


ALGOPAN[®] PIR LC

PREFABRICATED SANDWICH PANEL
 Thermal insulation: POLIISO PLUS GLUED WITH SLAB OF MINERALIZED WOOD WOOL BOUND CEMENT.
 Support: OSB LAYER on air cavity

CHARACTERISTIC	STANDARD	UNIT	VALUES
OSB thickness		mm	10
AIR cavity		mm	60
MINERALIZED WOOD WOOL BOUND CEMENT thickness		mm	75
POLIISO PLUS thickness	EN 823	mm	60 - 100
Thickness tolerance class (T2) Thickness from 60 mm to 100 mm	EN 823 EN 13165	mm	-1,5 /+1,5
Length	EN 822	mm	2000
Width	EN 822	mm	1200
Overall density POLIISO PLUS		kg/m ³	35 ± 10%
Specific heat POLIISO PLUS		J/kgK	1500
Overall density MINERALIZED WOOD WOOL BOUND CEMENT		kg/m ³	347 ± 10%
Specific heat MINERALIZED WOOD WOOL BOUND CEMENT		J/kgK	1810
Thermal conductivity MINERALIZED WOOD WOOL BOUND CEMENT	EN 13168	W/mK	0,065
Overall density OSB	EN 323	kg/m ³	600 ± 10%
Specific heat OSB		J/kgK	1700
Thermal conductivity OSB	EN 13986	W/mK	0,13
FINISHING			
Straight edges			
THERMAL CONDUCTIVITY AND THERMAL RESISTANCE			
Declared thermal conductivity POLIISO PLUS Thickness from 60 mm to 100 mm	EN 13164 EN 12667	W/mK	0,022
Declared thermal resistance ALGOPAN PIR LC:			
Thickness (mm):	205 [60+75+(60)+10]	225 [80+75+(60)+10]	245 [100+75+(60)+10]
Thermal resistance (m ² K/W):	3,85	4,75	5,65
COMPRESSIVE STRESS AT 10 % DEFORMATION - σ_{10} OF THERMAL INSULATION POLIISO PLUS			
Thickness from 60 mm to 100 mm	EN 826	kPa	≥ 150
COMPRESSIVE CREEP AFTER 50 YEARS WITH CRUSHING ≤ 2 % - σ_2 OF THERMAL INSULATION POLIISO PLUS			
Thickness from 60 mm to 100 mm	EN 1606	kPa	≥ 50
DIMENSIONAL STABILITY AT SPECIFIED TEMPERATURE AND HUMIDITY CONDITIONS OF THERMAL INSULATION POLIISO PLUS			
Condition test: (48 ± 1) hours, (70 ± 2)°C e (90 ± 5)% U.R.			
Thickness change	EN 1604	%	≤ 6
Change in length and width			≤ 2
LONG TERM WATER ABSORPTION BY TOTAL IMMERSION (28 DAYS) OF THERMAL INSULATION POLIISO PLUS			
Thickness from 60 mm to 100 mm	EN 12087	Vol. %	≤ 1
WATER VAPOUR DIFFUSION RESISTANCE FACTOR (μ)			
Thermal insulation POLIISO PLUS			125
ALGOPAN PIR LC	EN 12086		> 125
REACTION TO FIRE OF THERMAL INSULATION POLIISO PLUS			
Reaction to fire	EN 13501-1	Euroclass	F