



## GENERAL ISOPUR V-B POLYISOCYANURATE INSULATING PANEL COATED ON TOP SIDE WITH A THIN LAYER OF BITUMEN GLASS

### DESCRIPTION

**General ISOPUR V-B** is a sandwich panel consisting of a closed cell rigid polyiso foam insulating component (PIR) coated on top side with a TNT-coupled bitumen glass reinforcement. The product is CFC- and HCFC-free and is suitable for heat bonding (side of panel with bitumen glass layer).

CE marked according to standard EN 13165.

### TECHNICAL NOTE

When choosing insulating systems for roofing, assess in advance the need to insert a vapour barrier or vapour shield for the thermohygro-metric balance of the roofing.

### APPLICATION

It can be used for insulating flat or slanted roofs under tile (coupling with bituminous membranes).

In warm ballasted roofs, dry laying with staggered joints above the vapour barrier or vapour shield.

In warm roofs with exposed and visible membranes, join the insulating panel to the support as follows:

- in vapour shield stratigraphies, use **Isolink P** or **Isolink P Alu** (see technical data sheet and application method) and secure the panel, after placing the insulating sheets in a staggered manner, reviving the embossed parts with heat, assisting the constraint with mechanical fasteners, above the first waterproof layer, in areas with greater exposure to wind extraction (perimeters, technical compartments, skylights, etc.);
- in vapour barrier stratigraphies, use **Gemini Vapor** or **Gemini Vapor Alu** (see technical data sheet) and secure the panel, after placing the insulating sheets in a staggered manner, with **General Glue HV** bituminous adhesive (see technical data sheet) or **General Bitox**, assisting the constraint with mechanical fasteners, above the first waterproof layer, in areas with greater exposure to wind extraction (perimeters, technical compartments, skylights, etc.);
- in the case of dry laying without gluing, secure to the support using an appropriate number of mechanical fasteners depending on the wind extraction on the specific roof and depending on whether it is placed on the insulating panel or on the first waterproof layer.

In all circumstances proceed with heat bonding in total adherence of the waterproof layers that make up the stratigraphy, on the side of the panel with the TNT-coupled bitumen glass layer, which is suitable for heat bonding.

The reported data are medium and indicative data related to the current production and they can be updated in any moment without notice by General Membrane SpA. The technical information provided by GENERAL MEMBRANE SpA represent its best technical knowledge on the characteristics and the proper use of the product. Considering the different and several fields of use and the possible combinations of specific elements and situations not depending by General Membrane, the company does not take any responsibility for results. It is the buyer's responsibility to determine the suitability of the product for the intended application.





## TECHNICAL DATA

PROPERTIES	UNIT OF MEASUREMENT	CLASSIFICATION ACCORDING TO EN 13164	VALUE / LEVEL	TEST STANDARD
<b>Thermohygroscopic features</b>				
<b>Declared thermal conductivity (at average T of 10°C)</b>				
Thickness from 30 to 70 mm	W/mK	$\lambda_D$	0.028	EN 12667
Thickness from 80 to 100 mm	W/mK	$\lambda_D$	0.026	
Thickness from 120 to 160 mm	W/mK	$\lambda_D$	0.025	
<b>Declared thermal resistance</b>				
Thickness 30 mm	m <sub>2</sub> K/W	R <sub>D</sub>	1.05	EN 12667
Thickness 40 mm	m <sub>2</sub> K/W	R <sub>D</sub>	1.40	
Thickness 50 mm	m <sub>2</sub> K/W	R <sub>D</sub>	1.75	
Thickness 60 mm	m <sub>2</sub> K/W	R <sub>D</sub>	2.10	
Thickness 70 mm	m <sub>2</sub> K/W	R <sub>D</sub>	2.50	
Thickness 80 mm	m <sub>2</sub> K/W	R <sub>D</sub>	3.05	
Thickness 90 mm	m <sub>2</sub> K/W	R <sub>D</sub>	3.45	
Thickness 100 mm	m <sub>2</sub> K/W	R <sub>D</sub>	3.80	
Thickness 120 mm	m <sub>2</sub> K/W	R <sub>D</sub>	4.80	
Thickness 140 mm	m <sub>2</sub> K/W	R <sub>D</sub>	5.60	
Thickness 160 mm	m <sub>2</sub> K/W	R <sub>D</sub>	6.40	
<b>Water absorption for long-term total immersion</b>	Vol. %	WL(T)2	≤ 2	
<b>Water absorption for short-term partial immersion</b>	Kg/m <sup>2</sup>	WS(P)	≤ 0,2	EN 1609
<b>Flatness after wetting one side</b>	mm	FW2	≤ 10	EN 825
<b>Resistance to vapour diffusion</b>	m <sup>2</sup> ·h·Pa/mg	Z	6.9 – 63	EN 12086
Value for thickness 80 mm		μ	273	
<b>Mechanical features</b>				
<b>Compressive strength (at 10% deformation)</b>	kPa	CS(10/Y)150	≥ 150	EN 826
<b>Compressive strength (at 2% deformation)</b>	kPa	CS(2/Y)5000	≥ 5000	
<b>Compressive strength at 50 years (deformation ≤ 2%)</b>	Kg/m <sup>2</sup>	CC(2/1.5/50)	50	EN 1606
<b>Tensile strength perpendicular to the sides</b>	kPa	TR60	≥ 60	EN 1607
<b>Pull-through resistance</b>	N		> 800	EN 16382
<b>Physical features</b>				
<b>Tolerance on thickness</b>				
Thickness < 50 mm	mm	T2	±2	EN 823
50 mm ≤ Thickness ≤ 70 mm	mm	T2	±3	
Thickness ≥ 80 mm	mm	T2	-3; +5	
<b>Tolerance on width and length (L)</b>				
L < 1000 mm	mm		±5	EN 822
1000 mm ≤ L ≤ 2000 mm	mm		±7.5	
2000 mm ≤ L ≤ 4000 mm	mm		±10	
L > 4000 mm	mm		±15	
<b>Flatness deviation</b>	mm	S <sub>max</sub>	≤ 5	EN 825
<b>Orthogonal deviation</b>	mm/m	S <sub>b</sub>	≤ 5	EN 824
<b>Reaction to fire</b>		Euro class	F	EN 13501-1

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CONFORMITY DATA SHEET

PRODUCT

STC 071 – GENERAL ISOPUR V-B

ISSUED

UK-03-02/21



<b>Apparent volumetric mass density</b>	Kg/m <sup>3</sup>	ρ	45 ±2	EN 1602
<b>Dimensional stability (70°C and 90% R.H. for 48 h)</b>				
Thickness ≤ 40 mm	%	DS(70,90)	3	EN 1604
Thickness > 40 mm	%	DS(70,90)	4	
<b>Dimensional stability (-20°C for 48 h)</b>	%	DS(-20,-)	2	
<b>Average percentage of closed cells</b>	%		95	Manufacturer
<b>Linear thermal expansion coefficient</b>	mm/mK		0.05	UNI 6348
<b>Specific heat</b>	J/Kg-K		1470	EN 10456
<b>Average recycled content (% in weight)*</b>	%		3.7	EN 14021
<b>Volatile Organic Compounds (VOC) Emission</b>	French Regulation		A+	EN 16000
	Italian CAM		Pass	

PLEASE NOTE:

\* **Recycled content: the environmental claim of the product**, drawn up in accordance with UNI EN ISO 14021:2016, must be requested from our Technical Department.

*Specify **ECOFRIENDLY** when ordering.*

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