

ProCell® TB1000 Thermal Insulation Board

ProCell® TB1000 thermal insulation board is an innovative thermal insulation material developed to help delay thermal propagation in EV battery packs and improve charging-discharging capability in low temperature conditions.

It can function as a thermal barrier as well as a cell pad to manage pressure in other EV applications of various scenarios.

Features & Benefits:

- Thermal runaway protection
- Low thermal conductivity within a wide temperature range
- Stable and long-term thermal resistance
- Excellent dimensional stability

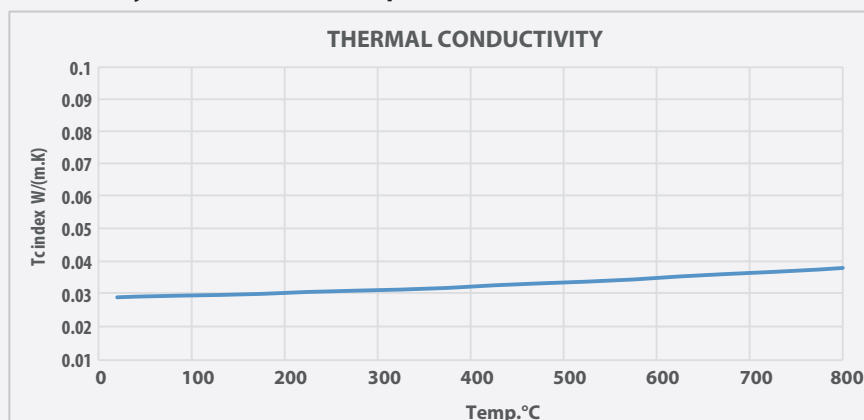
PROPERTY	TEST METHOD	VALUE
PHYSICAL		
Color	Visual	Gray
Thickness, mm	Internal	0.85
Thickness tolerance, mm	-	±0.15 mm (0.8 mm ≤ thickness ≤ 1.5 mm) ±0.2 mm (1.5 mm < thickness ≤ 5.0 mm)
Max. sheet size (length*width)	-	610mm*440mm (can be customized)
Density, kg/m ³	-	350-450
Compression Force Deflection range, kPa	ASTM D1056 25% Deflection	Based on design (finished part)
FLAMMABILITY		
Flame Resistance	UL 94	V-0
THERMAL		
Thermal Conductivity, W/m °K, °C (°F)	ISO8301 25 °C (77 °F) 200°C (392 °F) 400°C (752 °F) 600°C (1112 °F) 800°C (1472 °F)	Typical Value 0.029 W / (m·K) 0.030 W / (m·K) 0.032 W / (m·K) 0.035 W / (m·K) 0.037 W / (m·K)

Notes:

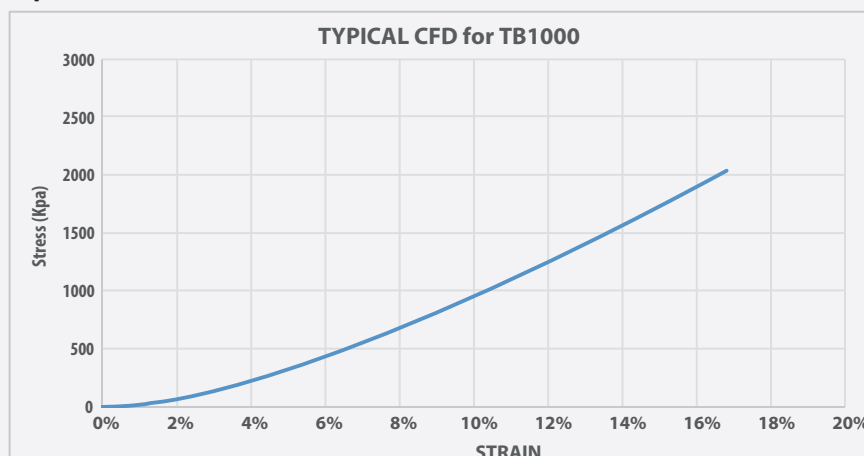
- Additional technical information and product specifications are available upon request.
- All metric conversions are approximate.

ProCell® TB1000 Thermal Insulation Board, cont'd.

Graphic 1: Thermal conductivity under different temperatures



Graphic 2: Typical Compression Force Deflection



Graphic 3: Usage scenario



For more information and to request a sample, please contact our team of experts at solutions@rogerscorp.com