

Type SPK thermal insulation boards

Thin chipboard	Symbol	Test method	Unit	Value
Classification	E1 P5, approved construction board for load-bearing purposes in damp environments			
Gross density	ρ_a		kg/m ³	~810
Thermal conductivity	λ_D	EN 13986	W/mK	0.120
Fire behaviour		EN 13986		E
Transverse tensile strength		EN 319	N/mm ²	≥0.65
Transverse tensile strength after boil test		EN 1087-1	N/mm ²	≥0.2
Bending strength		EN 310	N/mm ²	≥20
Bending elasticity modulus		EN 310	N/mm ²	≥2550
Board moisture		EN 322	%	5–9
Formaldehyde content		EN 120	mg/100 g	E1
Length and width tolerance		EN 324	mm	±2.0
Rectangularity		EN 324	mm/m	±1.5
Edge straightness tolerance		EN 324	mm/m	≤1.5
Thickness tolerance		EN 324	mm	±0.10
Limiting deviation of density			%	±10
Water vapour diffusion resistance factor	μ	EN 13986	μ , damp μ , dry	15 50
Airborne sound insulation		EN 13986	$R = 13 \times \lg(m_A) + 14$ $m_A =$ board surface density kg/m ²	
Sound absorption		EN 13986	Frequency range: 250–500 Hz = 0.10 Frequency range: 1000–2000 Hz = 0.25	
Biological stability		EN 13986	Risk category 1 (without ground contact; dry, 20°C/65% RAH)	
PCP content		EN 13986	<5	

Expanded rigid polystyrene foam (EPS)	Symbol	Test method	Unit	Value
Gross density	ρ_a	1602	kg/m ³	15
Thermal conductivity	λ_D	279	W/(m·K)	0.038
Specific thermal capacity	c		Wh/(kg·K)	0.39
Water vapour diffusion resistance factor	μ	12086		40
Fire behaviour classification in acc. with EN		13501-1		E
Fire behaviour classification in acc. with VKF		VKF	BKZ	5,1
Fire behaviour group		VKF		RF2 (cr)
Compression stress at 10% compression	σ_{10}	826	kPa ³⁾	≥ 60
Creep behaviour under pressure (50 years, compression 2%)	σ_c	1606	kPa ³⁾	12
Top application limit temperature, non-weight-bearing			°C	75
Cell content				Air

Wood	Symbol	Test method	Unit	Value
Type	Spruce			
Certification	FSC-certified			
Thermal conductivity	λ_D	SIA V 279	W/mK	0.140