

Description of board:

The **termPIR® BT** insulation boards comprise of a PIR rigid foam thermal insulation core. The boards are protected on both sides with gas-permeable lining from glass reticular fibre impregnated with bitumen (BT).

- ▷ Board in the product base: **EPDM**
- ▷ 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:



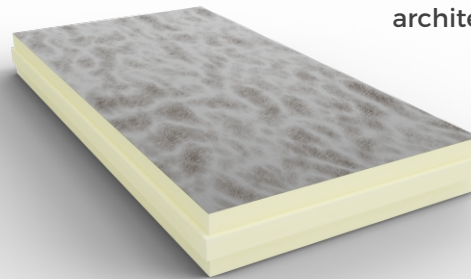
021-IMBIGS-001



16, 1488 1454



Green
architecture 



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:

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

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 $U = 1 / (R_e + R_o + R_i)$ | | | | | | | | | | | |
| 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 | | | | | |
| Dimensional stability: | | DS(70,-)2 | | | | | | | | | | |
| Apparent PIR core density: | | 30 kg/m ³ | | | | | | | | | | |
| Reaction to fire (of the product as placed on the market): | | F Class | | | | | | | | | | |
| External fire performance: | | Broof(t1) ; "non-fire spreading product" | | | | | | | | | | |
| | | Structure: - base: trapezoidal sheet, concrete; - vapour barrier: PE foil, bituminous sheeting - termPIR® BT: 50-250 mm - waterproofing membrane: PVC, bitumen felt, a two-layer system | | | | | The classification assigned to termPIR® BT insulation panels is that for a bonded system. Conditions of use according to the Building Research Institute's classification. | | | | | |