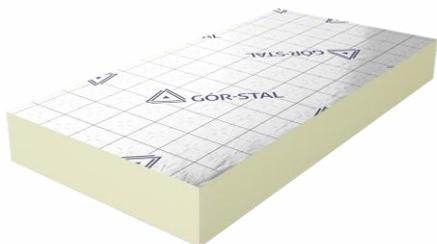


termPIR® AL boards

Polyisocyanurate thermal insulation boards (PIR) for insulation of flat roofs, partition walls and floors.

Parameters of termPIR® AL insulation boards



Type of core	Rigid polyisocyanurate foam (PIR)						
Apparent density of core	$\rho = 30 \text{ kg/m}^3$						
Declared heat conductivity coefficient	$\lambda_0 = 0,022 \text{ W/m}^2\text{K}$						
Board facing	AL - the gas-tight multilayer cladding containing aluminum						
Board dimensions [mm]	600 x 1200 / 1200 x 2400						
Available board dimensions on request [mm]	1000 x 1200 / 1200 x 1200 / 1200 x 1800 / 1200 x 3000						
Joint types	FIT - flat milling, LAP - stepwise milling*, TAG - tongue and groove*						
Thickness [mm]	Available boards thickness in 10 mm steps						
	20	30	40	50	60	80	100
Thermal resistance R_0 [m²K/W]	0,90	1,35	1,85	2,30	2,75	3,70	4,65
Heat transfer coefficient U [W/m²K] **	0,96	0,67	0,50	0,41	0,35	0,26	0,21
Thickness [mm]	120	140	150	180	200	220	250
Thermal resistance R_0 [m²K/W]	5,55	6,50	6,95	8,35	9,30	10,2	11,6
Heat transfer coefficient U [W/m²K] **	0,18	0,15	0,14	0,12	0,11	0,10	0,08
Fire reaction classification	20-49: F class, 50-250: E class						
Compressive strength	$\sigma \geq 120 \text{ kPa} - 20 \leq d_n < 30 \text{ mm}$ $\sigma \geq 150 \text{ kPa} - 30 \leq d_n \leq 250 \text{ mm}$						
* dimensions of boards with joint types are 2 to 4 % smaller ** in the roof							

Joint Types:

- ▷ LAP panel thickness min. 30 mm and orders from 2000 m²
- ▷ TAG panel thickness min. 40 mm



Factory of Insulation Boards

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termPIR® insulation boards

RESIDENTIAL PITCHED ROOFS

Build your energy-saving roof with us

Green buildings make use of smart technologies which allow for a high level of heating-related comfort and for erecting buildings featured with low energy consumption and dwelling costs.

termPIR® boards provide thermal insulation that is more efficient when compared with other constructional materials, like mineral wool or Styrofoam. They are energy-saving, long-lasting and safe for use in residential buildings.

INSULATION CLASSES

A+++ $\lambda = 0,018$	termPIR® MAX18
A++ $\lambda = 0,019$	termPIR® MAX19
A+ $\lambda = 0,022$	termPIR® *
A $\lambda = 0,025 - 0,027$	termPIR® **
B $\lambda = 0,029 - 0,034$	STYROFOAM XPS
C $\lambda = 0,031 - 0,044$	STYROFOAM EPS
D $\lambda = 0,031 - 0,045$	MINERAL WOOL
E $\lambda = 0,042 - 0,046$	CELLULAR CONCRETE

AMENDED VALUE FOR DIFFERENT MANUFACTURERS

* for termPIR® AL, termPIR® AGRO AL, termPIR® AGRO P, termPIR® AL GK, termPIR® AGRO P REV

** for termPIR® ETX, termPIR® WS, termPIR® PK, termPIR® BWS, termPIR® PK REM, termPIR® BT

Why insulate with termPIR® boards?



They make a great insulating material - $\lambda_D = 0,022 \text{ W/m}^2\text{K}^*$ a 140 mm plate is sufficient (applies to the roof partition) to meet the technical conditions for 2021.



They are hard and resist damage - $\sigma_{10} = 150 \text{ kPa}$ (from 30 mm) will not change shape over time (they do not slump), as well as being light weight - only $3,6 \text{ kg/m}^2$ boards of 120 mm in thickness.



They are water resistant - water absorption below **2%*** forget replacing damp insulation boards, and you can install them almost all year round.



They are **biologically** and **chemically** resistant you do not have to share your home with rodents and insects or worry about fungi or mould.



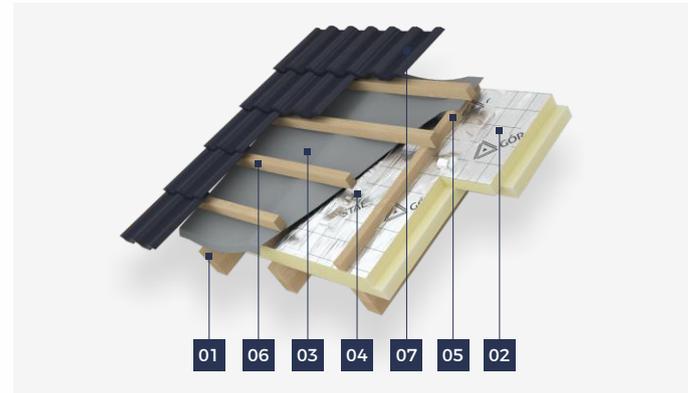
Our boards feature **increased fire resistance** they are a self-extinguishing material, i.e. they do not support combustion.

* for termPIR® AL

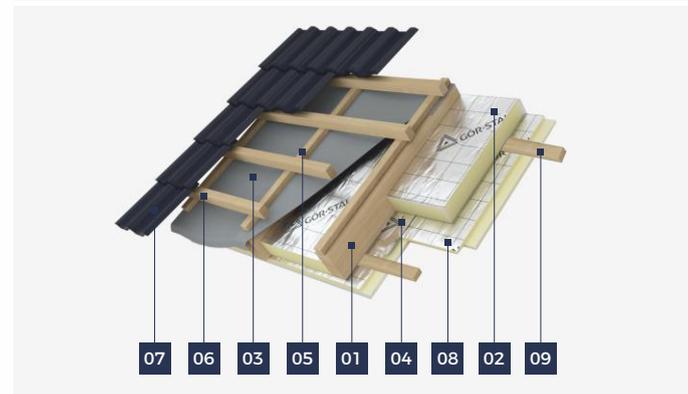
Modern, warm and durable over rafter insulation

termPIR® AL insulation boards are dedicated for over rafter insulation systems, which minimizes heat loss through thermal bridges.

Over the rafters during construction work



Under rafters in existing buildings



Legend:

01. Rafters
02. Insulation material, e.g. termPIR® AL insulation boards
03. Wind proof / vapour membrane
04. Aluminium sealing tape
05. Counter batten
06. Batten
07. Roof covering
08. Hybrid insulation boards termPIR® AL GK
09. Frame of the structure

Where to use termPIR® insulating boards?

termPIR® boards are not only dedicated to insulating roofs, but also for thermal insulation of industrial buildings, cold storages and livestock buildings.

Recommended use of termPIR® boards

Intended use of the board:	Buildings:	AL	AGRO AL	AGRO P	WS GK	AL GK	BT	PK	ETX	BWS	AGRO P REV	PK REM
on rafter insulation system on pitched roofs	residential	■										
under rafter insulation system on pitched roofs	residential				■	■		■				
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 - with external cladding	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	residential, retail and industrial	■										
suspended ceilings - high pressure washable	livestock, industrial				■							
internal wall insulation	existing, historic, stair-cores											
prefabricated concrete walls	highly resistant to corrosion caused by concrete											

■ - the board recommended for use ■ - a board that can be used

* - it is not recommended to use heat-sealable roofing felt

More info on page:

www.gor-stal.pl or www.termpir.eu

Green architecture 

