

# BISCO<sup>®</sup> Silicone FPC Fire Block Materials

BISCO<sup>®</sup> 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

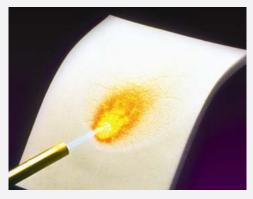
| PROPERTY   | TEST METHOD   | TYPICAL VALUE*                               |
|--|---------------|--|
| PHYSICAL   |               |  |
| Thickness, mm (inches)   |               | 1.59 (0.063)<br>3.18 (0.125)<br>6.35 (0.250) |
| Density, kg/m3 (lb./ft3)                                       | ASTM F 1315   | 513 (32)                                     |
| Temperature, Continuous  | SAE J 2236    | -55° to 200°C (-67° to 392°F)                |
| Flame Spread (Is)  | ASTM E 162    | <5   |
| Smoke Density-Flaming  | ASTM E 662    |  |
| (D <sub>s</sub> - 4 minutes)<br>(D <sub>s</sub> - 1.5 minutes) |               | < 75<br>< 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





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## **Standard Thickness Tolerances**

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

## Slit Material and Tape (PSA) Width Tolerances

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



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