

GENERAL DESCRIPTION

Lignostone® Switchboard grade is a laminated densified wood impregnated with resin, specially developed for electrical applications where insulating materials are exposed to air (not immersed in oil). Manufactured from red beech veneers impregnated under vacuum with thermosetting synthetic resin and densified under heat and pressure.

FEATURES & BENEFITS

- Low thermal conductivity
- Low moisture absorption
- Good electrical insulation properties in air
- High mechanical strength
- Excellent coefficient of friction

APPLICATIONS

- Switchboard insulation components
- Switchgear insulation components
- Cleats



- Barriers
- Partitions

GENERAL INFORMATION

Material	Densified laminated wood impregnated with thermoset phenolic resins
Colour	Brown / Wood
Specification	KP 20225

TECHNICAL DATA	TEST METHOD	UNITS	VALUE
Mechanical Properties			
Specific gravity	IEC 61061	g/cm ³	1.30
Modulus of elasticity in flexion (perpendicular)	ISO 178	N/mm ²	14,000
Compressive strength (perpendicular)	ISO 604	N/mm ²	230
Compressive strength (parallel)	ISO 604	N/mm ²	170
Bending strength (perpendicular)	ISO 178	N/mm ²	130
Bending strength (parallel)	ISO 178	N/mm ²	130
Tensile strength (parallel)	ISO 527	N/mm ²	30
Impact strength RT (perpendicular)	ISO 179	kJ/m ²	15
Impact strength RT (parallel)	ISO 179	kJ/m ²	10

Röchling
Grade MII/2/30

LIGNOSTONE® SWITCHBOARD GRADE
Impregnated Densified Wood

MII/2/30
Lignostone®
Switchboard
Grade

TECHNICAL DATA	TEST METHOD	UNITS	VALUE
Thermal Properties			
Thermal conductivity	DIN 52612	W/mK	ca. 0.30
Operating temperatures continuous	DIN 7707	°C	90
Temperature limit when drying and oil impregnating	DIN 7707	°C	90
Electrical Properties			
Electric strength at 90°C (parallel)	IEC 60243	kV/25mm	50
Electric strength (parallel)	IEC 60243	kV/25mm	35
Dielectric loss factor at 50 Hz	DIN 53483	tan alpha	0.02
Insulation resistance treatment	IEC 60093	Ω x cm	10 ¹⁰
Track resistance	IEC 60112		CTI 175

MATERIAL SPECIFICATIONS

Standard Width x Length (mm)

1000 x 2000

997 x 1000

1200 x 2400
(only available in 20mm thickness)

Standard Nominal Thickness (mm)

6 to 38

-sizing & AVAILABILITY

The above table shows the most commonly requested products in this range. Should you require something outside of these parameters, please contact your local sales representative or our customer service team.

MACHINING & FABRICATION

Insulect's manufacturing capabilities form a key part of the trusted service we offer our customers. Our two modern, well equipped facilities – in Brisbane and Melbourne – work with a wide range of electrical, thermal and mechanical materials – including plastics, composites and cellulose-based products.

We offer short run, specialty or volume based machining and fabrication for almost any application and can produce cut-to-order sheets or finished components. Coupled with our highly-trained and experienced team, we are able to deliver on the most complex of customer requirements.