

Technical Data Sheet

Lignostone[®] L X-2-E3-HQ

Laminated Densified Wood

Typical characteristics

- High mechanical strength at low density
- High red beech veneer quality; tangential stacked
- Laminated densified wood T2R according to the standard IEC 61061

Typical industries

- Electrical Industry
- Electrical Insulating Components
- Oil-filled transformers

	Test method	Unit	Guideline value
Mechanical properties			
Density	IEC 61061	g / cm ³	0.95
Flexural strength ¹⁾ ⊥	ISO 178	MPa	130
Modulus of elasticity in flexion ¹⁾ ⊥	ISO 178	MPa	11 000
Compressive strength ⊥	ISO 604	MPa	120
Shear strength II	IEC 61061	MPa	10
Thermal properties			
Thermal conductivity	DIN 52612	W/m K	0.22
Operating temperature continuous	DIN 7707	°C	105
Temperature limit when drying	DIN 7707	°C	130
Physical properties			
Oil absorption	IEC 61061	%	25
Moisture content	IEC 61061	%	5
Dielectrical properties			
Electric strength 90°C under oil ⊥	IEC 61061	kV / mm	17
Electric strength 90°C under oil II	IEC 61061	kV/25mm	80
Relative permittivity (50 Hz)	IEC 60250	ε _r	3.7
Dielectric loss factor (50 Hz)	IEC 60250	tan δ	0.01
Specific volume resistance	IEC 60093	Ω x cm	10 ¹²

= perpendicular to the lamination II = parallel to the lamination

¹⁾ Sample size for flexural strength and modulus of elasticity in flexure is 120 x 15 x 10 mm (Mechanical value depends on the average ring diameter)

