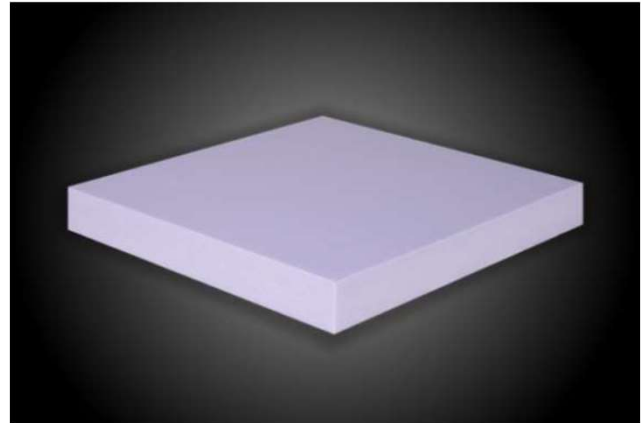




COREVO H

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



COREVO H is a thermal insulation sheet in indigo colored extruded expanded polystyrene, 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 from 900 mm to 1,250 mm, length from 2,000 mm to 4,000 mm and thicknesses available from 6 mm to 100 mm. **COREVO H** is rated to fire EUROCLASS E according to European Standard EN 13501-1. **COREVO H** complies with the Minimum Environmental Criteria (CAM).

APPLICATIONS WITH COREVO H: 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 bridge



CHARACTERISTIC	STANDARD	UNIT	VALUES
Thickness	EN 823	mm	6 - 100
Thickness tolerances Thickness from 6 mm to 100 mm	EN 823 EN 13164	mm	± 0,5
Length	EN 822 / ISO 29465	mm	2000 - 4000
Width	EN 822 / ISO 29465	mm	900 - 1250
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
Thickness 6 mm - 19 mm	EN 13164	λ_D : W/mK RD: m2K/W	0,034	
Thickness 20 mm	EN 13164	λ_D : W/mK RD: m2K/W	0,034	0,60
Thickness 21 mm - 29 mm	EN 13164	λ_D : W/mK RD: m2K/W	0,034	
Thickness 30 mm	EN 13164	λ_D : W/mK RD: m2K/W	0,031	0,95
Thickness 31 mm - 49 mm	EN 13164	λ_D : W/mK RD: m2K/W	0,032	
Thickness 40 mm	EN 13164	λ_D : W/mK RD: m2K/W	0,032	1,25
Thickness 41 mm - 49 mm	EN 13164	λ_D : W/mK RD: m2K/W	0,033	
Thickness 50 mm	EN 13164	λ_D : W/mK RD: m2K/W	0,033	1,50
Thickness 51 mm - 59 mm	EN 13164	λ_D : W/mK RD: m2K/W	0,033	
Thickness 60 mm	EN 13164	λ_D : W/mK RD: m2K/W	0,033	1,80
Thickness 61 mm - 79 mm	EN 13164	λ_D : W/mK RD: m2K/W	0,034	
Thickness 80 mm	EN 13164	λ_D : W/mK RD: m2K/W	0,034	2,35
Thickness 81 mm - 99 mm	EN 13164	λ_D : W/mK RD: m2K/W	0,034	
Thickness 100 mm	EN 13164	λ_D : W/mK RD: m2K/W	0,034	2,95
Compressive stress at 10 % deformation				
Thickness 6 ÷ 29 mm Thickness 30 ÷ 49 mm Thickness 50 ÷ 60 mm Thickness 61 ÷ 100 mm	EN 29469:2022	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 29469:2022	kPa	10 000	
Tensile elastic modulus	EN 12086:2013	kPa	5 000	
Shear resistance	EN 12086:2013	kPa	≥ 260	
Shear modulus	EN 12086:2013	kPa	2 700	
Traction perpendicular to the faces	EN 12086:2013	kPa	≥ 200 – TR200	
Dimensional stability at 70°C and 90% RH Changes in thickness, length and width	EN 1604	%	≤ 5 – DS(70,90)	
Deformation behavior. Condition test 70° C, 168 h, 40 kPa	EN 1605	%	≤ 5 – DLT(2)5	
Water absorption by immersion (28 days)	EN 16535:2019	Vol %	$\leq 0,7$ – WL(T)0,7	
Water absorption by diffusion (28 days)	EN 16536:2019	Vol %	$\leq 3\%$ – WD(V)3 sp.< 60 $\leq 2\%$ – WD(V)2 sp. 60 $\leq 1\%$ – WD(V)1 sp.> 60	

Resistance to water vapor diffusion (μ)	EN 12086:2013		MU 80
Frost behavior (freeze - thaw alternation) after water absorption by long-term diffusion Thickness <60 mm Thickness \geq 60 mm	EN 12091:2013	Vol %	≤ 2 – FTCD1 ≤ 1 – FTCD2
Reaction to fire	EN 13501-1	Euroclasse	E
Limit temperature of use		$^{\circ}\text{C}$	+75
Closed cell average		%	> 96
VOC (Volatile Organic Compounds)	EN 16516 / ISO 16000	Class/Protocol	A+, Leed, Well, Breeam

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