



GENERAL DESCRIPTION

Extruded polystyrene thermal insulation boards **MARSIPUS** are thermal insulating material (XPS) produced from polystyrene and suitable blowing agents by the process of continuous extrusion thus forming a continuous board at the desired thickness (20-100 mm). This is then cut and packed in various dimensions and shapes regarding surface and edges. The produced material is a solidified, homogeneous and stable foam with closed (> 95%) polyhedral cells ranging 0.1 – 0.4 mm in diameter and having a wall thickness of only 1µm. Accordingly, a mere 3% of the product volume is solid matter the remaining 97% being occupied by gas.

APPLICATIONS

All thermal insulation applications suitable for insulation of:

- double-sided walls
- external walls (rennovations, energy class upgrade)
- basement floors (placed immediately after a PE film)
- underground vertical walls, by means of mechanical support
- pitched roofs under the waterproofing membrane
- terraces, external thermal insulation as a composite thermal insulation tile (5cm **MARSIPUS XPS** with 1cm of high mechanical strength polymerized cement) resulting to a thermal insulated walkable terrace -**MARSIPUS TL**

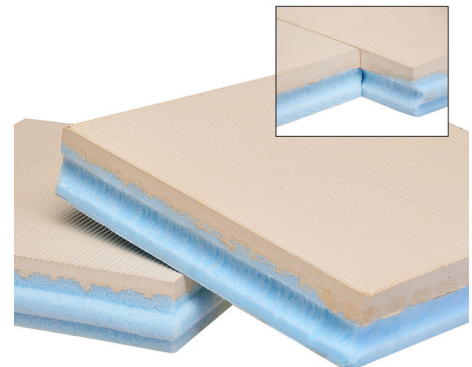
REQUIREMENTS

MARSIPUS XPS products are tested in accordance with EN 13164 and affixed with CE Marking.

STORAGE AND HANDLING

MARSIPUS XPS is not affected by rain, snow or intense cold therefore safe even in outdoor storage without any protection for several weeks. However, extensive exposure to sunlight can cause alterations and for this reason, storage in piles or under shed is recommended. Although **MARSIPUS XPS** products contain flame retardants, they should not be stored near to flammable materials.

Maximum recommended exposure temperature is: 75 °C.





TECHNICAL CHARACTERISTICS

MARSIPUS	UNIT	NORM	WL		RF		ST		FL		PR		SP	
			WALL	ROOFS*	EXTERNAL INSULATION	FLOORS	UNDERTILE	COOLING ROOMS						
PROPERTIES														
THERMAL CONDUCTIVITY COEFFICIENT $\lambda_{D \max}$ <small>(Corresponds to the material's behaviour after 25years of artificial ageing)</small>	W/mK	EN 12667	0.0318	30mm	0.0318	30mm	0.0318	30mm	0.0318	30mm	0.0326	40mm	0.0338	50mm
			0.0338	50mm	0.0338	50mm	0.0338	50mm	0.0338	50mm	0.0338	≥50mm	0.0355	75mm
THERMAL CONDUCTIVITY COEFFICIENT $\lambda_{D \max}$	W/mK	EN 12667	0.029		0.029		0.029		0.029		0.029		0.029	
FIRE BEHAVIOUR	-	EN 13501-1 EN ISO 11925-2	E		E		E		E		E		E	
LONGTERM WATER ABSORPTION UNDER TOTAL IMMERSION	% vol.	EN 12088	≤ 3		≤ 3		-		3		-		≤ 3	
SHORT-TERM WATER ABSORPTION UNDER TOTAL IMMERSION	% vol.	EN 12087			≤ 0.7		≤ 1.5		≤ 0.7		≤ 0.7		≤ 0.7	
VAPOR DIFFUSION RESISTANCE COEFFICIENT, μ	ng/(Pa.s.m)	EN 12086	≥ 100		≥ 120		≥ 80		≥ 120		≥ 120		≥ 120	
CAPILLARITY	-		none		none		none		none		none		none	
COMPRESSIVE STRENGTH min (deformation 10%)	kPa	EN 826	-		250	30-40mm	250	30-40mm	400 - 500		250	30-40mm	350	50mm
			300	≥50mm	300	≥50mm	300	≥50mm	400	≥75mm				
DIMENSIONAL STABILITY (70 °C, rel.moisture. 90%)	-	EN 1604	≤ 5%		≤ 5%		≤ 5%		≤ 5%		≤ 5%		≤ 5%	
MIN/MAX TEMPERATURE APPLICATION LIMIT	°C	-	- 50 / + 70		- 50 / + 70		- 50 / + 70		- 50 / + 70		- 50 / + 70		- 50 / + 70	
DIMENSIONS - APPEARANCE														
LENGTH	mm	EN 822	2500		1250		2500		1250		2500		2500	
WIDTH	mm	EN 822	600		600		600		600		600		600	
THICKNESS	mm	EN 823	25 to 100		25 to 120		25 to 100		30 to 50		40 to 50		50 to 75	
SURFACE			skinned		skinned		skinned grooved		skinned		skinned grooved		skinned	

The information contained in this leaflet is, to the best of our knowledge, true and reliable and is supported by the present state of our knowledge. According to the care taken and the method of application, upon which we have no influence, the values are subject to divergence. Therefore for best results, prior to use, an application test should be made by the user under his own processing conditions.

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