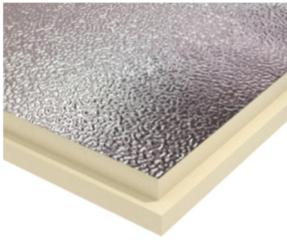


PIR boards PirroMembrane

DESCRIPTION:



PirroMembrane is an insulation board made of rigid polyisocyanurate (PIR) foam, faced on both sides with embossed pure aluminum foil of 50 μ .

PIR has the lowest thermal conductivity compared to traditional insulation, which significantly reduce the required insulation thickness.

PIR consists of a rigid closed cell, which together with the foil embossing provides PirroMembrane boards with high mechanical strength. Board is intended for moving people on it during the installing process.

The low density of material combined with high compressive strength reduces the load on the building frame and metal consumption for designed bearing structures.

The best ratio of weight to overlapping areas gives significant savings on the cost and timing of work; less required thickness reduces the amount of product to transport and costs for installation and fasteners.

PIR boards PirroMembrane has a high fire-resistant properties: exposed to the flame, polyisocyanurate becomes charred and forms a crust that protects intact polymer layers. PIR does not support combustion, does not extend the flame, does not melt and doesn't form burning drops of the melt.

You do not need a protective separation layer of glass fiber between the insulation and the membrane, because the facing of the boards performs this function.

The product is recommended for use in raw season (the rainfall is easily removed from the board surface).

Mechanical method of attachment is used when PIR boards are installing on profiled steel sheet.

APPLICATION:

PirroMembrane is designed for flat roof insulation of industrial and public buildings, constructed with steel deck. This insulation board was constructed for use of roofs, covered with mechanically fixed single ply PVC or bituminous double waterproofing systems. Suitable for roofs larger than 10 000 m² without fire-prevention separation zones.

PirroMembrane board is also applied to objects of private housing in the pitched roofs, layered masonry, walls with ventilated layer.

TECHNICAL FEATURES:

Characteristic	Description	Units	Value
Facings	pure aluminum foil	μ	50
Edge profiling	"Tongue-and-groove" perimeter profiling (for ≥ 50 mm thickness)	mm	10 (depth)
	"Quarter" perimeter profiling (for ≥ 30 mm thickness)	mm	15 (depth)
	Straight	-	-
Dimensions	Width x Length (EN 822)	mm	1200x600, 1200x1200, 1200x2400
	Thickness (EN 822)	mm	30-150 *
Thickness tolerance	(EN 823)	-	T2
Density	PIR foam	kg/m ³	31-38
Dimensional stability under specified temperature and humidity conditions	(EN 1604)	-	DS (70,90) 4
Deformation under specified compressive load and temperature conditions.	(EN 1605)	-	DLT(2)5
Short term water absorption by partial immersion	WS (EN 1609)	-	WS 0,1

Characteristic	Description	Units	Value
Long term water absorption	(EN 12087)	-	WL(T)1.5
Flatness after one-sided wetting	FW (EN 825)	mm	≤ 5
Thermal conductivity	λ_D (EN 12667)	W/m·K	0,023
Water vapour resistance	Z (EN 12086)	m ² ·h·Pa/mg	Z10-20
Compressive strength at 10% deformation	(EN 826)	kPa (kg/cm ²)	≥ 170 (1,7)
Tensile strength perpendicular to surface	(EN 1607)	kPa (kg/cm ²)	≥ 70 (0,7)
Fire behavior	Euroclass (EN 13501-1)	D s2 d0	
	End use steldeck	B s2 d0	
Temperature range of application		°C	-70..+100

* - available another size is a multiple of 5 mm in agreement with the Manufacturer.

Board thickness, mm	30	40	50	60	70	80	90	100	110	120	130	140	150
Thermal resistance $R=d/\lambda_d, m^2 \cdot K/W$	1,30	1,74	2,17	2,61	3,04	3,48	3,91	4,35	4,78	5,22	5,65	6,09	6,52
Heat transfer $U=1/R, W/M^2 \cdot K$	0,77	0,58	0,46	0,38	0,33	0,29	0,26	0,23	0,21	0,19	0,18	0,16	0,15

PACKAGE:

Boards are packed in bundles of up to 600 mm in height and covered with shrink film. The bundles are formed in pallets up to 2400 mm height. At the bottom of each pallet there are the support for the forklift. Each bundle and pallet is provided with the label.

TRANSPORTATION:

In covered vehicles in a horizontal position. Pack sizes are optimal for standard internal dimensions of road transport. Loading and transportation should comply with current shipping rules for the corresponding kinds of transport.

STORAGE:

Boards are stored on horizontal surface, closed from rain and direct sun exposure. It is necessary to ensure fire safety requirements. Boards should be stored in their original packaging. When bundles are stored without the support bars, it is recommended to check the absence of sharp edges on the support surface.