

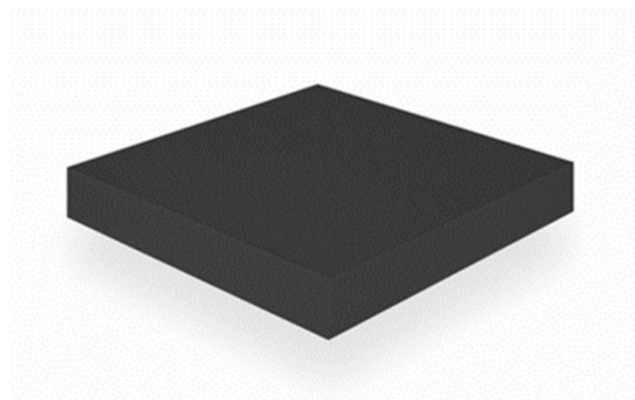


FABRICATION

XPS SOLUTIONS FOR INDUSTRIAL APPLICATIONS

X-FOAM MLB INDIGO BLACK

EXTRUDED POLYSTYRENE BOARD
[XPS - without HCFC - without HFC]



X-FOAM MLB INDIGO BLACK is a black extruded expanded polystyrene thermal insulation sheet, without extrusion skin, without CFC or HCFC and with 4 straight edges. The sheets declare compressive strength values from 250 kPa. They have a width from 900 mm to 1025 mm, length 3,055 mm and thicknesses available from 6 mm to 65 mm. **X-FOAM MLB INDIGO BLACK** it is fire classified EUROCLASS E according to the European standard EN 13501-1. **X-FOAM MLB INDIGO BLACK** complies with the Minimum Environmental Criteria (CAM).

APPLICATIONS WITH X-FOAM MLB INDIGO BLACK: Sandwich panels, isothermal vans, graphic applications, insulation of civil and industrial doors, are integrated into systems for the finished construction of French door spaces, insulation of thermal bridges



CHARACTERISTIC	STANDARD	UNIT	VALUES
Thickness	EN 823	mm	6 - 65
Thickness tolerances Thickness from 6 mm to 100 mm	EN 823 EN 13164	mm	± 0,5
Length	EN 822	mm	3055
Width	EN 822	mm	900 - 1025
Length (l) and width (b) tolerances	EN 13164	mm	l o b ≤ 1500: +/- 8 l o b > 1500: +/- 10
Orthogonality tolerance (Sb)	EN 824/EN 13164	mm/m	1,5
Flatness tolerance (Smax)	EN 825/EN 13164	mm/m	2
Straightness tolerance on the long edge		mm/m	1,5
Density		kg/m ³	33 +/- 10%
Specific heat		J/kgK	1450
Coefficiente di dilatazione termici lineare		mm/mK	0,07
Slab profile	Straight squared edge		
Surface finishing	Rough skinless with or without grooves		
Groove tolerances	Pitch 40 mm	Width 2 mm (-0/+1)	Width 3 mm (-0/+1)

CHARACTERISTIC	STANDARD	UNIT	VALUES	
Thermal conductivity (λ_D) and Thermal resistance (R_D)			λ_D	R_D
Thicknesses 6 ÷ 99 mm	EN 13164	λ_D : W/mK R_D : m ² K/W	0,033	
Thickness 65 mm	EN 13164	λ_D : W/mK R_D : m ² K/W	0,033	1,95
Compressive stress at 10 % deformation Thickness 6 ÷ 99 mm Thickness 65 mm Thickness 100 mm	EN 826	kPa	$\geq 250 - CS(10/Y)250$	
Compressive elastic modulus	EN 29469:	kPa	10 000	
Tensile elastic modulus	EN 12086:	kPa	5 000	
Shear resistance	EN 12086:	kPa	≥ 260	
Shear modulus	EN 12086:	kPa	2 700	
Traction perpendicular to the faces	EN 12086:	kPa	$\geq 200 - TR200$	
Dimensional stability at 70°C and 90% RH Changes in thickness, length and width	EN 1604	%	$\leq 5 - DS(70,90)$	
Deformation behavior. Condition test 70° C, 168 h, 40 kPa	EN 1605	%	$\leq 5 - DLT(2)5$	
Water absorption by immersion (28 days)	EN 16535:	Vol %	$\leq 0,7 - WL(T)0,7$	
Water absorption by diffusion (28 days)	EN 12088:	Vol %	$\leq 3\% - WD(V)3 \text{ sp.} < 60$ $\leq 2\% - WD(V)2 \text{ sp.} 60$ $\leq 1\% - WD(V)1 \text{ sp.} > 60$	
Resistance to water vapor diffusion (μ)	EN 12086:		MU 80	
Frost behavior (freeze - thaw alternation) after water absorption by long-term diffusion Thickness <60 mm Thickness ≥ 60 mm	EN 12091:	Vol %	$\leq 2 - FTCD1$ $\leq 1 - FTCD2$	
Reaction to fire	EN 13501-1	Euroclasse	E	
Limit temperature of use		°C	+75	
Closed cell average		%	> 96	
VOC (Volatile Organic Compounds)	EN 16516 / ISO 16000	Class/Protocol	A+, Leed, Well, Breeam	

