

TECHNICAL CARD

termPIR® AL GK INSULATION BOARDS



termPIR® AL GK	Product details:
Description of board:	termPIR® AL GK composite insulation boards are composed of a termPIR® boards with a PIR foam core covered on both sides by gas-resistant paper- and aluminium-based facings, and gypsum board with thickness of 12.5 mm. An adhesive layer bonds the paper- and aluminium-based facing and the gypsum board.
Certificates / Approvals:	
CE mark	■
ISO 9001, ISO 14001 System certificates	
Compatibility with EN 13950	■
Environmental Declaration EPD (type III)	
Environmental Certificate (type III)	
CO2 footprint	
(Leed & Breeam) Green Card	
Atest PZH	
VOC	
Keymark certificate and quality label	
Tests of thermal properties ITB	■
Fire classifications	■
Board in the product base SVT	
Board in the product base EPDM	
SundaHUS	
BVB	
Swan- The Nordic Ecolabel	
Certificate for the system ETICS	
Admitted to trading in the EU	■
	* dimensions of boards with joint types are 2 to 4 % smaller

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:	<p>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.</p> <p>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</p> <p>Additional information is available in the Technical Catalogue at the website www.termpir.eu</p>

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Declared heat transfer coefficient for $d_N^* = 25 \text{ mm} \pm 12.5 \text{ mm}$:	$(20 \leq d_N \leq 250 \text{ mm}); \lambda_D = 0,022 \text{ (W/m}\cdot\text{K)}$								
Thermal resistance R_D for $d_N^* = 25 \text{ mm} \pm 12,5 \text{ mm}$:	1,15 [W/m ·K]								
Declared heat transfer coefficient for $d_N^* = 20 \text{ mm} \pm 12,5 \text{ mm}$:	$(20 \leq d_N \leq 250 \text{ mm}); \lambda_D = 0,022 \text{ (W/m}\cdot\text{K)}$								
Standard board dimensions [mm]:	2600 mm ($\pm 10 \text{ mm}$) / 1200 m ($\pm 7,5 \text{ mm}$)								
Coefficient: U [W/m ² ·K], wg $U = 1 / (R_e + R_D + R_i)$									
For a given nominal thickness [mm]: Thermal resistance: R_D [m ² ·K/W]	for wall	20	0,93	30	0,66	40	0,50	50	0,40
	or roof	0,90	0,96	1,35	0,67	1,85	0,50	2,30	0,41
	for floor		0,93		0,66		0,50		0,40
	60	0,34	70	0,29	80	0,26	90	0,23	
	2,75	0,35	3,25	0,29	3,70	0,26	4,15	0,23	
		0,34		0,29		0,26		0,23	
	100	0,21	110	0,19	120	0,17	130	0,16	
	4,65	0,21	5,10	0,19	5,55	0,18	6,05	0,16	
		0,21		0,19		0,17		0,16	
	140	0,15	150	0,14	160	0,13	-	-	
	6,50	0,15	6,95	0,14	7,45	0,13	-	-	
		0,15		0,14		0,13			
Reaction to fire (end of use) Fire spread:	B-s1,d0 Class „non-fire spreading product“ Applies to termPIR® AL GK boards with PIR layer 20-140 mm thick + 12.5 mm gypsum board. Substrate: the boards can be used on any non-combustible or wood effect substrate. They are attached to structures using an adhesive (including combustible adhesives). termPIR boards can also be attached mechanically. For details please see the classification.								

* for $d = 20 - 250 \text{ mm} \pm 12 \text{ mm}$. The thermal characteristics pertain to a PIR insulation core together with facings. The calculations did not take into account the thermal resistance of the gypsum board or the resistance of the adhesive layer.

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termPIR® AL GK

Parameters of termPIR® board with aluminum cladding

PIR core density:	30 kg/m ³
Reaction to fire:	B-s1;d0

GK board

Parameters of the GK board (based on the manufacturer's declaration)

Reaction to fire:	A2-s1,d0
Coeficient of thermal conductivity (for thickness of 12.5 mm):	0,25 [W/m·K]

Buildings:

Intended use of the board:

residential, high density housing	on rafter insulation system on pitched roofs	
residential	under rafter insulation system on pitched roof	■
residential, retail and industrial	build Up Roofs [BUR] - Flat roofs, mechanically fastened	
residential, retail and industrial	build Up Roofs [BUR] - Flat 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	

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