



POLIISO EXTRA

THERMAL INSULATION PANEL
MADE OF RIGID CLOSED-CELL
POLYISO (PIR) FOAM EXPANDED
BETWEEN TWO MULTILAYER
ALUMINIUM FACINGS



POLIISO® EXTRA is a thermal insulation panel made of rigid, yellow, closed-cell polyiso (polyurethane) foam, expanded without CFCs or HCFCs between two multilayer aluminium facings. The panels have a declared thermal conductivity λ_D of 0.022 W/mK according to European standard EN 13165, compressive strength ≥ 150 kPa and Euroclass E reaction to fire according to EN 13501-1. Standard panel dimensions are 600 x 1200 mm, with thicknesses from 20 to 160 mm. POLIISO® EXTRA complies with the Minimum Environmental Criteria (CAM).

APPLICATIONS OF POLIISO® EXTRA: Cavity walls, residential floors, floors with heating systems, roofs beneath synthetic waterproofing membranes and cold-bonded systems.

PROPERTY	STANDARD	UNIT OF MEASURE	VALUES
Thicknesses	EN 823	mm	20 - 160
Thickness tolerance Thicknesses < 50 mm Thicknesses from 50 mm to 75 mm Thicknesses > 75 mm	EN 823	mm	T2 -2/+2 -3/+3 -3/+5
Length	EN 822	mm	1200
Width	EN 822	mm	600
Length and width tolerance Dimension < 1000 mm Dimension from 1000 mm to 2000 mm Dimension from 2001 mm to 4000 mm Dimension > 4000 mm	EN 13165	mm	-5/+5 -7,5/+7,5 -10/+10 -15/+15
Squareness tolerance (Sb)	EN 824	mm/m	5
Flatness tolerance (Smax) Length ≤ 2500 mm Area ≤ 0.75 m ² Area > 0.75 m ²	EN 824	mm	≤ 5 ≤ 10
Density		kg/m ³	36 +/- 10%

Specific heat capacity		J/kgK	1500	
PROPERTY	STANDARD	UNIT OF MEASURE	VALUES	
Declared thermal conductivity (λ_D) and declared thermal resistance (R_D)			λ_D	R_D
Thickness 20 mm	EN 13165	$\lambda_D: \text{W/mK}$ $R_D: \text{m}^2\text{K/W}$	0,022	0,91
Thickness 30 mm	EN 13165	$\lambda_D: \text{W/mK}$ $R_D: \text{m}^2\text{K/W}$	0,022	1,36
Thickness 40 mm	EN 13165	$\lambda_D: \text{W/mK}$ $R_D: \text{m}^2\text{K/W}$	0,022	1,82
Thickness 50 mm	EN 13165	$\lambda_D: \text{W/mK}$ $R_D: \text{m}^2\text{K/W}$	0,022	2,27
Thickness 60 mm	EN 13165	$\lambda_D: \text{W/mK}$ $R_D: \text{m}^2\text{K/W}$	0,022	2,73
Thickness 70 mm	EN 13165	$\lambda_D: \text{W/mK}$ $R_D: \text{m}^2\text{K/W}$	0,022	3,18
Thickness 80 mm	EN 13165	$\lambda_D: \text{W/mK}$ $R_D: \text{m}^2\text{K/W}$	0,022	3,64
Thickness 90 mm	EN 13165	$\lambda_D: \text{W/mK}$ $R_D: \text{m}^2\text{K/W}$	0,022	4,09
Thickness 100 mm	EN 13165	$\lambda_D: \text{W/mK}$ $R_D: \text{m}^2\text{K/W}$	0,022	4,55
Thickness 120 mm	EN 13165	$\lambda_D: \text{W/mK}$ $R_D: \text{m}^2\text{K/W}$	0,022	5,45
Thickness 140 mm	EN 13165	$\lambda_D: \text{W/mK}$ $R_D: \text{m}^2\text{K/W}$	0,022	6,36
Thickness 160 mm	EN 13165	$\lambda_D: \text{W/mK}$ $R_D: \text{m}^2\text{K/W}$	0,022	7,27
Compressive strength at 10% deformation or failure	EN 826	kPa	$\geq 150 - \text{CS}(10/Y)150$	
Compressive creep after 50 years with deformation $\geq 2\%$	EN 1606:2013	kPa	$\geq 25 - \text{CC}(2/1,5/50)25$	
Dimensional stability at $70 \pm 2^\circ\text{C}$, $90 \pm 5\%$ RH, 48 $\pm$ 1 hours Changes in thickness; changes in length and width	EN 1604:2013	% %	$\text{DS}(70,90)4$ ≤ 4 ≤ 1	
Dimensional stability at $-20 \pm 3^\circ\text{C}$, 48 $\pm$ 1 hours Changes in thickness; changes in length and width	EN 1604:2013	%	$\text{DS}(-20,-)2$ ≤ 2 $\leq 0,5$	
Water absorption by immersion (28 days)	EN 12087	Vol %	$\leq 1 - \text{WL}(T)1$	
Water vapour diffusion resistance factor (?)	EN 12086:2013		≈ 89.000	
Reaction to fire	EN 13501-1	Euroclass	E	
Service temperature range		$^\circ\text{C}$	- 40 / + 110	
VOC (Volatile Organic Compounds)		Class/Protocol	A+, Leed, Well, Breeam [...]	

Thermal resistance value R_d , not rounded
Technical data sheet values may change without prior notice
Rev. 06/26: Update, added missing thicknesses



POLIISO® EXTRA 06/2026 – 09.26