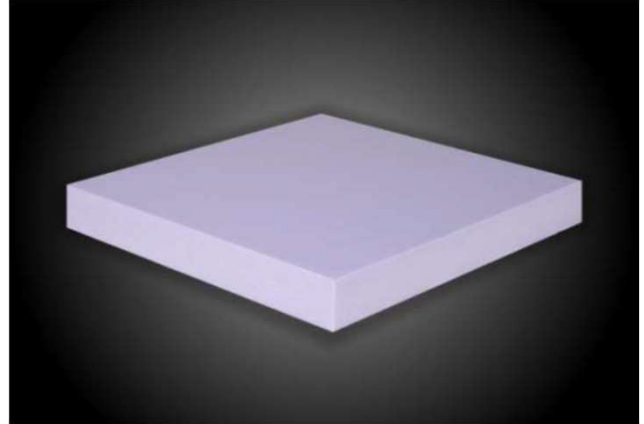




FABRICATION

XPS SOLUTIONS FOR INDUSTRIAL APPLICATIONS

X-FOAM MLB INDIGO (600) EXTRUDED POLYSTYRENE SHEET [XPS WITHOUT HCFC - WITHOUT HFC]



X-FOAM MLB INDIGO (600) is a sheet for thermal insulation in extruded polystyrene foam in indigo color, without extrusion skin, without CFC or HCFC and with 4 straight edges. The sheets declare compressive strength values from 200 kPa to 300 kPa depending on the thickness. They have a width of 600 mm to 625 mm, length of 1,000 mm to 3,000 mm and thicknesses available from 6 mm to 120 mm. **X-FOAM MLB INDIGO (1200)** is fire classified EUROCLASS E according to the European standard EN 13501-1. **X-FOAM MLB INDIGO (600)** complies with the Minimum Environmental Criteria (CAM).

APPLICATIONS WITH X-FOAM MLB INDIGO (600): Sandwich panels, isothermal boxes, graphic applications, insulation of civil and industrial doors, are integrated into systems for the finished construction of French window compartments, insulation of thermal bridges



PROPERTIES	STANDARD	UNITS OF MEASUREMENT	VALUES
Thicknesses	EN 823	mm	6 - 120
Thickness tolerance	EN 823 EN 13164	mm	± 0.5
Length	EN 822	mm	1000 - 3000
Width	EN 822	mm	600 - 625
Length (l) and width (b) tolerance	EN 13164	mm	L or B ≤ 1500: +/- 8 L or B > 1500: +/- 10
Orthogonality tolerance (S _b)	EN 824/EN 13164	mm/m	2
Flatness tolerance (S _{max})	EN 825/EN 13164	mm/m	2
Straightness tolerance on the long edge		mm/m	1,5
Density		kg/m ³	30 +/- 10%
Specific heat		J/kgK	1450
Coefficient of thermal expansion linear		mm/mK	0,07
Sheet profile	Square straight edge		
Surface Finish	Rough without skin with or without grooves		
Groove tolerances	Pitch 40 mm	Width 2 mm (-0/+1)	Depth 3 mm (-0/+1)

PROPERTIES	STANDARD	UNITS OF MEASUREMENT	VALUES	
Declared Thermal Conductivity (λ_D) and Declared Thermal Resistance (R_D)			λ_D	R_D
Thickness 6 mm - 19 mm	EN 13164	λ_D W/mK R_D m ² K/W	0,034	
Thickness 20 mm	EN 13164	λ_D W/mK R_D m ² K/W	0,034	0,60
Thickness 21 mm - 29 mm	EN 13164	λ_D W/mK R_D m ² K/W	0,034	
Thickness 30 mm	EN 13164	λ_D W/mK R_D m ² K/W	0,031	0,95
Thickness 31 mm - 49 mm	EN 13164	λ_D W/mK R_D m ² K/W	0,032	
Thickness 40 mm	EN 13164	λ_D W/mK R_D m ² K/W	0,032	1,25
Thickness 41 mm - 49 mm	EN 13164	λ_D W/mK R_D m ² K/W	0,033	
Thickness 50 mm	EN 13164	λ_D W/mK R_D m ² K/W	0,033	1,50
Thickness 51 mm - 59 mm	EN 13164	λ_D W/mK R_D m ² K/W	0,033	
Thickness 60 mm	EN 13164	λ_D W/mK R_D m ² K/W	0,033	1,80
Thickness 61 mm - 79 mm	EN 13164	λ_D W/mK R_D m ² K/W	0,034	
Thickness 80 mm	EN 13164	λ_D W/mK R_D m ² K/W	0,034	2,35
Thickness 81 mm - 99 mm	EN 13164	λ_D W/mK R_D m ² K/W	0,034	
Thickness 100 mm	EN 13164	λ_D W/mK R_D m ² K/W	0,034	2,95
Thickness 101 mm - 119 mm	EN 13164	λ_D W/mK R_D m ² K/W	0,034	
Thickness 120 mm	EN 13164	λ_D W/mK R_D m ² K/W	0,035	3,45
Compressive strength at 10% deformation due to load or break Thicknesses 6 ÷ 29 mm Thicknesses 30 ÷ 49 mm Thicknesses 50 ÷ 60 mm Thicknesses 61 ÷ 120 mm	EN 29469:	kPa	≥ 300 – CS(10/Y)300 ≥ 200 – CS(10/Y)200 ≥ 250 – CS(10/Y)250 ≥ 300 – CS(10/Y)300	
Compressive elastic modulus	EN 29469:	kPa	10 000	
Tensile elastic modulus	EN 12086:	kPa	5 000	
Shear resistance	EN 12086:	kPa	≥ 260	
Shear elastic modulus	EN 12086:	kPa	2 700	
Traction perpendicular to faces	EN 12086:	kPa	≥ 200 – TR200	
Dimensional stability at 70 °C and 90% RH Changes in thickness, length and width	EN 1604	%	≤ 5 – SD(70,90)	
Deformation behavior. Cond. 70 °C, 168 hours, 40 kPa test	EN 1605	%	≤ 5 – DLT(2)5	
Water absorption by immersion (28 days)	EN 12088:	Vol %	≤ 0.7 – WL(T)0.7	
Water absorption by diffusion (28 days).	EN 12086	Vol %	$\leq 3\%$ – WD(V)3 th.< 60 $\leq 2\%$ – WD(V)2 sp. 60 $\leq 1\%$ – WD(V)1 sp.> 60	
Resistance to vapor diffusion Water (μ)	EN 12086:		MU 80	

Frost behaviour (alternating freeze-thaw) after water absorption by long-term diffusion thicknesses <60 mm thicknesses ≥ 60 mm	EN 12091	Vol %	≤ 2 – FTCD1 ≤ 1 – FTCD2
Reaction to fire	EN 13501-1	Euroclass	E
Temperature limit of use		°C	+75
Closed Cell Media		%	> 96
VOCs (Volatile Organic Compounds)	EN 16516 / ISO 16000	Class/Protocol	A+, Leed, Well, Breeam

X-FOAM MLB INDIGO (600) 01/08/2024 – 01.24

