



**DESCRIPTION** Advanced porous material for thermal insulation (APM)

**OVERVIEW** Thermal insulation sheets/panels made of continuous filament glass fibre and nanoporous synthetic amorphous silica aerogel.

AEROGEL BV is provided with a PE-AL-PE multi-layer vapor barrier, available on one or both sides. Sheets/panels are compact and tenacious thanks to the high density fibrous matrix that ensure adequate compression behavior.

Widely used for thermal insulation of buildings, boasts superior performance compared to traditional insulation materials.

Designed for internal building restoration and renovation applications, and generally the whole applications ask for high insulation performance, strictly low thickness of the insulation layers, and almost-zero vapour permeability.

**CORE FEATURES**

	Superior thermal insulation		Almost zero vapour permeability		Harmful emissions free
	No-dust		Reduced thickness		Multy layer
	Compression resistant		Cut-to-size		Easy to install

**GUIDELINES** AEROGEL BV is easy to work : it can be cut and drilled as needed.

Precise cuts allow an optimal matching of the joints. No thermal bridges.

Joints will be sealed with aluminum tape.

Fixing to brick or cement structures made by adhesives or mechanically. Stapling or nailing are the commonly used methods for wood substrates. Fixing points will be sealed with aluminum tape.

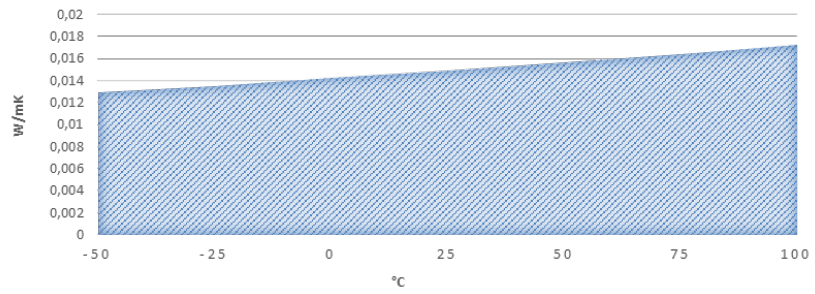
Please refer to the specific documentation depending on the type of application on [www.ecofine.it](http://www.ecofine.it).

**FIELD OF APPLICATION**

	Wall cavities		Counter walls		Floating floors
	False ceilings		Inner ceiling/roof		

PERFORMANCE

Thermal conductivity according to working temperature \*



\* Trend obtained by interpolation with conversion coefficient  $f t = 0.001 50343$

TECHNICAL DATA

FEATURE	STANDARD	U.M.	VALUE
Declared thermal conductivity <sup>1)</sup>	$\lambda_D$ EN10456	W/mK	0,016
Thermal resistance <sup>2)</sup>	R -	m <sup>2</sup> K/W	0,69
Calorific value	$C_p$ EN10456	J/Kg.K	1030
Nominal density	-	Kg./m <sup>3</sup>	200 ± 10%
Water vapour transmission rate	$\mu$ EN12086	-	> 4,5x10 <sup>6</sup>
Water vapor permeability	EN12086	Kg./msPa	< 4x10 <sup>-17</sup>
Airflow thickness	$S_d$ EN12086	m	> 1400
Short-term partial immersion water absorption	$W_p$ EN1609	Kg./m <sup>2</sup>	0
Long-term partial immersion water absorption	$W_{lp}$ EN12087	Kg./m <sup>2</sup>	0
Compression behaviour	$\sigma_{10}$ EN826	KPa	54
Point load behavior <sup>4)</sup>	$F_5$ EN12430	N	1 1 93 at 5 mm strain
Compressive creep <sup>3)</sup>	$\epsilon_{10Y}$ EN1606	%	0,45 (3 KPa) 1,55 (6 KPa) 3,65 (9 KPa)
Dynamic stiffness <sup>1)</sup>	$s'$ EN29052-1	MN/m <sup>3</sup>	43
Compressibility <sup>1)</sup>	$c$ EN12431	mm	1,2
Dimensional stability (70°C / 90%UR) <sup>4)</sup>	EN1604	%	width : $\Delta\epsilon_l < 1$ length : $\Delta\epsilon_b < 1$ thickness : $\Delta\epsilon_d < 1$
Insulation' fire behaviour - EUROCLASS	EN13501-1	-	B / s1 / d0

Lining' fire behaviour - EUROCLASS	EN13501-1	-	E
Service temperature range	-	°C	-30 / +70

- 1) performance determined for 11 mm-thickness    2) d/ D by d = 0,01 1 m    3) linear regression processed from 1h to 2928h  
 4) performance determined with no lining

**SIZES**

Nominal thickness	mm	11	22	33	44	55
Size	-	P	M	M	M	M
Dimension	mm	C D	C D	C D	C D	C D
Dimensional tolerance	%	width, lenght : ±1,5 ; thickness : 0/+15				

P=panel M=multi-layer panel obtained by coupling of panels C=740x740 D=11.480x740

**COMPLIANCE** Declaration of conformity by the manufacturer in compliance with D.M. 2-04-98.

**ADDITIONAL INFORMATION**

Article does not contain substances classified as dangerous according to Regulation (EC) 1272/2008 and subsequent amendments. Please refer to Information Sheet.

FAV classification in accordance with Regulation (EC) No. 1272/2008 Annex VI, as amended by Regulation (EC) No. 790/2009 according to CLP criteria.

HAZARD CATEGORY : Exempted from classification. NOTE : "R".

TARIC : 68 06 90 0000

**STORAGE**

Store the product in a dry place, away from moisture and ice.  
 Avoid exposition to UV rays for long periods.  
 Under standard storage conditions product is unlimited storable.

**DISPOSAL**

Dispose the product and its packaging in accordance with current local/national directives.  
 CER: 17.06.04 .  
 Article suitable for moving to landfill facilities for non-hazardous waste in compliance to D.M. 27/09/2010

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](http://www.ecofine.it)