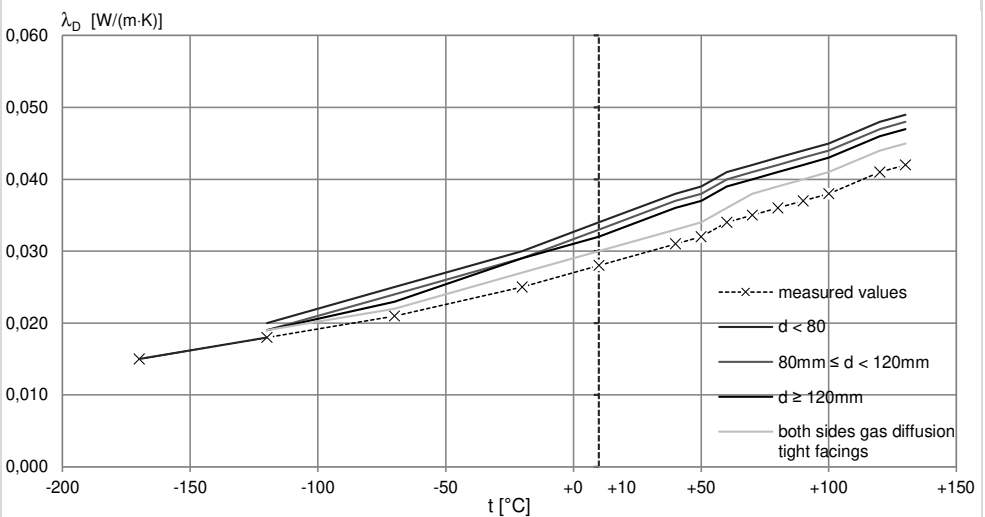


thermoset high-performance insulating material

application	as semi-finished product for further assembly	
assembly	unlaminated trimmed blocks	

puren-PIR NE 120 Technical data PU rigid foam

Characteristic	Standard/test procedure	Unit	Indicator		
Material	Polyurethane rigid foam (PU) in compliance with EN 13165 acc. to EN 14308, quality-certified, harmless from a biological and building ecology point of view, recyclable, rotproof, resistant to mildew and decay.				
Bulk density	EN 1602	kg/m ³	115 - 122		
Thermal conductivity					
Monitored limit value (fresh value) at 10°C mean temperature	EN 12667	W/(m·K)	0,028		
Nominal value (EU) λ_D at 10°C application temperature	EN 14308	W/(m·K)	at thickness d < 80 mm	80 ≤ d < 120 mm	d ≥ 120 mm
in the application temperature range -170 °C to +120 °C			0,034	0,033	0,032



Thermal insulation resistance for thickness	mm	20	40	60	80	100	120	140	160	180	200
R_D	m ² ·K/W	0,55	1,15	1,75	2,40	3,00	3,75	4,35	5,00	5,60	6,25

Compressive strength		measured values ²⁾	
Compressive stress at 10% compression	EN 826	kPa	1200
E-modulus (compressive stress) ²⁾		MPa	35,0 - 50,0
Tensile strength perpendicular to panel plane			
Transverse tensile strength	EN 1607	kPa	150
E-modulus (transverse tensile stress) ²⁾		MPa	35,0 - 40,0
Bending strength ²⁾	EN 12089	kPa	1600 - 2100
Transverse strength ²⁾	EN 12090 (in compliance with DIN 53427)	kPa	570 - 670
Shear strength ²⁾	EN 12090 (in compliance with DIN 53294)	kPa	660 - 770
Designation (EU)	EN 14308	PU-EN 14308-DS(TH)3-CS(10\Y)800	
Fire behaviour	non-smouldering, non-melting, non-dripping		
Reaction to Fire Class / RtF (EU)	EN 13501-1	E	
Closed cell content ²⁾	ISO 4590	%	90 - 95
Temperature resistance		°C	-30 bis +120, short-term to 250 °C
Moisture absorption ²⁾	EN 12087	Vol.-%	≤ 3

1) Literature value, not part of the factory production control and external supervision.
2) Average values calculated on a regular basis under production conditions as part of factory production control. It is ensured that mechanical characteristic values do not fall below their minimum level by more than 10%..

Declaration of performance
30137.CPR.2020.10
puren-PIR NE 120
www.puren.com/download

EN 14308:2015
Verification authority: 0751 FIW München

controlled by
0751 FIW München

thermoset high-performance insulating material

puren-PIR NE 120		Technical data PU rigid foam		
Characteristic		Standard/test procedure	Unit	Indicator
Specific heat capacity ¹⁾	C	EN 12524	J/(kg·K)	1400
Water vapour diffusion resistance factor ¹⁾	μ	EN 12086		40 - 200
Linear expansion coefficient ¹⁾		EN 1604	1/K	5 - 8 · 10 ⁻⁵