

Frame Gaskets and Strips

EMI/EMP Frame Gaskets and Strips

Frame mounted gaskets incorporate a length of MESH STRIP monel or Ferrex gasketing (with or without elastomer core), securely crimped into the edge of extruded aluminum mounting frames. Allowing simple mechanical mounting, the aluminum frame also provides a positive compression stop to prevent over-compression of the gasket.

The aluminum frame attaches easily to a flange surface with spot welds, rivets, bolts or sheet metal screws. The frame can serve as a load-bearing element, able to meet most shock and vibration requirements.

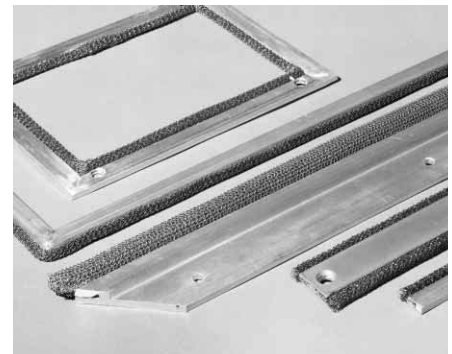
Frames can be supplied unfinished, chromate finished to MIL-C-5541, Class 3, or painted. Double-gasket versions feature a MESH STRIP gasket on both edges, or one MESH STRIP gasket and one environmental sealing gasket.

Note: These gaskets should generally not be used in salt spray or shipboard environments. Both monel and Ferrex mesh will cause galvanic corrosion of aluminum flanges. Silver-plated-aluminum filled elastomer gaskets are recommended on aluminum flanges in salt spray environments.

Standard Strips — With a maximum length of 8 feet (244 cm), Frame Gaskets are supplied in standard lengths of 7.5 feet (229 cm), and shipped straight in shipping tubes or boxes.

Fabricated Lengths — Select the style of frame required and submit a drawing indicating lengths required and location and diameter of holes.

Fabricated Frame Assemblies — Chomerics will fabricate ready-to-mount frame assemblies to customer specification. Select the frame style required. Referring to Figures 1a-c,



submit a drawing indicating dimensions, hole diameters, and hole locations. *Note:* Holes should not be specified in the jaw area that clamps over the gasket.

For assistance in determining the most suitable combination of frame and gasket for your application, consult Chomerics' Applications Engineering Department.

Table 1

EMI/EMP FRAME GASKETING			
Dimensions (with Single EMI Gasket)*	Dimensions (with Double EMI Gasket)*	EMI Gasket Description (Monel or Ferrex)	Typical Sizes For Aluminum Extrusion Mounting Strip
		Round Mesh Strip 0.188 in. dia.	Thickness (T) Width (W) 0.093 (2.4) 0.375 (9.5) 0.093 (2.4) 0.437 (11.1)
		Round Mesh Strip 0.250 in. dia.	0.125 (3.2) 0.312 (8.2) 0.125 (3.2) 0.375 (9.5) 0.125 (3.2) 0.437 (11.1)
		Rectangular Mesh Strip 0.156 in. high	0.125 (3.2) 0.500 (12.7) 0.125 (3.2) 0.625 (15.9) 0.125 (3.2) 0.750 (19.1)
		Rectangular Mesh Strip 0.188 in. high	0.125 (3.2) 1.000 (25.4) 0.125 (3.2) 1.125 (28.6) 0.125 (3.2) 1.250 (31.8)
		Mesh over Neoprene Sponge Core 0.188 in. dia.	<i>Part Numbers will be provided by Chomerics.</i> (mm dimensions in parentheses)
		Mesh over Neoprene Sponge Core 0.250 in. dia.	
		Mesh over Silicone Sponge Core 0.188 in. dia.	
		Mesh over Silicone Sponge Core 0.250 in. dia.	
		Mesh over Hollow Tube Silicone 0.188 in. dia.	
		Mesh over Hollow Tube Silicone 0.250 in. dia.	

Note: Diameters given for mesh-over-elastomer gaskets apply only to the elastomer core. Outside diameters, including mesh covers, can be up to 0.031 in. (0.79 mm) greater.

Table 2

SINGLE EMI/EMP FRAME GASKETING PLUS WEATHER SEAL															
Typical Cross Sections	Typical Weather Seal Dimensions														
	<p>Neoprene or Silicone, <i>Sponge or Solid</i></p> <table border="1"> <tr> <th>Height (H)</th> <th>Width (W)</th> </tr> <tr> <td>*0.125 (3.2)</td> <td>0.125 (3.2)</td> </tr> <tr> <td>*0.125 (3.2)</td> <td>0.188 (4.8)</td> </tr> <tr> <td>0.156 (4.0)</td> <td>0.125 (3.2)</td> </tr> <tr> <td>0.188 (4.8)</td> <td>0.188 (4.8)</td> </tr> <tr> <td>0.250 (6.4)</td> <td>0.188 (4.8)</td> </tr> <tr> <td>0.250 (6.4)</td> <td>0.250 (6.4)</td> </tr> </table> <p><i>*Aluminum Extrusions 0.093 (2.4 thick). All others 0.125 (3.2).</i></p> <p><i>Part Numbers will be provided by Chomerics.</i></p>	Height (H)	Width (W)	*0.125 (3.2)	0.125 (3.2)	*0.125 (3.2)	0.188 (4.8)	0.156 (4.0)	0.125 (3.2)	0.188 (4.8)	0.188 (4.8)	0.250 (6.4)	0.188 (4.8)	0.250 (6.4)	0.250 (6.4)
Height (H)	Width (W)														
*0.125 (3.2)	0.125 (3.2)														
*0.125 (3.2)	0.188 (4.8)														
0.156 (4.0)	0.125 (3.2)														
0.188 (4.8)	0.188 (4.8)														
0.250 (6.4)	0.188 (4.8)														
0.250 (6.4)	0.250 (6.4)														
	<p>Solid Neoprene or Solid Silicone</p> <p>Tube Diameter: 0.250 (6.4)</p> <p><i>Used with Aluminum Extrusions 0.125 (3.2) thick, in the following widths:</i></p> <table border="1"> <tr> <td>0.500 (12.7)</td> </tr> <tr> <td>0.625 (15.9)</td> </tr> <tr> <td>0.750 (19.1)</td> </tr> <tr> <td>1.000 (25.4)</td> </tr> <tr> <td>1.250 (31.8)</td> </tr> </table> <p><i>Part Numbers will be provided by Chomerics.</i></p>	0.500 (12.7)	0.625 (15.9)	0.750 (19.1)	1.000 (25.4)	1.250 (31.8)									
0.500 (12.7)															
0.625 (15.9)															
0.750 (19.1)															
1.000 (25.4)															
1.250 (31.8)															

Neoprene Weather Seal complies with MIL-R-6855, Class II, Grade 40.
 Silicone Weather Seal complies with MIL-R-5847, Class II, Grade 40 and with ZZ-R-765.

Figure 1 Fabricated Frame Assemblies

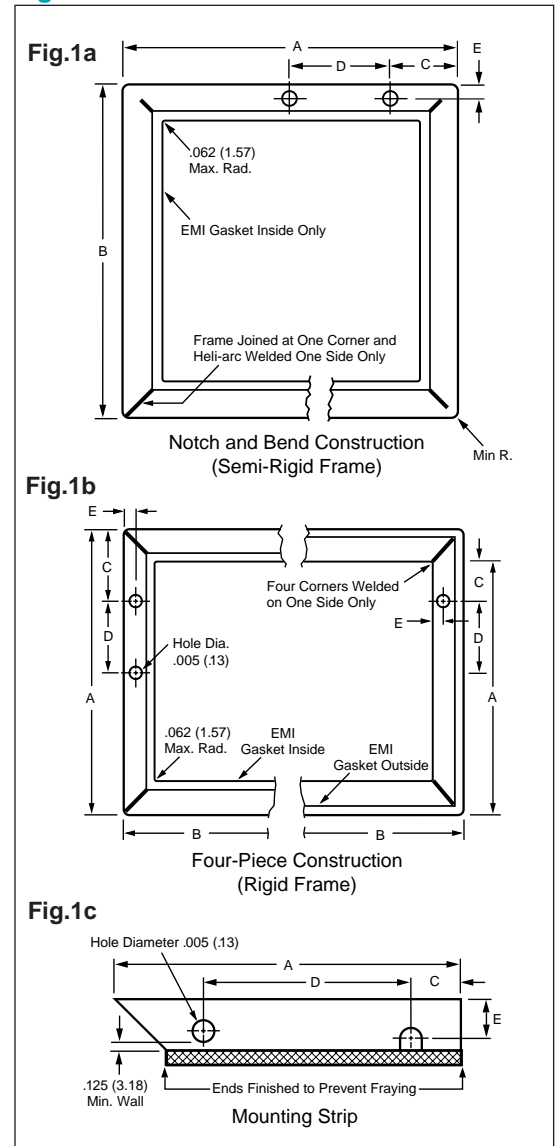


Table 3

TOLERANCES FOR ALUMINUM EXTRUSION MOUNTING STRIP	
Width	Tolerances
<0.125 (3.18)	±0.006 (0.15)
0.125-0.249 (3.18-6.32)	±0.007 (0.18)
0.250-0.499 (6.35-12.67)	±0.008 (0.20)
0.500-0.749 (12.70-19.02)	±0.009 (0.23)
0.750-0.999 (19.05-25.37)	±0.010 (0.25)
1.0-1.499 (25.40-38.07)	±0.012 (0.30)

Table 4

TOLERANCES FOR DIMENSIONS SHOWN IN FIGURES 1a-c				
Dim.	0-12.0 (0-30.5 cm)	12.1-24.0 (30.8-61.0 cm)	24.1-36.0 (61.2-91.4 cm)	36.1-48.0 (91.7-121.9 cm)
A & B	±0.020 (0.51)	±0.030 (0.76)	±0.047 (1.19)	±0.062 (1.57)
C, D, & E	±0.010 (0.25)	±0.015 (0.38)	±0.025 (0.63)	±0.030 (0.76)

(mm dimensions in parentheses)