

TECHNICAL CARD

termPIR® BWS INSULATION BOARDS



termPIR®
insulation boards

Description of board

The **termPIR® BWS** insulation boards comprise of a PIR rigid foam thermal insulation core. The boards are protected with gas-permeable lining from glass reticular fibre (WS) on one side and with lining from glass reticular fibre impregnated with bitumen (BT) on the other side.

- ▷ Tests of thermal properties: **ITB**
- ▷ **Keymark** certificate and quality label
- ▷ **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:



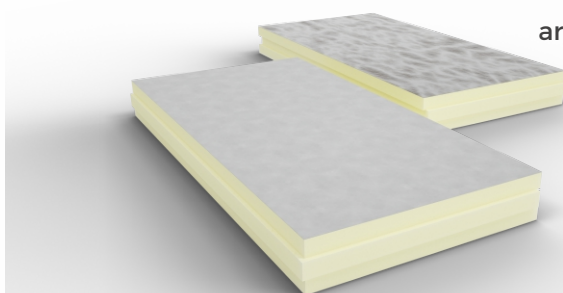
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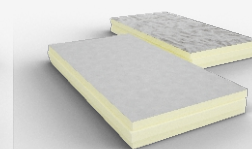
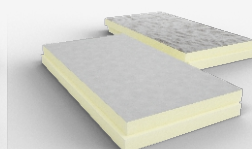
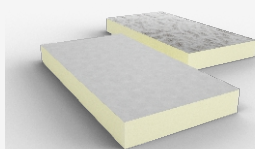
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Green
architecture



Visualisation of boards with available joint types



Joint types

FIT (flat milling)

LAP (stepwise milling)

TAG (tongue and groove)

Application of termPIR® BWS boards in energy efficient buildings

Buildings:

Intended use of the board:

- ▷ residential, high density housing
- ▷ residential
- ▷ residential, retail and industrial
- ▷ residential, retail and industrial
- ▷ residential, retail and industrial
- ▷ residential, retail and industrial
- ▷ residential, retail and industrial
- ▷ residential, retail and industrial
- ▷ residential, retail and industrial
- ▷ residential, retail and industrial
- ▷ residential, retail and industrial
- ▷ residential, retail and industrial
- ▷ livestock, industrial
- ▷ existing, historic, stair-cores
- ▷ prefabricated concrete walls

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

Key

 - the board recommended for use - boards that can be used

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

Boards can be installed in one or multiple layers in an interlocking manner. Boards should fit tightly to each other. The substructure needs to be stable. Install mechanically with fasteners, glue or suspend - depending on the kind of substructure and type of waterproofing. Prevent from pulling the fasteners through the board. Secure against the impact of weather conditions. The boards are not load-bearing elements. Additional information is available in the Technical Catalogue at the website www.gor-stal.pl and www.termpir.eu

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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 ₀		for (20 ≤ d _N < 80 mm): 0,026 [W/m·K]			for (80 ≤ d _N ≤ 120 mm): 0,025 [W/m·K]			for (120 ≤ d _N ≤ 250 mm): 0,024 [W/m·K]			
	Coefficient. U [W/m²·K], accod. to U = 1 / (Re + R ₀ + Ri)										
For a given nominal thickness [mm]: Thermal resistance: R ₀ [m²·K/W]	for wall	20	1,09	30	0,76	40	0,58	50	0,48	60	0,40
	for roof		1,12		0,78		0,59		0,49		0,41
	for floor	0,75	1,09	1,15	0,76	1,55	0,58	1,90	0,48	2,30	0,40
For a given nominal thickness [mm]: Thermal resistance: R ₀ [m²·K/W]	for wall	70	0,35	80	0,30	90	0,27	100	0,24	110	0,22
	for roof		0,35		0,30		0,27		0,24		0,22
	for floor	2,70	0,35	3,20	0,30	3,60	0,27	4,00	0,24	4,40	0,22
For a given nominal thickness [mm]: Thermal resistance: R ₀ [m²·K/W]	for wall	120	0,19	130	0,18	140	0,17	150	0,15	160	0,15
	for roof		0,19		0,18		0,17		0,16		0,15
	for floor	5,05	0,19	5,45	0,18	5,85	0,17	6,30	0,15	6,70	0,15
For a given nominal thickness [mm]: Thermal resistance: R ₀ [m²·K/W]	for wall	170	0,14	180	0,13	190	0,12	200	0,12	210	0,11
	for roof		0,14		0,13		0,12		0,12		0,11
	for floor	7,15	0,14	7,55	0,13	8,00	0,12	8,40	0,12	8,80	0,11
For a given nominal thickness [mm]: Thermal resistance: R ₀ [m²·K/W]	for wall	220	0,11	230	0,10	240	0,10	250	0,09		
	for roof		0,11		0,10		0,10		0,09		
	for floor	9,25	0,11	9,65	0,10	10,10	0,10	10,50	0,09		
Compressive strenght at 10% of deformation, σ ₁₀		for (20 ≤ d _N < 30 mm): ≥ 120 kPa , CS(10/Y)120					for (30 ≤ d _N ≤ 250 mm): ≥ 150 kPa , CS(10/Y)150				
Dimensional stability		DS(70,-)2									
Apparent PIR core density		30 kg/m³									
Reaction to fire (of the product as placed on the market)		F Class									