Silicone Material Selection Guide
MARKETS
- Aircraft
- Rail
- Automotive
- Telecommunications & Electrical Enclosures
- Portable Communications
- Exterior Lighting
- Medical Devices
- Wire, Cable & Fiber optics
- Manufacturing Equipment

APPLICATIONS
- Environmental Seals
- Outdoor Electrical Gaskets
- EMI/RFI Shielding Gaskets
- Chip Package & Battery Cushions
- Automotive Heat Shields
- HID Lighting Seals

ROGERS’ BISCO® SILICONES – PERFORMANCE TO THE EXTREME

Whether your design calls for high performance sealing, cushioning or protection - the BISCO Silicones broad portfolio of material options will provide the best design solution for your application.

Our materials are resistant to temperature extremes, UV and ozone, and are extremely resilient to mechanical fatigue. BISCO Silicone materials exhibit excellent compression set and creep resistance, and carry the most stringent UL flame ratings available.

The world runs better with Rogers.”
WHY CHOOSE BISCO SILICONES?
BISCO Silicones are a full line of cellular, solid and specialty materials produced in roll-stock to be fabricated into gaskets, heat shields, fire stops, seals, cushions and insulation for a wide variety of applications.

BISCO Silicone Materials offer…
• Superior flame resistance
• Low flame, smoke and toxicity upon combustion
• Excellent performance at extreme temperatures
• Superior resistance to compression set and creep

CELLULAR SILICONES
Available in a wide range of firmnesses, BISCO Cellular Silicones are ideal for sealing, cushioning, vibration isolation and insulation.

• Open and closed-cell offerings available
• Withstand temperatures from -55°C up to 200°C (-67°F to 392°F).
• Unsurpassed compression-set resistance for excellent long-term sealing
• Pass stringent smoke and toxicity regulations
• Meets the most stringent UL-94 flame ratings available, V-0 and HF-1

SOLID SILICONES
BISCO Solid Silicone materials are designed for high temperature/high pressure gasketing applications. They are available in a range of thicknesses and durometers, offering flexibility in materials selection. Grades are also available with fiberglass reinforcement for added dimensional stability and increased tear strength.

General Purpose Solids:
• Range of durometers from 40-70 Shore A
• Grades available with fiberglass reinforcement for added dimensional stability and increased tear strength

Performance Solids:
• Range of durometers from 10-40 Shore A
• Tight tolerances and softness, ideal for demanding sealing applications

SPECIALTY SILICONES
BISCO Specialty Silicone products are designed to meet specific industry needs. All of our specialty materials can withstand extreme temperatures and meet stringent industry flame tests.

Materials Include:
• Acoustic barriers
• Patented fire blocking material
• Silicone coated fiberglass cloth
• Silicone foam combined with fabrics

TIPS FOR MATERIAL SELECTION

<table>
<thead>
<tr>
<th>Application Need</th>
<th>Market</th>
<th>Flame, Smoke, Toxicity</th>
<th>UL Rated Material</th>
<th>Vibration Reduction</th>
<th>Acoustic Performance</th>
<th>Softness</th>
<th>Firmness</th>
<th>EMI Shielding</th>
<th>Moisture Resistant</th>
<th>Heat Shielding</th>
<th>Insulating</th>
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</table>

Legend
• BISCO Cellular Silicones
• BISCO Solid Silicones
• BISCO Specialty Silicones

For specific information regarding applications in additional market areas, please contact the Rogers’ Solutions Center at 800.935.2940 or 607.786.8112, or visit us online at www.rogerscorp.com

SPECIALTY SERVICES
Rogers Corporation, High Performance Foams Division, can offer the following value added capabilities to BISCO Silicone material:

ADHESIVE LAMINATION
Pressure Sensitive Adhesive options
• Acrylic one or two sides of material
• Silicone one side only

MATERIAL SLITTING
Ability to slit minimum width of 0.250" (6.35mm)
Width of slit must be greater or equal to thickness
Material can be slit with or without adhesive applied
Maximum roll diameter is 14” (355.6mm)
### Typical Physical Properties

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<tr>
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</tr>
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<tbody>
<tr>
<td>Unit</td>
<td>lb/ft^3</td>
<td>psi (kPa)</td>
<td>%</td>
<td>psi (kPa)</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>% (º C) (º F)</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Detail</td>
<td>–</td>
<td>@ 25% Deflection</td>
<td>@ 100ºC (212ºF)</td>
<td>–</td>
<td>–</td>
<td>24 hrs @ Room Temp</td>
<td>V O</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
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</tr>
</tbody>
</table>

### Flammability & Outgassing

- **Ultra-Soft BF-2000**
  - Density: 1.60 (26.0)
  - Compression Force Deflection: 1.5 (10.5)
  - % Deflection: 25 (172)
  - Tensile Strength: 85
  - Elongation: 5
  - Water Absorption: Pass
  - Flame Resistance: Pass
  - Flame Spread Index (Dy): 12
  - Smoke Density: 45
  - Toxic Gas Emissions Rating: Pass
  - Total Mass Loss: 200 (392)
  - Recommended Constant Use: Pass
  - Dielectric Constant: 1.28
  - Dissipation Factor: 0.01
  - Dielectric Strength: 52
  - Dry Ash Resistance: 125
  - Volume Resistivity: 10^12
  - Thermal Conductivity: 0.05

- **Extra-Soft BF-1000**
  - Density: 1.92 (32.0)
  - Compression Force Deflection: 3 (20.7)
  - % Deflection: 35 (241)
  - Tensile Strength: 90
  - Elongation: 5
  - Water Absorption: Pass
  - Flame Resistance: Pass
  - Flame Spread Index (Dy): 12
  - Smoke Density: 31
  - Toxic Gas Emissions Rating: Pass
  - Total Mass Loss: 200 (392)
  - Recommended Constant Use: Pass
  - Dielectric Constant: 1.29
  - Dissipation Factor: 0.01
  - Dielectric Strength: 66
  - Dry Ash Resistance: 124
  - Volume Resistivity: 10^12
  - Thermal Conductivity: 0.06

- **Soft HT-870**
  - Density: 2.40 (40.0)
  - Compression Force Deflection: 4 (27.6)
  - % Deflection: 30 (207)
  - Tensile Strength: 90
  - Elongation: 5
  - Water Absorption: Pass
  - Flame Resistance: Pass
  - Flame Spread Index (Dy): 17
  - Smoke Density: 30
  - Toxic Gas Emissions Rating: Pass
  - Total Mass Loss: 200 (392)
  - Recommended Constant Use: Pass
  - Dielectric Constant: 1.38
  - Dissipation Factor: 0.01
  - Dielectric Strength: 65
  - Dry Ash Resistance: 124
  - Volume Resistivity: 10^12
  - Thermal Conductivity: 0.07

- **Medium HT-800**
  - Density: 3.52 (56.0)
  - Compression Force Deflection: 9 (62.0)
  - % Deflection: 45 (310)
  - Tensile Strength: 80
  - Elongation: 5
  - Water Absorption: Pass
  - Flame Resistance: Pass
  - Flame Spread Index (Dy): 25
  - Smoke Density: 35
  - Toxic Gas Emissions Rating: Pass
  - Total Mass Loss: 200 (392)
  - Recommended Constant Use: Pass
  - Dielectric Constant: 1.56
  - Dissipation Factor: 0.01
  - Dielectric Strength: 67
  - Dry Ash Resistance: 124
  - Volume Resistivity: 10^12
  - Thermal Conductivity: 0.07

- **Firm HT-820**
  - Density: 3.84 (64.0)
  - Compression Force Deflection: 16 (110.3)
  - % Deflection: 50 (345)
  - Tensile Strength: 55
  - Elongation: 5
  - Water Absorption: Pass
  - Flame Resistance: Pass
  - Flame Spread Index (Dy): 35
  - Smoke Density: 20
  - Toxic Gas Emissions Rating: Pass
  - Total Mass Loss: 200 (392)
  - Recommended Constant Use: Pass
  - Dielectric Constant: 1.47
  - Dissipation Factor: 0.01
  - Dielectric Strength: 69
  - Dry Ash Resistance: 125
  - Volume Resistivity: 10^12
  - Thermal Conductivity: 0.09

- **Extra-Firm HT-840**
  - Density: 4.49 (72.0)
  - Compression Force Deflection: 22 (151.7)
  - % Deflection: 60 (414)
  - Tensile Strength: 60
  - Elongation: 5
  - Water Absorption: Pass
  - Flame Resistance: Pass
  - Flame Spread Index (Dy): NA
  - Smoke Density: NA
  - Toxic Gas Emissions Rating: NA
  - Total Mass Loss: 200 (392)
  - Recommended Constant Use: Pass
  - Dielectric Constant: 1.62
  - Dissipation Factor: 0.01
  - Dielectric Strength: 69
  - Dry Ash Resistance: 125
  - Volume Resistivity: 10^12
  - Thermal Conductivity: 0.10

### Underwriters Labs - JMLU2 Gasket and Seals / File #8KH139

- UL50, UL 50E (continuous / periodic compression), UL508, UL1570, UL1571, UL1572 (135C) and UL157, Oil Immersion
- SAE J1960
- ASTM D 1171

### Gasketing & Sealing Rating

- All Materials Meet or Exceed
**Solid Silicones**

### Performance Grade Silicones

#### 10 Durometer

**Property Method**
- **ASTM D 2240**
- **ASTM D 395 (B)**
- **ASTM D 412**
- **ASTM D 624**
- **ASTM D 2337**

**Detail**
- Shore A
- 70 hr @ 150º C (302º F)
- -2°C (-4°F)

**Unit**
- psi
- %
- psi (MPa)
- %
- psi (kN/m)
- -

**Value**
- 10 HT-6210
- 25-30
- 250 (1.7)
- 500
- 25 (4.4)
- Pass / No Cracks

#### 20 Durometer

**Property Method**
- **ASTM D 2240**
- **ASTM D 395 (B)**
- **ASTM D 412**
- **ASTM D 624**
- **ASTM D 2337**

**Detail**
- Shore A
- 70 hr @ 150º C (302º F)
- -2°C (-4°F)

**Unit**
- psi
- %
- psi (MPa)
- %
- psi (kN/m)
- -

**Value**
- 20 HT-6220
- 25-30
- 800 (5.5)
- 650
- 55 (9.6)
- Pass / No Cracks

#### 35 Durometer

**Property Method**
- **ASTM D 2240**
- **ASTM D 395 (B)**
- **ASTM D 412**
- **ASTM D 624**
- **ASTM D 2337**

**Detail**
- Shore A
- 70 hr @ 150º C (302º F)
- -2°C (-4°F)

**Unit**
- psi
- %
- psi (MPa)
- %
- psi (kN/m)
- -

**Value**
- 35 HT-6135
- <15
- 800 (5.5)
- 450
- 70 (12.3)
- Pass / No Cracks

#### 40 Durometer

**Property Method**
- **ASTM D 2240**
- **ASTM D 395 (B)**
- **ASTM D 412**
- **ASTM D 624**
- **ASTM D 2337**

**Detail**
- Shore A
- 70 hr @ 150º C (302º F)
- -2°C (-4°F)

**Unit**
- psi
- %
- psi (MPa)
- %
- psi (kN/m)
- -

**Value**
- 40 HT-6240
- 25-30
- 800 (5.5)
- 250
- 75 (13.1)
- Pass / No Cracks

### General Purpose Solids

#### 40 Durometer

**Property Method**
- **ASTM D 2240**
- **ASTM D 395 (B)**
- **ASTM D 412**
- **ASTM D 624**
- **ASTM D 2337**

**Detail**
- Shore A
- 70 hr @ 150º C (302º F)
- -2°C (-4°F)

**Unit**
- psi
- %
- psi (MPa)
- %
- psi (kN/m)
- -

**Value**
- 40 HT-1240
- 20
- 825 (5.7)
- 350
- 50 (8.8)
- Pass / No Cracks

#### 50 Durometer

**Property Method**
- **ASTM D 2240**
- **ASTM D 395 (B)**
- **ASTM D 412**
- **ASTM D 624**
- **ASTM D 2337**

**Detail**
- Shore A
- 70 hr @ 150º C (302º F)
- -2°C (-4°F)

**Unit**
- psi
- %
- psi (MPa)
- %
- psi (kN/m)
- -

**Value**
- 50 HT-1250
- 20
- 950 (6.6)
- 300
- 70 (12.2)
- Pass / No Cracks

#### 60 Durometer

**Property Method**
- **ASTM D 2240**
- **ASTM D 395 (B)**
- **ASTM D 412**
- **ASTM D 624**
- **ASTM D 2337**

**Detail**
- Shore A
- 70 hr @ 150º C (302º F)
- -2°C (-4°F)

**Unit**
- psi
- %
- psi (MPa)
- %
- psi (kN/m)
- -

**Value**
- 60 HT-1260
- 20
- 1050 (7.2)
- 250
- 75 (13.1)
- Pass / No Cracks

#### 70 Durometer

**Property Method**
- **ASTM D 2240**
- **ASTM D 395 (B)**
- **ASTM D 412**
- **ASTM D 624**
- **ASTM D 2337**

**Detail**
- Shore A
- 70 hr @ 150º C (302º F)
- -2°C (-4°F)

**Unit**
- psi
- %
- psi (MPa)
- %
- psi (kN/m)
- -

**Value**
- 70 HT-1270
- 25
- 1150 (7.9)
- 200
- 90 (15.8)
- Pass / No Cracks

## Specialty Silicones

### Thermal Solutions

#### BISCO Fire Block Materials: FPC

Flame retardant silicone foams designed to protect sensitive components from damage during fires.

### BISCO Reflective Foam: RF-120

Reflective silicone foam designed to aid in heat management applications by both insulating against heat and reflecting it away.

### BISCO Reinforced Foam: IF-200

Abrasion resistant foam that allows users to place the foam in slightly harsher environments while minimizing the potential for tearing the foam.

### BISCO FR Performance Solid: HT-6360

Formulated to be a solid flame resistant material that meets the strictest flammability ratings.
### BISCO Vibration Isolator: L3 Première

BISCO L3 Première silicone foam technology is the next generation in dynamic flooring materials. The L3 Première is developed specifically to meet global requirements for flammability, smoke and toxicity while providing superior vibration isolation performance.

<table>
<thead>
<tr>
<th>Property</th>
<th>Method</th>
<th>Detail</th>
<th>Unit</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td></td>
<td></td>
<td></td>
<td>White</td>
</tr>
<tr>
<td>Nominal Thickness</td>
<td></td>
<td></td>
<td>mm</td>
<td>25</td>
</tr>
<tr>
<td>Density</td>
<td>ASTM D 1056</td>
<td></td>
<td>kg/m³ (pcf)</td>
<td>288 (18)</td>
</tr>
<tr>
<td>Compression Deflection</td>
<td>ASTM D 1056</td>
<td>Force Load Measured @ 25% Strain</td>
<td>kPa (psi)</td>
<td>120 (17.5)</td>
</tr>
<tr>
<td>Compression Set</td>
<td>ASTM D 1056</td>
<td>100°C for 22 hours @ 50% Compression</td>
<td>%</td>
<td>&lt;5</td>
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<tr>
<td>Flame, Smoke &amp; Toxicity</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>French Mass Transit (Rail)</td>
<td>NF F 16-101</td>
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<td>mm</td>
<td>25</td>
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### BISCO Sound Block: HT-200

BISCO Sound Block materials are silicone elastomers designed to reduce the transmission of sound within interior spaces while preventing the spread of fire and smoke.

<table>
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<th>Method</th>
<th>Detail</th>
<th>Unit</th>
<th>Value</th>
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<tbody>
<tr>
<td>Flame Spread (D₁₀)</td>
<td>ASTM E 162</td>
<td></td>
<td>°C</td>
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<td>Smoke Density (D₂₃)</td>
<td>ASTM E 662</td>
<td>Flaming D₂₃ 4 minutes</td>
<td>°C</td>
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<td></td>
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<td>Flaming D₂₃ 2.5 minutes</td>
<td>°C</td>
<td>&lt;5</td>
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<td></td>
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<td>Non-Flaming D₂₃</td>
<td>°C</td>
<td>&lt;5</td>
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<td>Oxygen Index</td>
<td>ASTM D 2863</td>
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<td>%</td>
<td>50</td>
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<td>Toxic Gas Emissions</td>
<td>SMP-800C</td>
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<td>Pass</td>
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<td>Sound Transmission Loss Rating</td>
<td>ASTM E 90</td>
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### BISCO EMI Shielding Material EC-2000

BISCO EC-2000 Electrically Conductive Solid Silicones are an ideal EMI/RFI shielding solution when high shielding effectiveness is a must. These soft, conductive materials offer exceptional compression force deflection to increase design flexibility for all types of enclosures.

<table>
<thead>
<tr>
<th>Property</th>
<th>Method</th>
<th>Detail</th>
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<th>Value</th>
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<td>Specific Gravity</td>
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<td>Internal</td>
<td>g/cc</td>
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<td>Hardness</td>
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<td>Shore A</td>
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<td>60</td>
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<tr>
<td>Tensile Strength</td>
<td>ASTM D 412</td>
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<td>psi</td>
<td>90</td>
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<td>Elongation</td>
<td>ASTM D 412</td>
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<td>%</td>
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<td>Volume Resistivity</td>
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<td>Shielding Effectiveness</td>
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<td>500 MHz</td>
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<td>1 GHz</td>
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<td>10 GHz</td>
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<td>85</td>
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### Fiberglass Reinforced Silicone HT-1500

Designed for press pad and high strength gasketing applications where durability and tear resistance are critical.

<table>
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<th>Method</th>
<th>Detail</th>
<th>Unit</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Durameter</td>
<td>ASTM D 2240</td>
<td>Shore A</td>
<td>psi</td>
<td>75</td>
</tr>
<tr>
<td>Compression Set</td>
<td>ASTM D 955(B)</td>
<td>70 hr @ 150°C (302°F)</td>
<td>%</td>
<td>25</td>
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<tr>
<td>Breaking Strength</td>
<td>ASTM D 412</td>
<td></td>
<td>psi (MPa)</td>
<td>300 (5.3)</td>
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<tr>
<td>Low Temperature Embrittlement</td>
<td>ASTM D 2137</td>
<td>-62°C (-40°F)</td>
<td></td>
<td>Pass/No Cracks</td>
</tr>
</tbody>
</table>

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**Specialty Silicones**

**Acoustic Solutions**

**BISCO Vibration Isolator: L3 Première**

BISCO L3 Première silicone foam technology is the next generation in dynamic flooring materials. The L3 Première is developed specifically to meet global requirements for flammability, smoke and toxicity while providing superior vibration isolation performance.

<table>
<thead>
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<th>Method</th>
<th>Detail</th>
<th>Unit</th>
<th>Value</th>
</tr>
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<tbody>
<tr>
<td>Color</td>
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<td>White</td>
</tr>
<tr>
<td>Nominal Thickness</td>
<td></td>
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<td>mm</td>
<td>25</td>
</tr>
<tr>
<td>Density</td>
<td>ASTM D 1056</td>
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<td>kg/m³ (pcf)</td>
<td>288 (18)</td>
</tr>
<tr>
<td>Compression Deflection</td>
<td>ASTM D 1056</td>
<td>Force Load Measured @ 25% Strain</td>
<td>kPa (psi)</td>
<td>120 (17.5)</td>
</tr>
<tr>
<td>Compression Set</td>
<td>ASTM D 1056</td>
<td>100°C for 22 hours @ 50% Compression</td>
<td>%</td>
<td>&lt;5</td>
</tr>
<tr>
<td>Flame, Smoke &amp; Toxicity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>French Mass Transit (Rail)</td>
<td>NF F 16-101</td>
<td></td>
<td>mm</td>
<td>25</td>
</tr>
</tbody>
</table>

**BISCO Sound Block: HT-200**

BISCO Sound Block materials are silicone elastomers designed to reduce the transmission of sound within interior spaces while preventing the spread of fire and smoke.

<table>
<thead>
<tr>
<th>Property</th>
<th>Method</th>
<th>Detail</th>
<th>Unit</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flame Spread (D₁₀)</td>
<td>ASTM E 162</td>
<td></td>
<td>°C</td>
<td>&lt;5</td>
</tr>
<tr>
<td>Smoke Density (D₂₃)</td>
<td>ASTM E 662</td>
<td>Flaming D₂₃ 4 minutes</td>
<td>°C</td>
<td>&lt;75</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Flaming D₂₃ 2.5 minutes</td>
<td>°C</td>
<td>&lt;5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Non-Flaming D₂₃</td>
<td>°C</td>
<td>&lt;5</td>
</tr>
<tr>
<td>Oxygen Index</td>
<td>ASTM D 2863</td>
<td></td>
<td>%</td>
<td>50</td>
</tr>
<tr>
<td>Toxic Gas Emissions</td>
<td>SMP-800C</td>
<td></td>
<td></td>
<td>Pass</td>
</tr>
<tr>
<td>Sound Transmission Loss Rating</td>
<td>ASTM E 90</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**BISCO EMI Shielding Material EC-2000**

BISCO EC-2000 Electrically Conductive Solid Silicones are an ideal EMI/RFI shielding solution when high shielding effectiveness is a must. These soft, conductive materials offer exceptional compression force deflection to increase design flexibility for all types of enclosures.

<table>
<thead>
<tr>
<th>Property</th>
<th>Method</th>
<th>Detail</th>
<th>Unit</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific Gravity</td>
<td></td>
<td>Internal</td>
<td>g/cc</td>
<td>2.18</td>
</tr>
<tr>
<td>Hardness</td>
<td>ASTM D 2240</td>
<td>Shore A</td>
<td></td>
<td>60</td>
</tr>
<tr>
<td>Tensile Strength</td>
<td>ASTM D 412</td>
<td></td>
<td>psi</td>
<td>90</td>
</tr>
<tr>
<td>Elongation</td>
<td>ASTM D 412</td>
<td></td>
<td>%</td>
<td>60</td>
</tr>
<tr>
<td>Volume Resistivity</td>
<td>Rogers Internal</td>
<td></td>
<td>Ohm-cm</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Shielding Effectiveness</td>
<td>MIL-G-3528</td>
<td>100 MHz</td>
<td>dB</td>
<td>120</td>
</tr>
<tr>
<td></td>
<td></td>
<td>500 MHz</td>
<td></td>
<td>120</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 GHz</td>
<td></td>
<td>110</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10 GHz</td>
<td></td>
<td>85</td>
</tr>
</tbody>
</table>

**Fiberglass Reinforced Silicone HT-1500**

Designed for press pad and high strength gasketing applications where durability and tear resistance are critical.

<table>
<thead>
<tr>
<th>Property</th>
<th>Method</th>
<th>Detail</th>
<th>Unit</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Durameter</td>
<td>ASTM D 2240</td>
<td>Shore A</td>
<td>psi</td>
<td>75</td>
</tr>
<tr>
<td>Compression Set</td>
<td>ASTM D 955(B)</td>
<td>70 hr @ 150°C (302°F)</td>
<td>%</td>
<td>25</td>
</tr>
<tr>
<td>Breaking Strength</td>
<td>ASTM D 412</td>
<td></td>
<td>psi (MPa)</td>
<td>300 (5.3)</td>
</tr>
<tr>
<td>Low Temperature Embrittlement</td>
<td>ASTM D 2137</td>
<td>-62°C (-40°F)</td>
<td></td>
<td>Pass/No Cracks</td>
</tr>
</tbody>
</table>

---
### BISCO Silicone Tolerances

#### Cellular Standard Thickness Tolerance

<table>
<thead>
<tr>
<th>in</th>
<th>1/32</th>
<th>1/16</th>
<th>3/32</th>
<th>1/8</th>
<th>3/16</th>
<th>1/4</th>
<th>3/8</th>
<th>1/2</th>
<th>3/4</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>mm</td>
<td>0.031</td>
<td>0.063</td>
<td>0.094</td>
<td>0.125</td>
<td>0.188</td>
<td>0.250</td>
<td>0.375</td>
<td>0.500</td>
<td>0.750</td>
<td>1.000</td>
</tr>
</tbody>
</table>

#### Solids Standard Thickness Tolerance

<table>
<thead>
<tr>
<th>in</th>
<th>0.010 - 0.014</th>
<th>0.015 - 0.025</th>
<th>0.026 - 0.040</th>
<th>0.041 - 0.094</th>
<th>0.095 - 0.145</th>
</tr>
</thead>
<tbody>
<tr>
<td>mm</td>
<td>0.25 - 0.36</td>
<td>0.38 - 0.64</td>
<td>0.66 - 1.02</td>
<td>1.04 - 2.39</td>
<td>2.41 - 3.68</td>
</tr>
</tbody>
</table>

#### Width Tolerance

<table>
<thead>
<tr>
<th>in</th>
<th>0 &lt; T ≤ 3</th>
<th>3 &lt; T ≤ 8</th>
<th>8 &lt; T ≤ 12</th>
<th>12 &lt; T ≤ 18</th>
<th>18 &lt; T ≤ 26</th>
<th>26 &lt; T ≤ 36</th>
<th>T ≥ 36</th>
</tr>
</thead>
<tbody>
<tr>
<td>w/o PSA</td>
<td>+/- 0.031</td>
<td>+/- 0.031</td>
<td>+/- 0.094</td>
<td>+/- 0.215</td>
<td>+/- 0.250</td>
<td>+/- 0.065</td>
<td>1.00 - 1.00</td>
</tr>
</tbody>
</table>

#### Cellular

<table>
<thead>
<tr>
<th>Width Tolerance</th>
<th>BF-1000</th>
<th>BF-1005 (A)</th>
<th>HT-800</th>
</tr>
</thead>
<tbody>
<tr>
<td>+/- 0.002</td>
<td>-</td>
<td>+0.003, -0.002</td>
<td>-</td>
</tr>
<tr>
<td>+/- 0.004</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>+/- 0.006</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>+/- 0.008</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

#### Speciality

<table>
<thead>
<tr>
<th>Width Tolerance</th>
<th>BF-1000</th>
<th>BF-1005 (A)</th>
<th>HT-800</th>
</tr>
</thead>
<tbody>
<tr>
<td>+/- 0.016</td>
<td>-</td>
<td>+0.020, -0.020</td>
<td>-</td>
</tr>
<tr>
<td>+/- 0.020</td>
<td>-</td>
<td>+0.025, -0.025</td>
<td>-</td>
</tr>
<tr>
<td>+/- 0.050</td>
<td>-</td>
<td>+0.050, -0.050</td>
<td>-</td>
</tr>
<tr>
<td>+/- 0.060</td>
<td>-</td>
<td>+/- 0.060, +/- 0.060</td>
<td>-</td>
</tr>
</tbody>
</table>

### BISCO Silicone Specifications

#### General Industry Specifications

<table>
<thead>
<tr>
<th>Astronomy Global Specifications</th>
<th>BF-1000</th>
<th>BF-1005 (A)</th>
<th>HT-800</th>
</tr>
</thead>
<tbody>
<tr>
<td>FAR 25.853</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>FT-16-101</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>NPA 130</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>NFPA 130</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>UL-94**</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

#### Global Specifications

<table>
<thead>
<tr>
<th>Mass Transit (Tested to)</th>
<th>BF-1000</th>
<th>BF-1005 (A)</th>
<th>HT-800</th>
</tr>
</thead>
<tbody>
<tr>
<td>BS 6853*</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>NF F 16-101*</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>NPA 130*</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>MS-A556*</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

#### General Industry Specifications

<table>
<thead>
<tr>
<th>BF-2000</th>
<th>BF-1000</th>
<th>BF-1005 (A)</th>
<th>HT-800</th>
</tr>
</thead>
<tbody>
<tr>
<td>+/- 0.031</td>
<td>-</td>
<td>+0.031, -0.031</td>
<td>-</td>
</tr>
<tr>
<td>+/- 0.031</td>
<td>-</td>
<td>+0.031, -0.031</td>
<td>-</td>
</tr>
<tr>
<td>+/- 0.125</td>
<td>-</td>
<td>+0.125, -0.125</td>
<td>-</td>
</tr>
<tr>
<td>+/- 0.125</td>
<td>-</td>
<td>+0.125, -0.125</td>
<td>-</td>
</tr>
</tbody>
</table>

#### Mass Transit (Tested to)

<table>
<thead>
<tr>
<th>BF-2000</th>
<th>BF-1000</th>
<th>BF-1005 (A)</th>
<th>HT-800</th>
</tr>
</thead>
<tbody>
<tr>
<td>+/- 0.031</td>
<td>-</td>
<td>+0.031, -0.031</td>
<td>-</td>
</tr>
<tr>
<td>+/- 0.031</td>
<td>-</td>
<td>+0.031, -0.031</td>
<td>-</td>
</tr>
<tr>
<td>+/- 0.125</td>
<td>-</td>
<td>+0.125, -0.125</td>
<td>-</td>
</tr>
<tr>
<td>+/- 0.125</td>
<td>-</td>
<td>+0.125, -0.125</td>
<td>-</td>
</tr>
</tbody>
</table>

* Indicated materials have been tested to specific sections of each safety standard. Ask your Customer Service Representative for detailed results.

** Underwriters Laboratories limits the ratings to specific colors and thicknesses. Consult www.ul.com for more details.

*** >0.031 thickness
## Product Availability

### Thickness

<table>
<thead>
<tr>
<th>Color</th>
<th>Width inch</th>
<th>Thickness (in)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.025</td>
<td>0.050</td>
</tr>
<tr>
<td></td>
<td>0.075</td>
<td>0.100</td>
</tr>
<tr>
<td></td>
<td>0.125</td>
<td>0.150</td>
</tr>
<tr>
<td></td>
<td>0.200</td>
<td>0.250</td>
</tr>
<tr>
<td></td>
<td>0.375</td>
<td>0.500</td>
</tr>
<tr>
<td></td>
<td>0.625</td>
<td>1.000</td>
</tr>
</tbody>
</table>

### Color

- **Ultra-Soft**: BF-2000, BF-1000, HT-870
- **Soft**: HT-800
- **Medium**: HT-820
- **Firm**: HT-840
- **10 Durometer**: HT-6210
- **20 Durometer**: HT-6220
- **35 Durometer**: HT-6335
- **40 Durometer**: HT-6240
- **50 Durometer**: HT-6250
- **60 Durometer**: HT-6260
- **70 Durometer**: HT-6270
- **Fire Block**: FPC
- **Reflective Foam**: RF-120
- **Reinforced Foam**: IF-200
- **FR Performance Solid**: HT-6360
- **Vibration Isolator**: L3 Premium
- **EMI Shielding**: EC-2040, EC-2130
- **Dimensionally Stable Material**: HT-1500, HT-1510
- **Sound Block**: HT-200

### Legend
- **Standard Product**
- **Standard Product Not w/Adhesive**
- **Custom Materials**
- **Not Available**

***Width varies per thickness***

### Availability

- **Ultra-Soft**: BF-2000, BF-1000, HT-870
- **Soft**: HT-800
- **Medium**: HT-820
- **Firm**: HT-840
- **10 Durometer**: HT-6210
- **20 Durometer**: HT-6220
- **35 Durometer**: HT-6335
- **40 Durometer**: HT-6240
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- **EMI Shielding**: EC-2040, EC-2130
- **Dimensionally Stable Material**: HT-1500, HT-1510
- **Sound Block**: HT-200

*Sold by weight only, not thickness. See below for standard weights. Also available with adhesive (one side only) and/or fiberglass on one or two sides.*

### Standard Weights (lb/ft²)

<table>
<thead>
<tr>
<th>Thickness (in)</th>
<th>Target Wt (lb/ft²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.025</td>
<td>0.25 +/- 0.030</td>
</tr>
<tr>
<td>0.050</td>
<td>0.50 +/- 0.050</td>
</tr>
<tr>
<td>0.075</td>
<td>0.75 +/- 0.075</td>
</tr>
<tr>
<td>0.100</td>
<td>1.00 +/- 0.100</td>
</tr>
<tr>
<td>0.125</td>
<td>1.50 +/- 0.150</td>
</tr>
</tbody>
</table>

### Additional Information

- Available from 4mm – 25mm
- **HT-200 Availability**:
  - BF-2000
  - BF-1000
  - HT-870
  - HT-800
  - HT-820
  - HT-840
  - HT-6210
  - HT-6220
  - HT-6335
  - HT-6240
  - HT-6250
  - HT-6260
  - HT-6270
  - FPC
  - RF-120
  - IF-200
  - HT-6360
  - L3 Premium
  - EC-2040
  - EC-2130
  - HT-1500
  - HT-1510
  - HT-200

### Contact Information

- e-mail: service@stockwell.com
- Phone: (800) 523-0123

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**Stockwell Elastomers**

Manufacturing Solutions Through Engineered Materials

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**BISCO® Silicons**
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