

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

**OVERVIEW** Thermal insulation blanket/sheets made of continuous filament glass fibre and nanoporous synthetic amorphous silica aerogel.  
 AEROGEL A2 is a compact and tenacious blanket thanks to the fibrous matrix that ensures breathability and toughness.  
 Widely used for thermal insulation of buildings, boasts superior performance compared to traditional insulation materials.  
 Designed for restoration and renovation of buildings and generally the whole civil and industrial applications ask for high insulation performance and strictly low thickness of the insulation layers.  
 Suitable with external thermal insulation systems.  
 Harmful emissions free : VOC A+. Compliant with RoHS Directive 2011/65/EU.

**CORE FEATURES**

	Superior thermal insulation		Non-combustible Non-flammable		Super-hydrophobic
	Compression resistant		Reduced thickness		Easy to install
	Breathable		Harmful emissions free		Durable

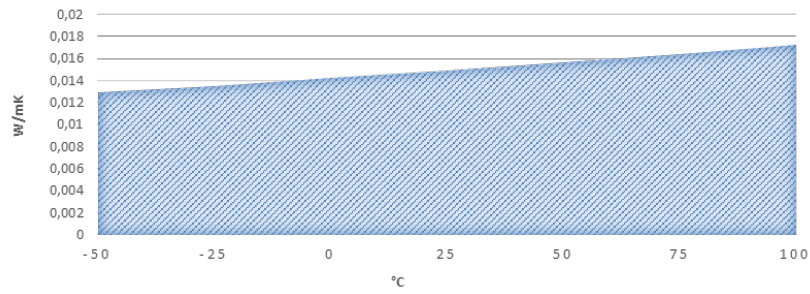
**GUIDELINES** AEROGEL A2 is easy to work : it can be cut and drilled as needed.  
 Precise cuts allow an optimal matching of the joints. No thermal bridges.  
 Fixing to brick or cement structures made by adhesives or mechanically. Stapling or nailing are the commonly used methods for wood substrates.  
 Please refer to the specific documentation depending on the type of application on [www.ecofine.it](http://www.ecofine.it).  
 For external thermal insulation systems (ETICS) please refer to [Linee guida per la posa](#).

**FIELD OF APPLICATION**

	External insulation		Internal partitions		Thermal bridges
	Ceilings		Flat roofs		Counter walls
	Wall cavities		Pitched roofs		

PERFORMANCE

Thermal conductivity according to working temperature \*



\* Trend obtained by interpolation with conversion coefficient  $f_t = 0,00150343$

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	-	13
Water vapor permeability	EN12086	Kg./msPa	14,4x10 <sup>-12</sup>
Airflow resistivity	r EN29053	KPas/m <sup>2</sup>	>1000
Short-term partial immersion water absorption	$W_p$ EN1609	Kg./m <sup>2</sup>	0
Long-term partial immersion water absorption	$W_{ip}$ EN12087	Kg./m <sup>2</sup>	0
Compression behaviour	$\sigma_{10}$ EN826	KPa	54
Point load behavior	$F_5$ EN12430	N	1193 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
Tensile strength perpendicular to faces	EN1607	KPa	13
Tensile strength parallel to faces	EN1608	KPa	perpendicular to fiber orientation: 202 parallel : 1297
Dimensional stability (70°C / 90%UR)	EN1604	%	width : $\Delta\epsilon < 1$

length :  $\Delta\epsilon_b < 1$   
thickness :  $\Delta\epsilon_d < 1$

Static contact angle	⊖	EN15802	°	167
Fire behaviour - EUROCLASS		EN13501-1	-	B / s1 / d0
Volatile Organic Compounds (VOC)		EN16000-9	class	A+
RoHS		EN62321	-	Directive 2011/65/EU compliant
Service temperature range <sup>4)</sup>		-	°C	-30 / +300

1) performance determined for 11 mm-thickness    2)  $d/\lambda D$  by  $d=0,011\text{ m}$     3) linear regression processed from 1h to 2928h  
4) no internal phenomena of "self heating", breaks, cavities, degradation of the fibrous structure or thickness reduction > 1%

#### SIZES

Nominal thickness	mm	11	22	33	44	55
Size	-	R P	M	M	M	M
Dimension	mm	A B C D E F	C D E F	D	D	D
Dimensional tolerance	%	width, length : $\pm 1,5$ ; thickness : 0 / +15				

R=roll P=sheet M=multi-layer panel obtained by coupling of sheets

A=1.500x35.500 B=1.500x8.750 C=740x740 D=1.480x740 E=1.480x290 F=1.480x160

**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.  
FAVs 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 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)