


# X-FOAM<sup>®</sup> MLB

EXTRUDED POLYSTYRENE PANEL (XPS) [WITHOUT HCFC - WITHOUT HFC]

CHARACTERISTICS	STANDARD	UNIT	VALUES				
<b>SIZE</b>							
Thickness	EN 823	mm	20 - 100				
Thickness tolerance class (T2)	EN 823 EN 13164	mm	-1,5 /+1,5				
Thickness < 50 mm							
Thickness from 50 mm to 100 mm			-1,5 /+1,5				
Length	EN 822	mm	3000				
Width	EN 822	mm	600				
<b>TYPE FINISH</b>							
Straight edges		Panel without skin surface					
<b>THERMAL CONDUCTIVITY AND THERMAL RESISTANCE</b>							
Declared thermal conductivity	EN 13164 EN 12667	W/mK					
Thickness from 20 mm 30 mm				0,032			
Thickness 40 mm				0,033			
Thickness from 50 mm to 60 mm				0,034			
Thickness from 80 mm to 100 mm			0,035				
Thermal resistance (EN 13164)							
Thickness (mm):	20	30	40	50	60	80	100
Thermal resistance (m <sup>2</sup> K/W):	0,60	0,90	1,20	1,45	1,75	2,25	2,85
<b>COMPRESSIVE STRESS AT 10% DEFORMATION - <math>\sigma_{10}</math></b>							
Compressive strength	EN 826	kPa					
Thickness from 20 mm to 40 mm				≥ 200			
Thickness from 50 mm to 60 mm				≥ 250			
Thickness from 30 mm to 100 mm			≥ 300				
<b>TENSILE STRENGTH PERPENDICULAR TO FACES</b>							
Thickness from 20 mm to 100 mm	EN 1607	kPa	≥ 600				
<b>DIMENSIONAL STABILITY AT SPECIFIED TEMPERATURE AND HUMIDITY CONDITIONS</b>							
Condition test: (48±1) hours, (70±2)°C and (90± 5)% U.R.							
Changes in thickness, length and width	EN 1604	%	≤ 5				
<b>DEFORMATION BEHAVIOR</b>							
Test condition: 70°C, 168 hours, 40 kPa	EN 1605	%	≤ 5				
<b>LONG TERM WATER ABSORPTION BY TOTAL IMMERSION (28 DAYS)</b>							
Thickness from 20 mm to 100 mm	EN 12087	Vol. %	≤ 0,7				
<b>WATER ABSORPTION BY DIFFUSION (28 DAYS)</b>							
Thickness from 20 mm to 50 mm	EN 12088	Vol. %	≤ 5				
Thickness from 60 mm to 100 mm			≤ 3				
<b>WATER VAPOUR DIFFUSION RESISTANCE FACTOR (<math>\mu</math>)</b>							
Thickness from 20 mm to 100 mm	EN 12086		80				
<b>FREEZE - THAW RESISTANCE</b>							
Thickness from 20 mm to 100 mm	EN 12091	Vol. %	≤ 1				
<b>REACTION TO FIRE</b>							
Reaction to fire	EN 13501-1	Euroclass	E				
<b>TEMPERATURE LIMIT USE</b>							
Temperature limit use		° C	+ 75				