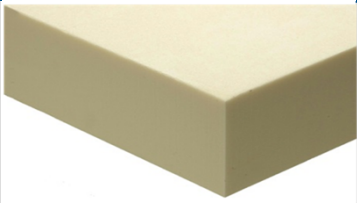


thermoset high-performance insulating material

application	for door and composite elements	
assembly	unlaminated blocks, boards or pre-cut parts dimensions at customer's option upon request dimensional tolerances acc. to puren factory standard	

Foradur® 40		Technical data PU rigid foam										
Characteristic	Standard/test procedure	Unit	Indicator									
Material	Polyurethane rigid foam (PU) acc. to DIN EN 13165, quality-certified, harmless from a biological and building ecology point of view, recyclable, rotproof, resistant to mildew and decay.											
Bulk density	DIN EN 1602	kg/m ³	38 - 42									
Thermal conductivity												
Monitored limit value (fresh value) at 10°C mean temperature	DIN EN 12667	W/(m·K)	0,021									
Nominal value (EU)	λ_D		at thickness									
	DIN EN 13165	W/(m·K)	d < 80 mm	80 ≤ d < 120 mm		d ≥ 120 mm						
	DIN 4108-4	W/(m·K)	0,027	0,026		0,025						
Thermal insulation resistance for thickness	λ_B											
	mm		20	40	60	80	100	120	140	160	180	200
	R_D	m ² ·K/W	0,70	1,45	2,20	3,05	3,80	4,80	5,60	6,40	7,20	8,00
Compressive strength			measured values ²⁾									
Compressive stress at 10% compression	DIN EN 826	kPa	250									
E-modulus (compressive stress) ²⁾		MPa	290 - 350									
Tensile strength perpendicular to panel plane												
Transverse tensile strength	DIN EN 1607	kPa	150									
E-modulus (transverse tensile stress) ²⁾		MPa	230 - 280									
Bending strength ²⁾	DIN EN 12089	kPa	10,5 - 13,5									
Transverse strength ²⁾	DIN EN 12090 (in compliance with DIN 53427)	kPa	350 - 450									
Shear strength ²⁾	DIN EN 12090 (in compliance with DIN 53294)	kPa	150 - 200									
Designation (EU)	DIN EN 13165	PU-EN 13165-T2-DS(70,90)3-DS(-20,-)2-CS(10\Y)250-TR150										
Fire behaviour	normal flammability, non-smouldering, non-melting, non-dripping											
Reaction to Fire Class / R _t F (EU)	DIN EN 13501-1	E										
Closed cell content ²⁾	ISO 4590	%	90 - 95									
Temperature resistance		°C	-30 to +120									
Moisture absorption ²⁾	DIN EN 12087	Vol.-%	≤ 3									
Specific heat capacity ¹⁾	C	DIN EN 12524	J/(kg·K)									
Water vapour diffusion resistance factor ¹⁾	μ	DIN EN 12086	1400									
Linear expansion coefficient ¹⁾	DIN EN 1604	1/K	40 - 200									
			5 - 8 · 10 ⁻⁵									

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
20131.CPR.2020.10
puren-PIR NE 40
www.puren.com/download



DIN EN 13165:2012+A2:2016
Verification authority: 0751 FIW München



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0751 FIW München