

Thermal insulation aerogel-based composite panel

AEROGEL HF

AEROGEL HF is a composite panel consisting of one or multiple layers of AEROGEL HP -CE marked in accordance to harmonized standard EN 13162 - and a 15 mm thickness 4-sides-tapered-edge gypsum fibreboard -CE marked in accordance to harmonized standard EN 15283-2 -.

It's designed for building restoration and renovation, and generally for all applications where reduction the thickness of the insulation package is needed.

Specifically suitable for dry applications.

Only for internal use.



CORE FEATURES

Insulation material composed of silica aerogel - volume of which consists of 3% SiO₂ and 97% air contained in nanopores - with high density mineral fibres support and homogeneous, gypsum-based 15 mm thickness fibreboard, in-factory sealed

- best thermal performance
- stability and impact strenght
- harmful emissions and VOC free
- fire resistant
- effective sound insulation
- easy and fast to install

COMPLIANCE

CE-marked components in accordance to Regulation (EU) 305/2011 , according to standards EN 13162:2015 and ETA 03/0050

FIELD OF APPLICATION



- Internal counter walls
- Ceilings
- Dry screed floors

GUIDELINES

Depending on 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 the 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.

TECHNICAL DATA

Nominal thickness	mm	25	35	45	55	65
Dimensions	mm	1480x1000				
Thermal resistance ¹⁾	m ² K/W	0,69	1,34	1,99	2,64	3,29
Conductance	W/m ² K	1,45	0,75	0,50	0,38	0,30
Airflow resistance (Sd)	m	0,32	0,45	0,58	0,84	0,97
Nominal gross weight	Kg./m ²	19	21	23	25	28
¹⁾ The sum of RD for insulation component and R for fibreboard component						

Product does not contain any substance classified as hazardous in accordance with Regulation (EC) No. 1272/2008.

INSULATION COMPONENT	STANDARD	U.M.	VALUE
Declared thermal conductivity λ_D	EN13162	W/mK	0,016
Average thermal conductivity λ_m	EN12667	W/mK	0,014
Calorific value C_p	EN10456	J/Kg.K	1030
Nominal density ρ	--	Kg./m ³	180 ± 10%
Water vapor transmission rate μ	EN12086	--	13
Water vapor permeability	EN 12086	Kg./msPa	14,4x10 ⁻¹²
Long term water absorption by total immersion (Wlp)	EN12087	Kg./m ²	0
Fire behaviour - EUROCLASS	EN13501-1	--	B/s1/d0
Compression behavior (σ_{10})	EN826	KPa	70,6
Tensile strength parallel to faces σ_t	EN1607	KPa	7,1
Compressive creep 1)	EN1606	%	Deformazione relativa $\epsilon_{10a} < 15$
 CE marked in accordance to UNI EN 13162		1) Condition of stress 9 KPa, linear regression processed from 0,1 to 2016 hours	

GYPSUM FIBREBOARD COMPONENT	STANDARD	U.M.	VALUE
Thermal conductivity λ	EN12664	W/mK	0,32
Nominal density ρ	--	Kg./m ³	1150 ± 50
Calorific value C_p	--	J/Kg.K	1100
Fire behaviour - EUROCLASS	EN13501-1	--	A2/s1-d0
Water vapour transmission rate μ	EN12572	--	13
Stiffness Brinell	--	N/mm ²	30
Coefficient of expansion	--	%/K	0,001
 CE marked product in accordance to UNI EN 15283-2 e ETA 03/0050		Designation code EN15283-2 : GF-I-W2-C1	

- 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 (insulation component) and CER 170802 (gypsum fibreboard component)
- TARIC: 68091900

RELATED PRODUCTS

Joint Filler



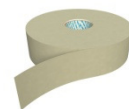
For filling of tapered edge joints between panels, and stopping screw heads
 Coverage: approx. 0,8-1 kg/m2

Fine Surface Treatment



Resin reinforced filling material in a powder form. Fine Surface Treatment is a high quality finish used for fine filling on AEROGEL HF surfaces.
 Substrate must be clean and dry. Coverage: approx. 1 kg/m2 for each mm of thickness

Paper Jointing Tape



Paper tape needed to reinforce tapered edge joints. Tape must be drowning in the Joint Filler
 Coverage: 1 roll for 35m2

Multiexp. rame fixing MQL-ST



Ø8mm universal nylon frame plug with screw, for fixing of AEROGEL HF to walls and ceilings. Suitable for a wide range of supports: expands in full supports and ties in cavities.

Please refer to the installation guidelines and specific documentation according to the type of application

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