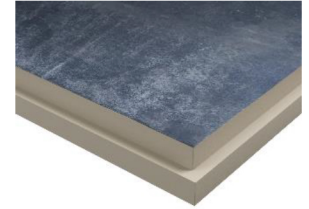
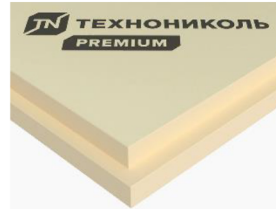
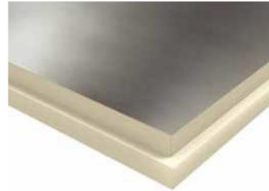


Technical data sheet PIR thermal insulation boards

Proprietary standard:
EN 13165+A1:2016



Product description:

Heat insulation material based on the rigid closed-cell (no less than 95%) polyisocyanurate foam (PIR). The boards are facing with kraft paper, cardboard, glass tissue with mineral coating (GTM), glass tissue with bitumen coating (GTB), aluminum foil (F) or multilayer facing (incl. water-resistant foil with paper foundation) and paper facing with polyethylene. Due to their structure and production features PIR heat insulation boards have low thermal conductivity, low water absorption, high strength, and high fire resistance. PIR thermal insulation boards is a thermal insulation material. Resistant to weather and rot impact, they have extremely long service life (incl. in corrosive environment and under high humidity). When exposed to fire, PIR thermal insulation boards form a graphite protective layer on their surface. It prevents the flame spreading and serves as a reliable protection against further effects of fire.

Application:

PIR thermal insulation boards are used in civil and industrial buildings while installing flat roofing systems with the profiled and concrete foundation, waterproofing rolled materials and other types of waterproofing materials. PIR thermal insulation boards can also be used for floor heating (incl. loaded constructions), facades, plinths, and pitched roofs.

Product technical data:

Essential characteristics		Performance			
			F/F	GTM	GTB
Thermal resistance	Thermal resistance R_D ($m^2 \cdot K/W$)	d_N 30mm	1.35	1.15	1.15
		d_N 40mm	1.80	1.54	1.54
		d_N 50mm	2.25	1.92	1.92
		d_N 60mm	2.70	2.31	2.31
		d_N 70mm	3.15	2.69	2.69
		d_N 80mm	3.60	3.08	3.08
		d_N 90mm	4.05	3.46	3.46
		d_N 100mm	4.50	3.85	3.85
		d_N 110mm	5.0	4.23	4.23
		d_N 120mm	5.45	4.62	4.62
		d_N 130mm	5.9	5.0	5.0
		d_N 140mm	6.35	5.38	5.38
		d_N 150mm	6.81	5.77	5.77
	Thermal conductivity λ_D ($W/(m \cdot K)$)		0.022	0.026	0.026
	Thickness tolerance	T2			
Reaction to fire			Class E	Class E	Class F

Durability of reaction to fire against heat, weathering, ageing / degradation		Reaction to fire does not change with time	Reaction to fire does not change with time	Reaction to fire does not change with time
Dimensional stability under specified	48 h, 70 °C, 90 % R.H	NPD	NPD	NPD
Temperature and humidity condition				
Deformation under specified compressive load and temperature conditions	40 kPa, 70°C, 168h	NPD	NPD	NPD
Compressive strength	Compressive stress or compressive strength	CS(10\Y)150 ≥ 150	CS(10\Y)150 ≥ 150	CS(10\Y)150 ≥ 150
Tensile / Flexural strength	Tensile strength perpendicular to faces	NPD	NPD	NPD
Durability of compressive strength against ageing / degradation	Compressive creep	NPD	NPD	NPD
Water permeability	Short term water absorption	WS(P)0.1	WS(P)0.1	WS(P)0.1
	Flatness after one sided wetting	FW2 ≤5	FW2 ≤5	FW2 ≤5
Water vapour permeability	Water vapour transmission	NPD	NPD	NPD
Acoustic absorption index	Sound absorption	NPD	NPD	NPD
Release of dangerous substances to the indoor environment	Release of dangerous substances	No harmonized test method available	No harmonized test method available	No harmonized test method available
Continuous glowing combustion	Continuous glowing combustion	No harmonized test method available	No harmonized test method available	No harmonized test method available

The letters 'NPD' (No Performance Determined) are indicated where no performance is declared.

Transportation and storage:

The boards shall be transported in covered vehicles. PIR insulation boards shall be stored in sheltered warehouses or under shelter protecting them from sun radiation.

Package information:

Shall be packed in UV-stabilized film and delivered in pallets.