

**AEROGEL THERMAL INSULATION PANEL/BLANKET
UNCOATED**

AEROGEL HP

Mineral fibers support matrix aerogel-based thermal insulation panel/blanket, non-inflammable, vapor breathable, with no covering layers.

Fire behavior Euroclass B/s1/0, nominal density 200 kg/m³.

Designed to building restoration and renovation, and generally for whole civil and industrial applications where highly thermal performance and low thickness of the insulation package are needed.

AEROGEL HP surface is not suited to be coated by skim coatings or mortars because of its highly hydrophobic property: suitable for dry applications.



CORE FEATURES

Insulation material made of silica aerogel - volume of which consists of 97% air contained in nanopores- with high density mineral fibers support

- high thermal performance
- compression and creep resistant
- vapour breathable
- harmful emissions free
- no VOC, A+ class
- fireproof
- good sound reduction property
- easy to work, may be cut and pierce
- flexible in 6 and 10 mm thickness

COMPLIANCE

CE marked in accordance to Regulation (EU) 305/2011, according to standard EN 13162:2015
CE marking of the product ensures compliance with Declaration of Performance nr. AP2016-30

FIELD OF APPLICATION



- Wall cavities
- Rainscreen cladding.
- Pitched roof
- Dry screed floors
- Flat roofs
- Attic

GUIDELINES

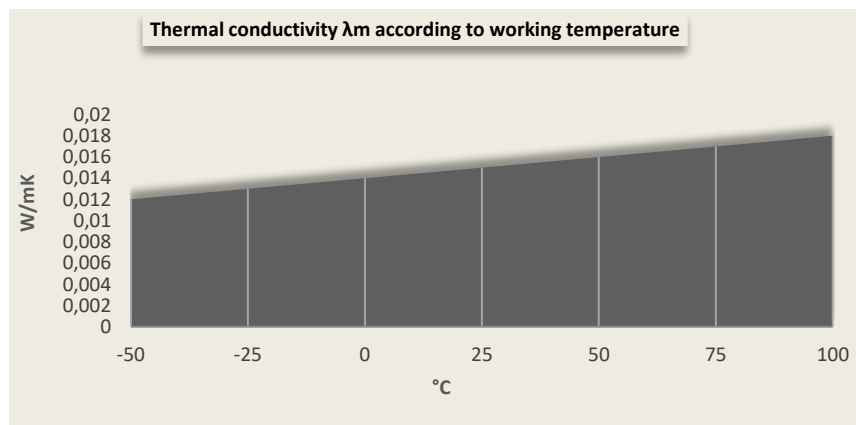
Depending on the type of application. Please refer to case studies and original documentation on ecofine.it portal.

Keep dry, protect from moisture and UV rays.

Under standard storage conditions product is unlimited storable.

Inhalation and breathing excessive amounts of product dust may cause irritation of the respiratory tract. Long-time contact with skin and eyes may cause irritation,

THERMAL PERFORMANCE



°C	W/mK
-50	0,012
-25	0,013
0	0,014
25	0,015
50	0,016
75	0,017
100	0,018

TECHNICAL DATA

FEATURE	STANDARD	U.M.	VALUE
Thermal conductivity λ_d	EN12667	W/mK	0,015
Calorific value Cp	EN10456	J/Kg.K	1030
Nominal density ρ	--	Kg./m ³	200 ± 10%
Water vapour transmission rate μ	EN12086	--	13
Water vapour permeability	EN12086	Kg./msPa	14,4x10 ⁻¹²
Airflow resistivity	EN29053	KPas/m ²	>1000
Short-term partial immersion water absorption (Wp)	EN1609	Kg./m ²	0
Long term water absorption by total immersion (Wlp)	EN12087	Kg./m ²	0
Compression behaviour ($\sigma_{10/20}$)	EN826	KPa	55 at 10% - 100 at 20%
Compressive creep (1)	EN1606	%	relative deformation $\epsilon_{10a}<15$
Tensile strength perpendicular to faces	EN1607	KPa	7,1
Tensile strength parallel to faces (2)	EN1608	KPa	perpendicular to the orientation of fibers:202 parallel:1.297
Dimensional stability	EN1604	%	width: $\Delta\epsilon_l<1$ length: $\Delta\epsilon_b<1$ thickness: $\Delta\epsilon_d<1$
Fire behaviour - EUROCLASS	EN13501-1	--	B/s1/d0
Volatile Organic Compounds (VOC)	EN16000-9	class	A+
RoHS	EN62321	--	Directive 2011/65/EU compliant

Nominal thickness (d _N)	mm	6	10	20	30	40	50	60
Size (3)	--	r	r/p	p				
Dimension (4)	--	a	b/c-d	c-d		d		
Thermal resistance (Rd)	EN13162	0,35	0,65	1,30	1,95	2,60	3,25	3,90
Conductance	--	2,53	1,52	0,76	0,51	0,38	0,30	0,25
Service temperature	--	-50/+200			-30/+100			
Flexibility	--	YES				NO		
Airflow resistance (Sd)	EN12086	0,078	0,13	0,26	0,39	0,52	0,65	0,78
Dynamic stiffness (s')	EN29052-1	--	43	--				
Compressibility (c)	EN12431	--	1,2	--				

CE according to standard EN 13162:2015
MW-EN 13162-T2-DS(70,-)-CS(10)55-TR5-WL(P)-MU13

¹⁾ 9KPa load, linear regression processed from 0,1 to 2016 hours
²⁾ Referred to thickness 10 mm ³⁾ r= roll p= panel
⁴⁾ a=1.500x38.000 b=1.500x36.000 c=740x740 d=1480x740

- Product does not contain substances classified as dangerous according to Regulation (EC) 1272/2008 and subsequent amendments. Please refer to article MS information sheet
- Notes for disposal: product suitable to be transferred to landfill facilities for non-hazardous waste in compliance to D.M. 27/09/2010, CER 170604
- TARIC: 6806900000

All product information, data and technical details are based on the latest research and experience. We reserve the right to make technical alterations to the constructions recommended and to the handling as well as to further development of the individual products and associated changes in quality. All technical guidelines and requirements are to be adapted to local conditions and do not constitute factory, technical or assembly guidelines. The relevant technical guidelines and specifications for the products in the technical leaflets and system descriptions have to be observed. We will provide the most up to date technical information at the time of publishing. On publication of new data or releases, all previous publications become invalid. Please see on www.ecofine.it