures which require a higher degree of insulation in the least possible space. It consists of a nano-technological insulation in Aerogel coupled with a polypropylene breathing membrane reinforced with glass fibre and has been designed for reduced-thickness heat insulation.

With a thickness of 10 mm - and thermal conductivity of 0.015 W/mK - **Aeropan®** allows reducing energy dispersion and recovering space in civil, commercial and residential buildings.

The properties of the panel - minimum heat conductivity, flexibility and compression resistance, hydrophobicity and easy installation - make it an indispensable product for providing high levels of heat insulation both in new buildings and in the rehabilitation of older ones.

his product is ideal for application on outside perimeter walls and inside walls, intrados, window padding, roofs and for solving thermal bridges.

Aeropan® is the perfect choice for outdoor and indoor restructuring, as

well as building recovery and historical buildings subject to architectural restraints which require top levels of living comfort.

## PERFORMANCE LEVELS

Aeropan® is a semi-rigid insulating panel, made of reinforced high-density fibres, completely saturated with nano-porous Aerogel with very low heat conductivity and a PP finish reinforced with glass fibre.

With a thickness of just 10 mm, the panel is able to provide heat insulation between -50°C and + 450°C.

These features make Aeropan® **extremely suitable for use in a range of environmental conditions**, without performance levels and durability being affected in any way.

## OUTDOOR/INDOOR THERMAL INSULATION FINISHING

Heat insulation of the outdoor/indoor finishing system type, for vertical and horizontal surfaces, such as overhanging balconies and the like, consisting of a semi-rigid panel, made up of a layer of Aerogel silica reinforced with PET fibres (felt), of the Aeropan® type, water repellent

and breathing, supplied in 1400x720 mm panels, with a nominal thickness of 20 mm, 30 mm, 40 mm) with volumetric density of 230 kg/m<sup>3</sup>, heat conductivity 0.015 W/mK, heat resistance Rd 0.67 m<sup>2</sup>K/W per cm of thickness, temperature of use between -50°C /+450°C,

permeable to water vapour ( $\mu$  5), impermeable to surface water and/or immersion with water contact angle of no less than 150°, extended on flat or curved surfaces, vertical or horizontal, after gluing, installed on smooth, dry, dust-free and perfectly integral surfaces devoid of any roughness.



## TECHNICAL FEATURES

TECHNICAL DATA	VALUES	UNIT	TEST METHOD
Panel format	1400x720	mm	
Thicknesses	6/10/20/30/40/50/60	mm	
Thermal conductivity ( $\lambda$ ) a 10 °C	0,015	W/m·K	EN12667
Permeability to water vapor	0,07	m	EN12086
Engagement limit temperatures	-50 +450	°C	
Compressive strength (for a deformation of 10%)	80	KPa	EN826
Specific heat	1.000	J/kgK	ASTM E 1269
Nominal density	230 ± 10%	kg/m <sup>3</sup>	
Fire reaction class	BS-D <sub>0</sub>		EN-13501-1
Long-term water absorption by partial immersion	Wp ≤ 0,01	kg/m <sup>2</sup>	EN 1609
Color	white		

## HEAT RESISTANCE

THICKNESS	6	10	20	30	40
R (m <sup>2</sup> K/W)	0,40	0,67	1,34	2,01	2,68

\* reaction to fire tests carried out on an integral external insulation system