termPIR® Insulation boards

TECHNICAL CARD termPIR® AL AT INSULATION BOARDS



| termPIR® AL AT | Product details: |
|-----------------------|---|
| Description of board: | The termPIR® AL AT insulation boards comprise of a PIR rigid foam thermal insulation core. The boards are protected on both sides with a gas tight lining layer composed of aluminium (AL), paper and polyethylene. |

| Certificates / Approvals: | | |
|---|--|--|
| _ | | |
| CE mark | | |
| ISO 9001, ISO 14001 System certificates | | |
| Compatibility with EN 13165+A2 and EN 13172 | | |
| Tests of thermal properties ITB | | |
| Reaction to fire: GRYFIT LAB/ Fires | | |
| Fire classifications: ICiMB | | |
| Admitted to trading in the EU | | |
| | | |





 $^{^{\}ast}$ dimensions of boards with joint types are 2 to 4 % smaller

| Information about product safety: | Information about suabstances 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.termpir.eu |

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|---|--------------|--|--|---|------|-------|---|-------|------|-------|--|
| Kind of core: | | Rigid polyisocyanurate foam (PIR) | | | | | | | | | |
| Apparent PIR core density: | | | ρ = 30 kg/m³ | | | | | | | | |
| Declared heat transfer coefficient for lining: | | for $(20 \le d_N \le 250 \text{ mm})$: $\lambda_D = 0.022 \text{ (W/m-K)}$ | | | | | | | | | |
| Standard board dimensions [mm]: | | 600 x 1200 / 1200 x 2400 (minus the depth of the joint) | | | | | | | | | |
| Available boards dimensions [mm]: | | 1000 x1200 / 1200 x 1200 / 1200 x 1800 / 1200 x 3000 (minus the depth of the joint) | | | | | | | | | |
| Coefficient: U [W/m²-K], wg U = 1 / (Re + R _p + Ri) | | | | | | | | | | | |
| | | | 20 | 0,90 | 30 | 1,35 | 40 | 1,85 | 50 | 2,30 | |
| For a given nominal thickness [mm]: | | Thermal resistance: R _D [m²·K/W] | 60 | 2,75 | 70 | 3,25 | 80 | 3,70 | 90 | 4,15 | |
| tinotticoo [i | | ND [1444] | 100 | 4,65 | 110 | 5,10 | 120 | 5,55 | 130 | 6,05 | |
| | | | 140 | 6,50 | 150 | 6,95 | 160 | 7,45 | 170 | 7,90 | |
| | | 180 | 8,35 | 190 | 8,85 | 200 | 9,30 | 210 | 9,75 | | |
| | | | 220 | 10,25 | 230 | 10,75 | 240 | 11,15 | 250 | 11,60 | |
| | | | σ≥120 kPa 20 ≤ d _M < 30 mm, | | | | | | | | |
| Compressiv | e strenght a | at 10% of deformation: | σ≥150 | σ ≥150 kPa 30 ≤ d _N < 140 mm | | | | | | | |
| compressive strength at 1070 of deformation: | | σ≥140 | σ ≥140 kPa 140 ≤ d _N ≤ 250 mm, | | | | | | | | |
| | | | (20 ≤ d _N ≤ 130 mm): ≥ 80 kPa, TR80 | | | | | | | | |
| Tensile strength perpendicular to faces: | | (50 < d _N ≤ 200 mm): ≥ 50 kPa, TR50 | | | | | | | | | |
| | | (130 < d _N ≤ 250 mm): ≥ 40 kPa, TR40 | | | | | | | | | |
| Flatness after one-sided moisting: | | ≤ 10 mm / FW2 | | | | | | | | | |
| Long-term absorption upon complete immersion: | | ≤ 2 % [kg/kg] / WL(T)2 | | | | | | | | | |
| Dimensional stability: | | for (20 | for (20 ≤ d _N < 50 mm): DS(70,-)1 | | | | for (50 ≤ d _N ≤ 250 mm): DS(-20,-)2 / NDS(70,90)3 | | | | |
| Reaction to fire (of the product as placed on the market): | | E - terr | E - termPIR® AL (20-49: F class, 50-250: E class) | | | | | | | | |

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| 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 corrossion caused by concrete | | |
| | | | |
| the board recommended for use boards that can be used | | | |

DoP Nr termPIR / ALAT / 16 /1 Update: 27.08.2024

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