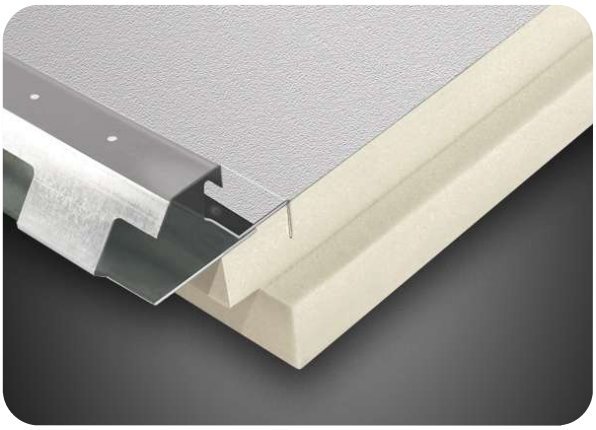
POLIISO TEGOLA

THERMAL INSULATION PANEL MADE OF RIGID, CLOSED-CELL POLYISO FOAM (PIR), EXPANDED BETWEEN TWO EMBOSSED ALUMINIUM SUPPORTS



POLIISO® TEGOLA is a panel designed for under-tile thermal insulation consisting of a rigid closed-cell polyiso (polyurethane foam) foam, yellow, expanded without the use of CFCs or HCFCs between two embossed aluminium supports. The panels, hinged on 4 sides, declare values of λ_D equal to 0.022 W/mK according to the European standard EN 13165, compressive strength values ≥ 150 kPa and have a length of 2400 mm, width equal to the pitch of the tile and thicknesses available from 60 to 140 mm. The panels are EUROCLASS E fire rated according to the European standard EN 13501-1 and are load-bearing thanks to the insertion, in length, of a 30 mm perforated metal tile holder profile to facilitate ventilation under the roofing covering.
Polyiso foam - The only polyiso foam on the market which, thanks to a closed cellular structure, allows for maximum thermal performance and maintenance over time. The use of polyiso foam panels with waterproof supports allows the best thermal resistance value to be obtained. **POLIISO® TEGOLA** complies with the Minimum Environmental Criteria (CAM).

A profile with a height of 42 mm is also available to ensure greater ventilation. If a 42 mm profile is required, in the thicknesses 60 and 80 mm there will be a different height of the leaf: 18 mm for the 60 mm thickness and 30 mm for the 80 mm thickness.

APPLICATIONS WITH POLIISO® TILE: Ventilated roof

CE

PROPERTIES	STANDARD	UNITS OF MEASUREMENT	VALUES
Thicknesses	EN 823	mm	60 - 140
Thickness tolerance Thicknesses from 50 mm to 75 mm Thicknesses > 75 mm	EN 823/ EN 13165	mm	T2: -3/+3 -3/+5
Length	EN 822	mm	2400
Standard width	EN 822	mm	Steps from 315 to 485
Length and width tolerance Size < 1000 mm Dimensions from 1000 mm to 2000 mm Size from 2001 mm to 4000 mm Size > 4000 mm	EN 13165 EN 822	mm	-5/+5 -7,5/+7,5 -10/+10 -15/+15

PROPERTIES	STANDARD	UNITS OF MEAS-UREMENT	VALUES
Orthogonality tolerance (Sb)	EN 824 /EN 13165	mm/m	5
Flatness tolerance (Smax) Length ≤ 2500 mm ≤ area 0.75 m2 > area 0.75 m2	EN 825 EN 13165	 mm/m mm/m	 ≤ 5 ≤ 10
Density		kg/m3	40 +/- 10%
Specific heat		J/kgK	1500

Declared thermal conductivity (λD) and declared thermal resistance (RD)			λd	Rd*
Thickness 60 mm	EN 13165/EN 12667	λD: W/mK - R_D: m2K/W	0,022	2,73
Thickness 80 mm	EN 13165/EN 12667	λD: W/mK - R_D: m2K/W	0,022	3,64
Thickness 100 mm	EN 13165/EN 12667	λD: W/mK - R_D: m2K/W	0,022	4,55
Thickness 120 mm	EN 13165/EN 12667	λD: W/mK - R_D: m2K/W	0,022	5,45
Thickness 140 mm	EN 13165/EN 12667	λD: W/mK - R_D: m2K/W	0,022	6,36
Compressive strength at 10% strain due to load or break	EN 826	kPa	≥ 150 – CS(10/Y)150	
Dimensional stability at 70±2°C, 90±5% RH, 48±1 hours Changes in thickness Changes in length and width	EN 1604:2013	 % %	 SD(70,90)3 ≤ 6 ≤ 2	
Dimensional stability at -20±3 °C, 48±1 hours Changes in thickness Changes in length and width	EN 1604:2013	 % %	 DS(-20,-)1 ≤ 2 ≤ 1	
Water absorption by immersion (28 days)	EN 12087	Vol %	≤ 1 – WL(T)1	
Resistance to water vapour diffusion (μ)	EN 12086:2013		Infinite MU	
Reaction to fire	EN 13501-1	Euroclass	E	
Temperature limit of use		°C	- 40 / + 110	
VOCs (Volatile Organic Compounds)	EN 16516 / ISO 16000	Class/Protocol	A+, Leed, Well, Breeam [...]	

*Thermal resistance values are not rounded.

The values in the technical data sheet are subject to change without notice.