

BISCO® SILICONES – FPC FIRE BLOCK MATERIALS

BISCO® Fire Protective Covering (FPC) materials are patented 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 burnthrough of flames as high as 1900°F (1038°C) 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. BISCO FPC materials are available in various thicknesses and manufactured in roll form to allow fabricators to easily convert the material to the proper dimensions.

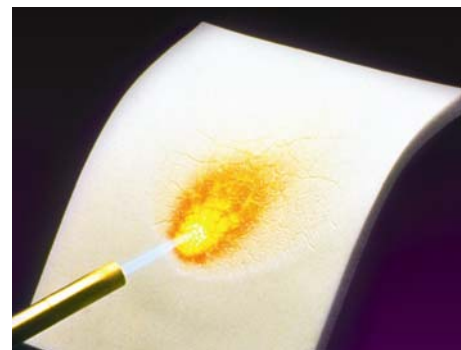
Features and Benefits

- Patented technology resists flames up to 1900°F (1038°C) and allows the material to protect areas for prolonged periods of time.
- FPC materials emit extremely low levels of smoke or toxic gas when subjected to fire, thereby making them ideal for aircraft and railcar cabins where smoke and toxic gas may cause harm to passengers.
- Silicone elastomer is directly cast onto a reinforcing fiberglass layer, thereby offering a flexible, yet durable product that has good tear resistance.
- Good resistance to arcing allows FPC to prevent the start of electrical fires within engine and electronic equipment areas.
- Available through distribution sites throughout North America, Europe, and Asia.

Applications

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

Silicone FPC – Typical Physical Properties At 1/8" thick (3.18 mm)			
Property	Test Method	Typical Value	
Thickness		0.063" (1.59 mm)	
		0.125" (3.18 mm)	
		0.250" (6.35 mm)	
Density	ASTM F 1315	32 pcf	
Temperature			
	Continuous	SAE J-2236	-67° to 392°F (-55° to 200°C)
	Intermittent	Rogers Internal	-482°F (-250°C)
Flame Spread (I _s)	ASTM E 162	< 5	
Smoke Density – Flaming (D _s - 4 minutes) (D _s - 1.5 minutes)	ASTM E 662	< 75	
		< 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	



Installation

- Available with or without pressure-sensitive adhesives. Foam side should face toward flame.

The information contained in this data sheet is intended to assist you in designing with Rogers BISCO Silicones. It is not intended to and does not create any warranties, express or implied, including any warranty of merchantability or fitness for a particular purpose or that the results shown on the data sheet will be achieved by a user for a particular purpose. The user should determine the suitability of Rogers BISCO Silicones for each application.