


GIBITEC® PLUS

PREFABRICATED SEMI-SANDWICH PANEL
Thermal insulation: POLIISO PLUS
Support on one side: PLASTERBOARD SHEET

CHARACTERISTIC	STANDARD	UNIT	VALUES
Plasterboard thickness		mm	13 (or 10)
POLIISO PLUS thickness	EN 823	mm	20 - 140
Thickness tolerance class (T2)			
Thickness < 50 mm	EN 823	mm	-2 /+2
Thickness from 50 mm to 70 mm	EN 13165		-3 /+3
Thickness > 70 mm			-3 /+5
Length	EN 822	mm	3000 / 2000
Width	EN 822	mm	1200
Overall density POLIISO PLUS		kg/m ³	35 ± 10%
Specific heat POLIISO PLUS		J/kgK	1500
Overall density PLASTERBOARD	UNI EN 520	kg/m ³	810 ± 10%
Specific heat PLASTERBOARD	UNI EN 1045	J/kgK	1000
Specific heat PLASTERBOARD	UNI 10351-94	W/mK	0,25
FINISHING			
Straight edges			
THERMAL CONDUCTIVITY AND THERMAL RESISTANCE			
Declared thermal conductivity POLIISO PLUS			
Thickness from 20 mm to 140 mm	EN 13165 EN 12667	W/mK	0,022
Declared thermal resistance GIBITEC PLUS (EN 13165 / EN13950)			
Thickness (mm):	20+13	30+13	40+13
	50+13	60+13	80+13
	100+13	120+13	140+13
Thermal resistance (m ² K/W):	0,95	1,40	1,85
	2,30	2,75	3,65
	4,55	5,50	6,40
COMPRESSIVE STRESS AT 10 % DEFORMATION - σ_{10} OF THERMAL INSULATION POLIISO PLUS			
Thickness from 20 mm to 140 mm	EN 826	kPa	≥ 150
COMPRESSIVE CREEP AFTER 50 YEARS WITH CRUSHING ≤ 2 % - σ_2 OF THERMAL INSULATION POLIISO PLUS			
Thickness from 20 mm to 140 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 20 mm to 140 mm	EN 12087	Vol. %	≤ 1
WATER VAPOUR DIFFUSION RESISTANCE FACTOR (μ)			
Thermal insulation POLIISO PLUS	EN 12086		125
GIBITEC PLUS		> 125	
REACTION TO FIRE OF THERMAL INSULATION POLIISO PLUS			
Reaction to fire	EN 13501-1	Euroclass	F