

# **Lignostone**® Switchboard Grade

**IMPREGNATED DENSIFIED WOOD** 

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**

- 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**

#### **Technical Information**

Material: Densified laminated wood impregnated with

thermoset phenolic resins

Colour: Brown / Wood Specification: KP 20225

### **Sizing and Machining**

Standard Sheet Size: 997mm x 1,000mm

1,000mm x 2,000mm

1,200mm x 2,400mm (only in 20mm thickness)

Nominal Thickness: 6.0mm to 38.0mm

1300 446 565

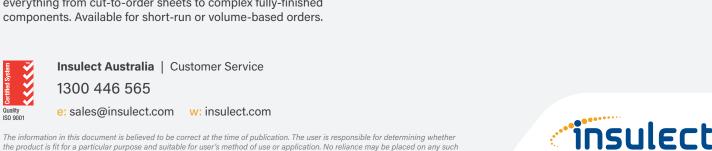
We provide a full machining and fabrication service, delivering everything from cut-to-order sheets to complex fully-finished components. Available for short-run or volume-based orders.



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information or data without first contacting Insulect Australia to clarify individual user requirements.



## **Technical Information**

Technical Data	Test Method	Units	Value
Mechanical			
Specific gravity	IEC 61061	g/cm³	1.30
Modulus of elasticity in flexion (perpendicular)	ISO 178	N/mm²	14,000
Compressive strength (perpendicular)	ISO 604	N/mm²	230
Compressive strength (parallel)	ISO 604	N/mm²	170
Bending strength (perpendicular)	ISO 178	N/mm²	130
Bending strength (parallel)	ISO 178	N/mm²	130
Tensile strength (parallel)	ISO 527	N/mm2	30
Impact strength RT (perpendicular)	ISO 179	kJ/m2	15
Impact strength RT (parallel)	ISO 179	kJ/m²	10
Thermal			
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			
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



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