

TECHNICAL CARD

termPIR® ETX INSULATION BOARDS



Description of board:

The **termPIR® ETX** insulation boards comprise of a PIR rigid foam thermal insulation core. The boards are protected with gas-permeable lining from glass reticular fibre (EXT).

- ▷ Tests of thermal properties: **ITB**
- ▷ Fire classifications: **ICiMB**
- ▷ **Keymark** certificate and quality label
- ▷ Certificate for the **ETICS** system
- ▷ **ISO 9001, ISO 14001** system certificates
- ▷ Compatibility with **EN 13165+A2** and **EN 13172**
- ▷ Admitted to trading in the **EU**

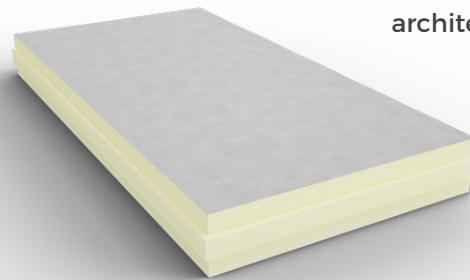
▷ Determination for parameters with DoP:



021-IMBIGS-001



16, 1488 1454



Visualisation of boards with available joint types:



Joint types:

FIT (flat milling)

LAP (stepwise milling)

TAG (tongue and groove)

Information about product safety:

Information about substances contained in the product referred to in Art. 31 and 33 of the Regulation (CE) No.1907/2006 (REACH): Not applicable.

Instruction:

Lay boards in a single layer or multiple layers, in a staggered pattern. Ensure that the boards adhere tightly to each other. Ensure substrate stability. Insulation boards can be installed mechanically using screws, can be suspended or bonded - depending on the type of surface and type of waterproofing membrane. Ensure that the screws do not come clear through the boards. Protect your insulated board system against the elements. termPIR® boards are not structural components. Where insulation boards are to be installed as part of an ETICS facade system, do not install them until after one month from the date of manufacture shown on the label. For further information consult the Technical Catalogue available on www.gor-stal.pl, termpir.eu as well as the ETICS Guideline - termPIR® system.

Buildings:

Intended use of the board:

▷ residential, high density housing	▷ on rafter insulation system on pitched roofs	
▷ residential	▷ under rafter insulation system on pitched roofs	
▷ residential, retail and industrial	▷ build Up Roofs [BUR] - Flat & Green roofs, mechanically fastened	
▷ residential, retail and industrial	▷ build Up Roofs [BUR] - Flat & Green roofs, adhesive or glued systems	
▷ residential, retail and industrial	▷ triple layered external walls - cavity walls	
▷ residential, retail and industrial	▷ double layered external walls - ETICS system	■
▷ residential, retail and industrial	▷ basement and foundation walls	
▷ residential, retail and industrial	▷ partition walls	
▷ residential, retail and industrial	▷ slabs between floors	
▷ residential, retail and industrial	▷ ground floor slabs	
▷ livestock, industrial	▷ suspended ceilings - high pressure washable	
▷ existing, historic, stair-cores	▷ Internal wall insulation	
▷ prefabricated concrete walls	▷ highly resistant to corrosion caused by concrete	

Key: ■ the board recommended for use ■ boards that can be used

Performance:		Values / Classes:									
Length / Width:		2,4 m / 1,2 m; 1,2 m / 1,2 m; 0,6 m / 1,2 m; (minus the depth of the joint) Other lengths also available on request									
Nominal thickness:		$d_n = (20 - 250)$ mm									
Declared heat transfer coefficient for lining, λ_b :		for $(20 \leq d_n < 80)$ mm): 0,027 [W/m·K]			for $(80 \leq d_n < 120)$ mm): 0,026 [W/m·K]			for $(120 \leq d_n \leq 250)$ mm): 0,025 [W/m·K]			
	Coefficient. U [W/m ² ·K], accod. to $U = 1 / (Re + R_o + Ri)$										
For a given nominal thickness [mm]: Thermal resistance: R_o [m ² ·K/W]	for wall	20	1,10	30	0,78	40	0,61	50	0,49	60	0,42
	for roof		1,14		0,80		0,62		0,50		0,42
	for floor	0,70	1,10	1,10	0,78	1,45	0,61	1,85	0,49	2,20	0,42
For a given nominal thickness [mm]: Thermal resistance: R_o [m ² ·K/W]	for wall	70	0,36	80	0,31	90	0,28	100	0,25	110	0,23
	for roof		0,37		0,31		0,28		0,25		0,23
	for floor	2,55	0,36	3,05	0,31	3,45	0,28	3,80	0,25	4,20	0,23
For a given nominal thickness [mm]: Thermal resistance: R_o [m ² ·K/W]	for wall	120	0,20	130	0,19	140	0,17	150	0,16	160	0,15
	for roof		0,20		0,19		0,17		0,16		0,15
	for floor	4,80	0,20	5,20	0,19	5,60	0,17	6,00	0,16	6,40	0,15
For a given nominal thickness [mm]: Thermal resistance: R_o [m ² ·K/W]	for wall	170	0,14	180	0,14	190	0,13	200	0,12	210	0,12
	for roof		0,14		0,14		0,13		0,12		0,12
	for floor	6,80	0,14	7,20	0,14	7,60	0,13	8,00	0,12	8,40	0,12
For a given nominal thickness [mm]: Thermal resistance: R_o [m ² ·K/W]	for wall	220	0,11	230	0,11	240	0,10	250	0,10	-	-
	for roof		0,11		0,11		0,10		0,10		-
	for floor	8,80	0,11	9,20	0,11	9,60	0,10	10,00	0,10	-	-
Compressive strenght at 10% of deformation, σ_{10} :		for $(20 \leq d_n < 30)$ mm): \geq 120 kPa , CS(10/Y)120					for $(30 \leq d_n \leq 250)$ mm): \geq 150 kPa , CS(10/Y)150				
Tensile strength perpendicular to faces:		for $(20 \leq d_n < 50)$ mm): NPD					for $(50 \leq d_n \leq 250)$ mm): \geq 80 kPa, TR80				
Water vapour transmission:		$\mu = (90 \div 170)$									
Dimensional stability:		for $(20 \leq d_n < 50)$ mm): DS(70,-)1					for $(50 \leq d_n \leq 250)$ mm): DS(-20,-)2 / DS(70,90)3				
Apparent PIR core density:		30 kg/m ³									
Reaction to fire (of the product as placed on the market):		20-49: F class, 50-250: E class									

Mechanical and physical properties of termPIR® ETX insulation panels in the ETICS facade system (for panels with minimum thickness of 50 mm):

Reaction to fire (end of use):	B-s1,d0 Class
Fire spread:	NRO , „non-fire spreading product“
Certifications:	The product has had issued for it a Certificate of Conformity, based on a European Technical Approval, according to the ETAG 004 Guideline.