

BISCO® Silicone FPC Fire Block Materials

BISCO® Fire Protective Covering (FPC) materials are flame retardant silicone foams designed to protect sensitive components that may be damaged during fires. The flexible foam materials have the unique ability to resist the burn-through of flames as high as 1038°C (1900°F) while reducing the spread of flames to other areas. These unique features enable the material to solve safety and design issues within various industrial and transportation markets.

Features & Benefits:

- Resists flames up to 1038°C (1900°F)
- Emits extremely low levels of smoke or toxic gas when subjected to fire
- Silicone elastomer is directly cast onto a reinforcing fiberglass layer
- Good resistance to arcing

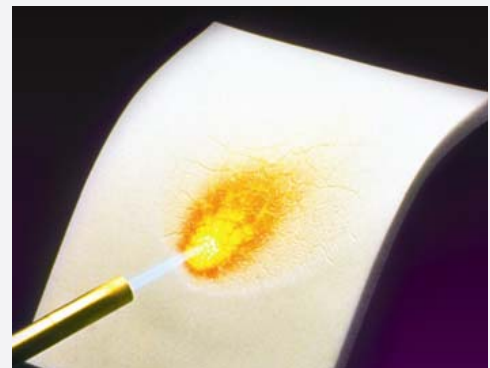
PROPERTY	TEST METHOD	TYPICAL VALUE*
PHYSICAL		
Thickness, mm (inches)		1.59 (0.063) 3.18 (0.125) 6.35 (0.250)
Density, kg/m3 (lb./ft3)	ASTM F 1315	513 (32)
Temperature, Continuous	SAE J 2236	-55° to 200°C (-67° to 392°F)
Flame Spread (ls)	ASTM E 162	<5
Smoke Density-Flaming	ASTM E 662	
(D ₅ - 4 minutes)		< 75
(D ₅ - 1.5 minutes)		< 25
Dielectric Breakdown	ASTM D 149-90	1100 volts
Dielectric Strength	ASTM D 149-90	9 volts/mil
Arc Resistance	ASTM D 495-89	+1800 seconds

Applications:

- Wraps for electrical cables and power lines
- Cargo covers for aerospace
- Protective covering for rail-car brake lines
- Fire barriers and smoke seals between rail-car passenger compartments

Installation:

- Available with or without pressure-sensitive adhesives
- Foam side should face toward flame
- Materials are available in various thicknesses and manufactured in roll form to allow fabricators to easily convert the material to specific dimensions



Standard Thickness Tolerances

NOMINAL THICKNESS	TOLERANCE
mm (inches)	mm (inches)
1.59 (0.063)	± 0.508 (± 0.020)
3.18 (0.125)	± 0.762 (± 0.030)
6.35 (0.250)	± 1.016 (± 0.040)

Slit Material and Tape (PSA) Width Tolerances

NOMINAL WIDTH	TOLERANCE
mm (inches)	mm (inches)
> 0 - 76 (> 0 - 3)	± 1.60 (± 0.063)
> 76 - 203 (> 3 - 8)	± 2.39 (± 0.094)
> 203 - 305 (> 8 - 12)	± 3.18 (± 0.125)
> 305 - 457 (> 12 - 18)	± 4.78 (± 0.188)
> 457 - 660 (> 18 - 26)	± 5.56 (± 0.219)
> 660 - 914 (> 26 - 36)	+ 25.4/- 0 (+ 1/- 0)

VALUE ADDED OFFERINGS

- Adhesive (PSA) lamination
- Slit material/tapes

Notes:

*Typical Value - Value is based on historical data. Please note the frequency of testing varies.

Additional industry specifications are available as well. All other properties are based on industry standard guidelines.

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