

I-Mat 650 – Technical Data Sheet

I-Mat 650, thermal insulation Mat with low dust release. It has excellent thermal insulation properties and are fire rated class A1.

Its thermal conductivity coefficient is about 0.016W/m·k at room temperature, even lower than still air.

Application +25° C up to +650° C.



Thermal conductivity

Average temperature	Thermal conductivity W/(m.k)	Test methods
25°C	0,021	GB/T10294
150°C	0,022	GB/T10295
300°C	0,036	GB/T10295
500°C	0,072	GB/T10295

Physical properties

I-Mat 650	Results/Value	Test methods
Thickness (mm)	3, 6, 10	GB/T34336-2017
Width (mm)	1400 or 1500	GB/T34336-2017
Color	White	GB/T34336-2017
Permitted useful temperature range °C	25° C to 650° C	GB/T17430-2015
Density (kg/m ³)	200 ± 20	GB/T34336-2017
Dimensional stability	1 %	GB/T 8811-2008
Compress property	min, kpa, @10%→60	GB/T 13480-2014
	min, kpa, @25%→120	GB/T 13480-2014
Fire rating	A1	GB 8624-2012
Toxicity level of smoke	ZA1	GB/T 20285-2006
Flaming droplets	d0	GB/T 20284
Level of Smoke (FED), max	0.1	GB/T 20285-2006
Corrosion resistance	Pass	GB/T 17393-2008 ISO 12944-6 & 9227-2012
Tensile strength (min) (kpa)	≥800	GB/T 17911-2011