

## INBORD® M

### Composition

A phenole/melamine laminate having a tracking resistant decorative surface. INBORD® M is generally a mechanical grade and for lower electrical requirements (low voltage applications up to 1000 volts). The core meets PF CP 201 according IEC 60893 and Hp 2061 according DIN 7735. Thickness of the melamine laminate 0,1 mm. The temperature Index is E (120°C).

### Properties

INBORD® M laminate has a tracking resistant surface which being coloured improves the aesthetic appeal of manufactured components. The surface colour will not fade. Colour range shown on chart.

The material does not corrode and in contrast to painted and varnished metal surfaces, the material is virtually impossible to damage or scratch.

INBORD® M being a duromer does not melt and is halogen free. Therefore, when fire occurs the material does not melt, expand or buckle.

### Application

INBORD® M serves as insulating construction material for components in electrical equipment such as cell and pole partitions for medium voltage switch-gear. It is also used for cover plates for switch-gear cabinets, switching apparatus in telephone installations, ships, industrial plants and power stations. Also for base plates of cable junction boxes, panels in household consumer units and fuse boxes as well as for control panels in a wide range of electrical appliances.

### Tooling

INBORD® M can be machined in a simple and effective manner with the same type of tools and machinery as used in the wood working industry.

Colour selection (Other colours upon request.)

Design	Uni dark green	Uni red	Uni light grey	Uni white	Uni sahara	Uni orange	Uni navy blue	Uni birch grey
Number	59	67	76	85	644	682	701	741

Technical Data

Properties	Testmethod	Unit	Value
Density	ISO 1183/A	g/cm <sup>3</sup>	approx. 1,4
Flexural strength	ISO 178	MPa	130
Flexural modulus of elasticity	ISO 178	MPa	12000
Compressive strength perpendicular to laminations	ISO 604	MPa	300
Tensile strength	ISO 527	MPa	100
Electric strength at 23°C in oil perpendicular to laminations (thickness 3mm)	IEC 243	kV/mm	2
Breakdown voltage at 90°C in oil parallel to laminations	IEC 243	kV	5
Comparative tracking index	IEC 112	-	CTI 200
Water absorption (thickness 10 mm)	ISO 62 / 1	mg	< 500
Impact strength (Charpy) parallel to laminations a <sub>n15</sub>	DIN 53453	kJ/m <sup>2</sup>	15
Dimensional stability	DIN 53462	°C	> 190
Fire rating of building materials, furnace test, (thickness of test specimen 3 - 6 mm)	DIN 4102, T1	-	B1
Arc resistance	DIN 53484	-	L1

Availability

Thickness: 0,8 - 30 mm (for 2800 x 1300 mm), tolerances according IEC 60893  
0,8 - 60 mm (for 2170 x 1070 mm)

Sheet size: 2800 x 1300 mm (mat surface), tolerance +30/-0  
2170 x 1070 mm (shiny surface), tolerance +10/-30