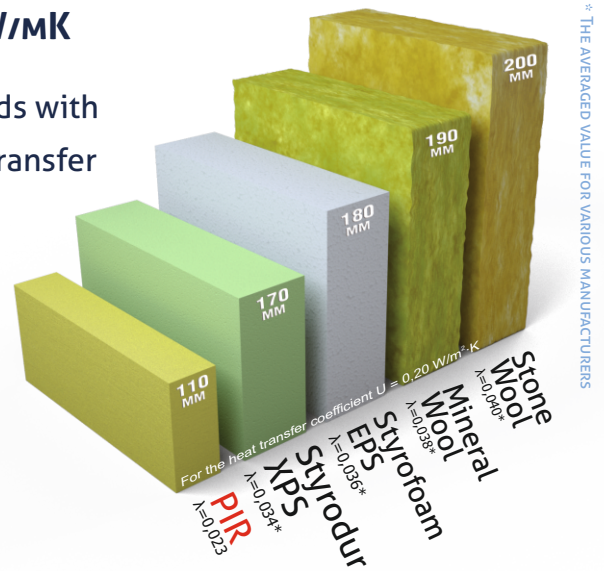


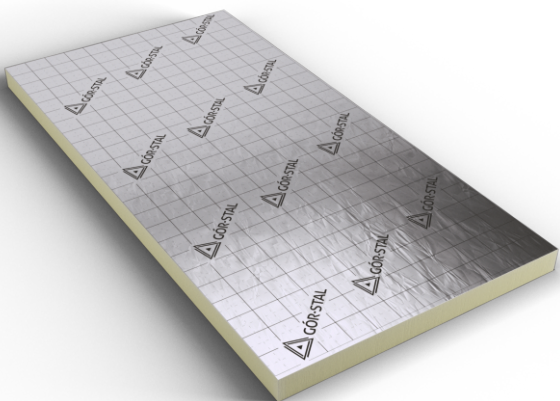
MORDERN THERMAL INSULATING MATERIAL $\lambda = 0,023 \text{ W/mK}$

Gór-Stal has been a manufacturer of Therm Insulating Boards with PIR core (short for polyisocyanurate) with the lowest heat transfer coefficient equal to $\lambda = 0.023 \text{ W/m}^2\text{K}$ since 2009. At the moment, it is the best result among popular thermal insulation materials available on the Polish market. Thus, PIR boards provide a much more efficient heat insulation compared to materials such as mineral wool or Styrofoam, allowing for cost-effective, long-lasting and safe use of a house or an apartment.



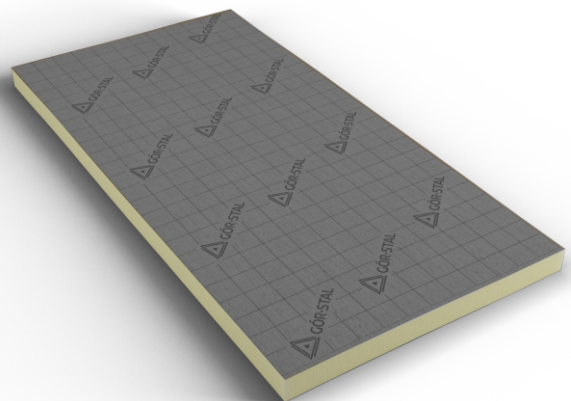
termPIR AL

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



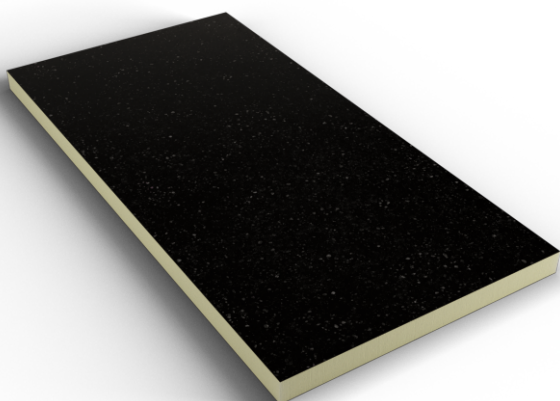
termPIR WS

Polyisocyanurate thermal insulation boards (PIR) for pitched roofs, interior and exterior walls and **CARPATIA Facade System** manufactured by Gór-Stal



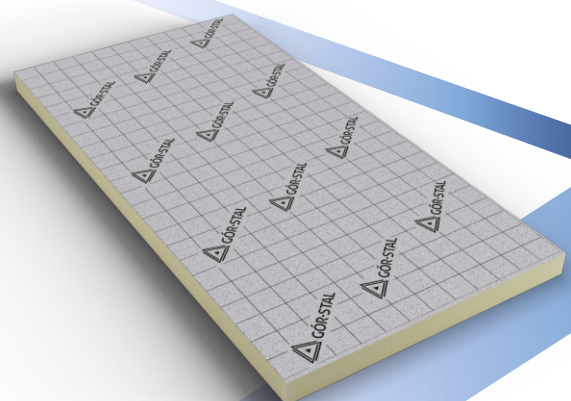
termPIR BT

Polyisocyanurate thermal insulation boards (PIR) are insulation materials for the renovation of flat roofs in residential buildings. Various types of roofing can be used directly on the board.



termPIR AGRO AL

Polyisocyanurate thermal insulation boards (PIR) for the insulation of agricultural and industrial facilities. High resistance to pressure washing and ammonia.

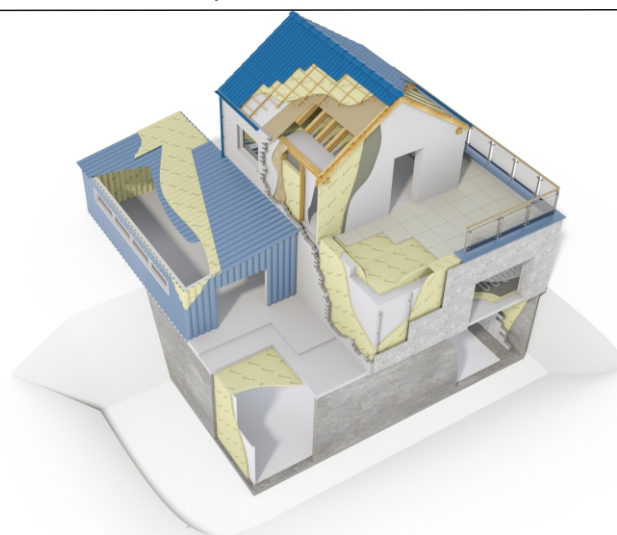


PARAMETERS OF TERMPİR BOARDS

Type of core	RIGID polyisocyanurate foam (PIR)											
Apparent density of core	$= 30^{+6}_-2 \text{ kg/m}^3$											
Declared heat conductivity coefficient	$\lambda_D = 0,023 \text{ W/mK}$											
Board facing	<ul style="list-style-type: none"> • AL - KRAFT paper covered with aluminium • WS - fiberglass • BT - bitumen lining • AGRO AL 50 micron aluminium 											
Board dimensions	1200 x 2400 mm / 1200 x 600 mm											
Available board dimensions on request	1200 x 1200 mm / 1200 x 3600 mm / 1200 x 6000 mm / 1200 x max 12000											
Joint types	TAG - Tounge and Groove, LAP - Overlap edges, FIT - Straight edges											
Thickness [mm]	available board thickness at increments of 10 mm on request											
	20	40	50	60	80	100	120	150	180	200	220	250
Thermal resistance R [m ² K/W]	0,87	1,74	2,17	2,61	3,48	4,35	5,22	6,52	7,83	8,70	9,57	10,87
Heat transfer coefficient U [W/m ² K]	1,15	0,58	0,46	0,38	0,29	0,23	0,19	0,15	0,13	0,12	0,10	0,09
Compressive strength at 10% of deformation	$\sigma = 120 \text{ kPa}$											
Fire reaction classification (board itself)	E - self-extinguishing - for AL, WS, BT F - for others											
Water absorbability	2,0 %V											

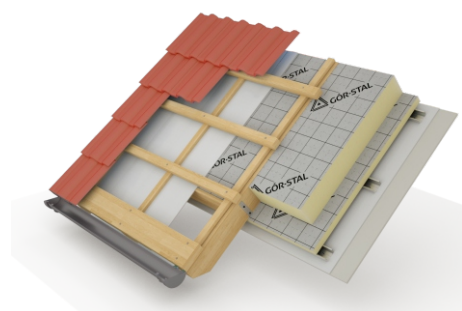
WHERE TO USE TERMPİR BOARDS?

PIR boards are used as part of the heat insulation system for insulation of **foundations, walls, exterior walls, ceilings, terraces and balconies, flat roofs and pitched roofs**. They are an optimal alternative to today's most popular insulating materials such as mineral wool, Styrofoam and Styrodur in every possible heat insulation system.

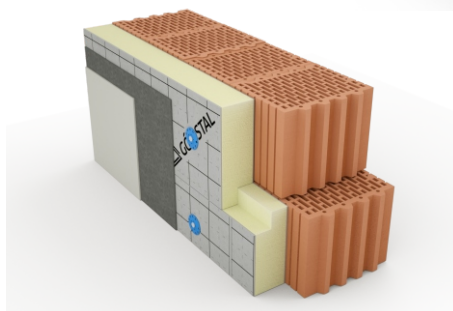


POSSIBLE USAGE OF TERMPİR BOARDS IN A DETACHED HOUSE

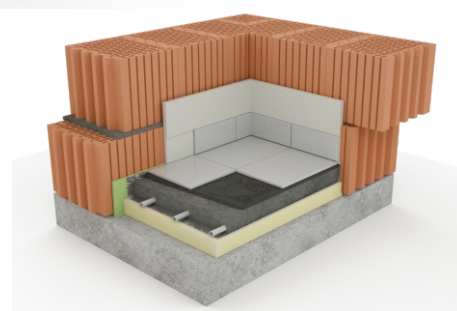
POPULAR HEAT INSULATION SYSTEMS



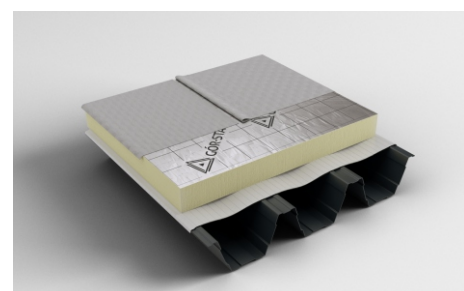
PITCHED ROOF INSULATION



EXTERNAL WALL INSULATION LIGHT-WET METHOD (ETICS)



INSULATION UNDER FLOOR HEATING



FLAT ROOF INSULATION WITH PVC MEMBRANE

WHY PIR?

- heat conductivity coefficient = $\lambda 0,023 \text{ W/mK}$
- unique fire resistance
- compressive strength of a minimum of 120 kPa
- low water absorbability < 2%
- low weight $30^{+6}_-2 \text{ kg/m}^3$
- unique chemical and biological resistance
- considerable ease and safety of assembly

Gór-Stal sp. z o.o.
 ul. Przemysłowa 11, 38-300 Gorlice
Factory of termPIR Insulation Boards
 ul. Adolfa Mityry 9, 32-700 Bochnia
 tel./phone: +48 18 353 98 00
 e-mail: info@gor-stal.pl