

WonderBUILDS



 TECHNICAL

LogicPIR BOARDS

THERMAL INSULATION

UK'S PREMIER ROOFING PRODUCTS

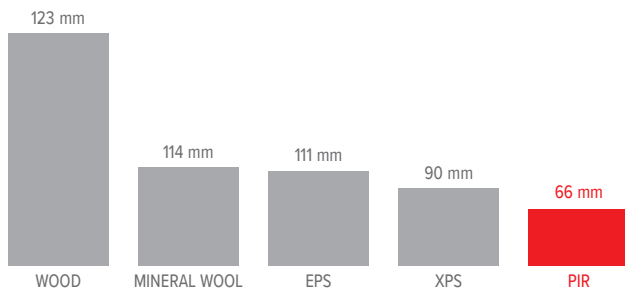
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THERMAL INSULATION BOARD

LogicPIR is a thermal insulating material of new generation made of rigid PIR (polyisocyanurate), which is used in flat and pitched roofing systems, basements, floors and facades.



LogicPIR is a board made of rigid PIR (Polyisocyanurate) for use in flat roofing systems. Being very rigid and perfectly flat, PIR is an ideal substrate for Roofing materials, especially for bituminous and synthetic membranes. PIR has high compressive strength and very low thermal conductivity values of 0.022-0.026 W/m*K. More than 95% of PIR consists of closed cells. PIR board does not absorb water. It maintains stable parameters for a long period of time.



UNIQUE FEATURES



RELIABILITY AND DURABILITY

Throughout its 25-year service life LogicPIR retains its qualities.



RECORD LOW THERMAL CONDUCTIVITY

PIR has very low thermal conductivity of 0.022 - 0.026 W/m*K.



DOES NOT ABSORB WATER

The board structure consists of closed rigid cells, which do not allow water to come into material. Composite facers, made of AL foil and plastic, provide an additional vapor barrier.



LOW DENSITY

The low density of PIR is combined with high thermal resistance. Use of the product reduces the overall weight of a roof. This is especially important for roofs renovation. Transportation costs are substantially reduced as well.



DOES NOT BURN

PIR is not flammable. When in contact with an open flame, polymer burns on surface only. This creates a charcoal skin, which is an effective defense against further polymer damaging.



ALL SEASONS

It functions effectively within a temperature range from -65 °C to +110 °C, so it is suitable for use in any climate.

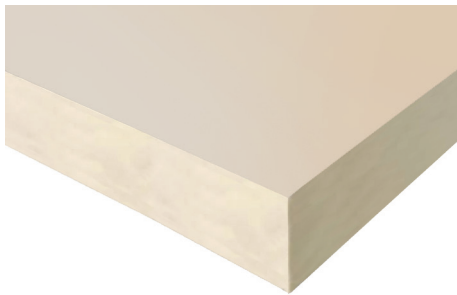


DYNAMIC LOAD RESISTANCE

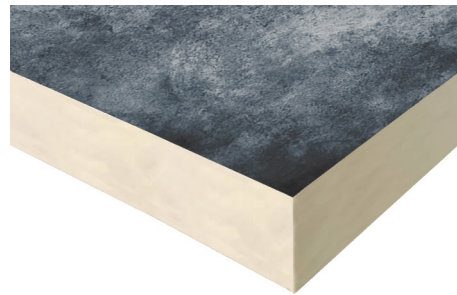
PIR complies with class 2 for dynamic load (EN 826). Compression strength of 120 kPa provides high resistance against deformation due to live loads.



TECHNICAL DATA

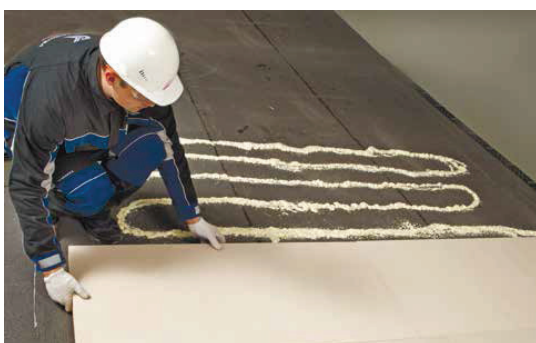


PIR board with facing of glass tissue with mineral coating

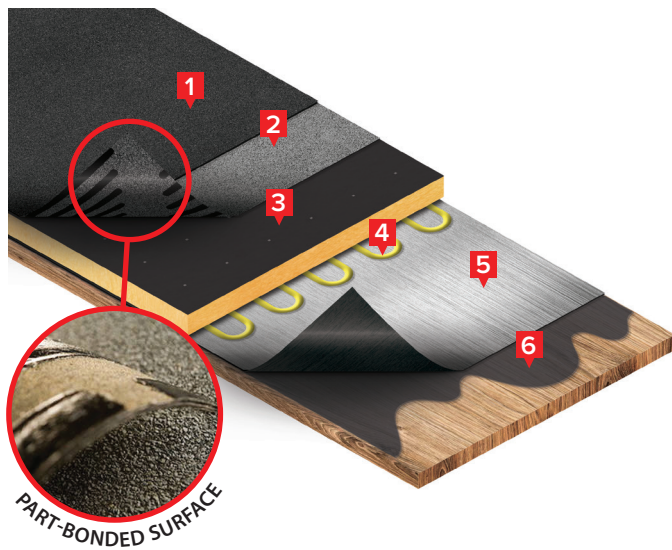


PIR board with facing of glass tissue with bitumen coating

ESSENTIAL CHARACTERISTICS	PERFORMANCE	
	mineral coating	bitumen coating
Thermal conductivity, W/m ² K	0.026	0.026
Reaction to fire	Class E	Class F
Thickness, mm	30-150 (in steps of 10 mm)	
Board sizes, mm	1200x1200, 1200x600, 2400x1200	
Compressive strength	CS(10\Y)150 ≥ 150	CS(10\Y)150 ≥ 150
Water permeability - short term water absorption	WS(P)0.1	WS(P)0.1
Water permeability - flatness after one sided wetting	FW2 ≤ 5	FW2 ≤ 5

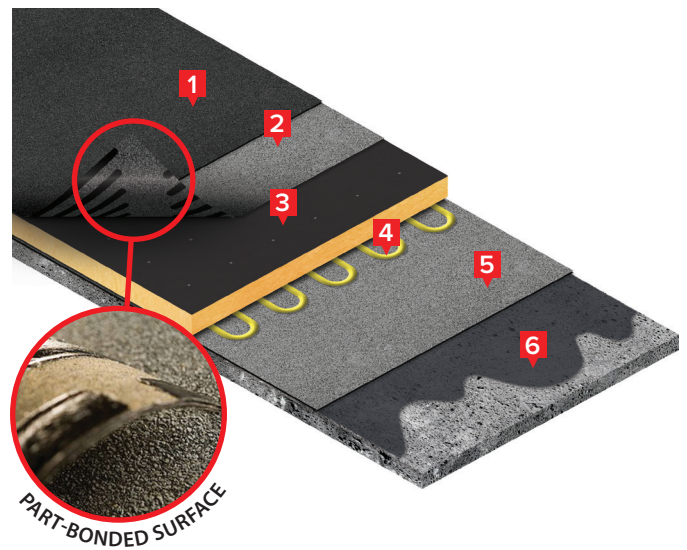


ROOFING SYSTEMS



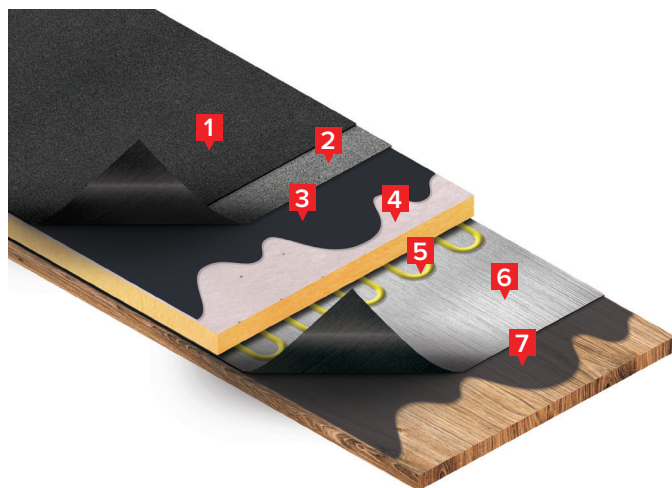
25 YEAR SYSTEM

- 1 Technoelast K-PS 170/5000
- 2 Technoelast K-TMS 170/3400
- 3 LogicPIR board with bitumen tissue
- 4 WonderBuilds Insulation Adhesive
- 5 Technoelast VB500 Self
- 6 WonderBuilds SA Primer



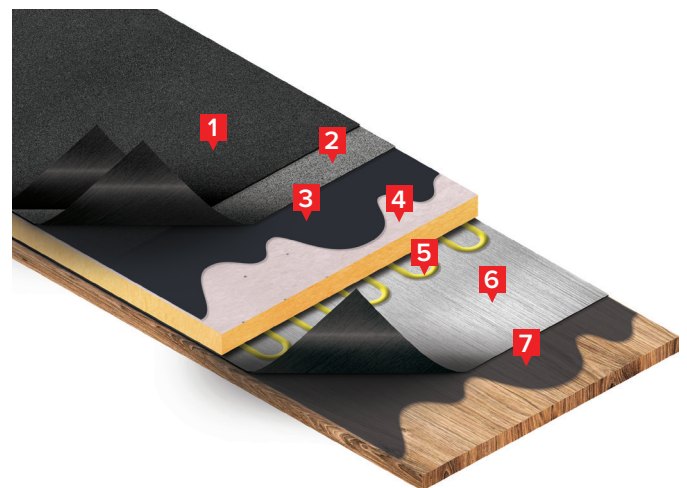
25 YEAR SYSTEM (TORCH-ON ALUMINIUM LINED VCL)

- 1 Technoelast K-PS 170/5000
- 2 Technoelast K-TMS 170/3400
- 3 LogicPIR board with bitumen tissue
- 4 WonderBuilds Insulation Adhesive
- 5 Radonelast 3.5
- 6 TN Quick Drying Primer 03



SAFE2TORCH SYSTEM

- 1 Technoelast K-PS 170/5000
- 2 Mida Self PVS 2
- 3 WonderBuilds SA Primer
- 4 LogicPIR board with glass tissue (mineral coating)
- 5 WonderBuilds Insulation Adhesive
- 6 Technoelast VB500 Self
- 7 WonderBuilds SA Primer



FULLY ADHERED SYSTEM

- 1 Technoelast Multiroof 4500 Multiroof SA
- 2 MidaSelf PVS 2
- 3 WonderBuilds SA Primer
- 4 LogicPIR board with glass tissue (mineral coating)
- 5 WonderBuilds Insulation Adhesive
- 6 Technoelast VB500 Self
- 7 WonderBuilds SA Primer