

### Product Overview

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Kemtron has the capability to produce many designs and styles of flat gaskets. We have a versatile process of manufacture, which is ideally suited for development and pre-production through to full production volumes. Modern tooling, enable complex shapes to be produced whilst maintaining tight, repeatable tolerances. Single or multipart tool configurations allow for efficient, economical production techniques.

Flat gaskets are produced from sheet while larger gaskets can be cut from fabricated picture frames.

This option has the advantage of saving material and allows larger gaskets to be produced economically. This is facilitated by our in-house tool making and silicone moulding facilities. Fabricated frames use either extruded or moulded flat section that is joined by vulcanizing the polymer.

This process has allowed Kemtron to produce gaskets up to 2 meters long, with the same mechanical integrity as is found in a single part gasket cut from sheet. This method of manufacture often offers cost savings over cutting from sheet with subsequent loss of waste material. During this process compression stops or collars can also be incorporated. This leads to reduced hardware costs and negates the need for fixings to be torqued to prevent over compression and damage to the gasket.

Our experience in laminating allows us to apply self-adhesive backing tape to even the most difficult materials such as silicone, regardless of quantities. We use a range of high performance tapes suitable for all conditions.

Kemtron has in house slitting capability, which allows us to convert sheet or log materials into strip or coils. This flexible technique with short lead times allows materials to be supplied to exact customer requirements with low minimum order quantities.

## Product Overview

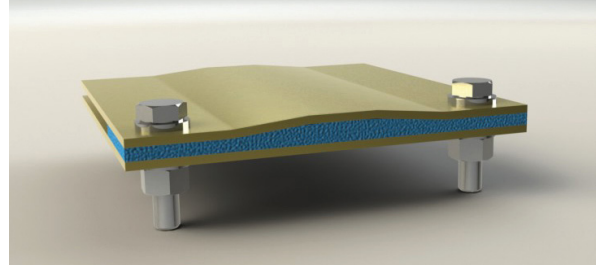
### Availability

- Continuous lengths up to 5 mtrs long for slit coils.
- Fabricated gaskets to customer's drawings.
- Can be fitted with compression limit stops or collars.
- Easily assembled using the self-adhesive backing option. (Self-adhesive backing is an assembly aid only).
- A broad range of sizes available.
- A large range of materials to suit many climatic conditions.
- Large fabricated gaskets can be produced economically.
- UL flame retardant approved materials are also available.

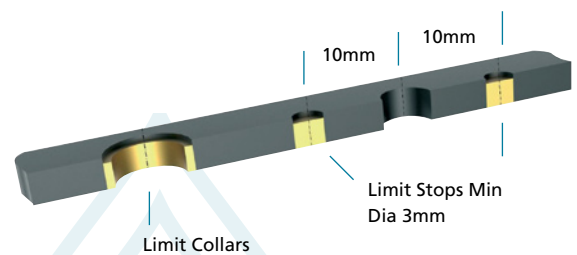
### Design Considerations

- It is important that this material is not over-compressed. If the design of the equipment does not allow for any mechanical method of preventing over-compression, the gasket should be fitted with built-in compression limiters, either metal stops fitted to the gasket, or metal collars fitted into each fixing hole.
- When specifying die cut gaskets minimum material width should not be less than 2mm or at least the material thickness in any part of the gasket. If this cannot be achieved around fixing holes consider using a slot. Particular attention is required if specifying compression collars in holes.
- Particular consideration must be given to compression forces, hole centres, size and number of fixings and rigidity of mating flanges.

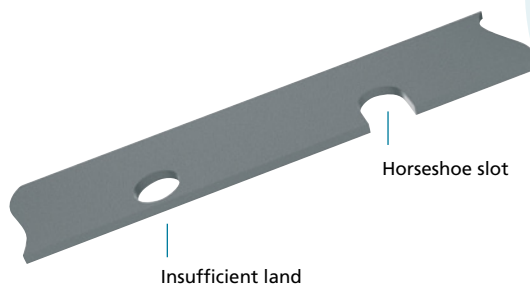
### Compression 3



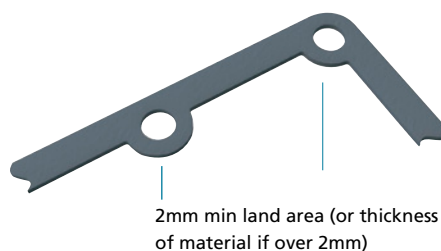
### Compression Limit Applications



### Horse Shoe Slot



### Minimum Land



### Notice

Information supplied in these data sheets is based on independent and laboratory tests which Kemtron believes to be reliable. Kemtron has no control over the design of customer's product which incorporates Kemtron's products, therefore it is the responsibility of the user to determine the suitability for his particular application and we recommend that the user make his own test to determine suitability. The product described in this data sheet shall be of standard quality, however the products are sold without warranty of fitness for a particular purpose, either expressed or implied, except to the extent expressly stated on Kemtron's invoice, quotation or order acknowledgement. Kemtron does not warrant that products described in this data sheet will be free of conflict with existing or future patents of third parties. All risks of lack of fitness, patent infringement and the like are assumed by the user.

\*special minimum order quantity may apply

## Technical Specification

### Silicone Sponge

#### SP16

	Width (mm)	Temperature Range	Density Kg M <sup>3</sup>	Colour	Flame Resistance
<b>Closed Cell</b>	1000	-60°C/+200°C	250	White	None
<b>Thickness</b>	1.5mm, 2.5mm, 3.0mm, 4.0mm, 5.0mm, 6.0mm, 8.0mm, 9.5mm, 12.5mm				

#### SP16VO

	Width (mm)	Temperature Range	Density Kg M <sup>3</sup>	Colour	Flame Resistance
<b>Closed Cell</b>	1000	-60°C/+200°C	200	Grey	UL94VO
<b>Thickness</b>	1.5mm, 2.5mm, 3.0mm, 5.0mm, 6.0mm				

### Rogers Bisco® Silicone Sponge

#### BF1000

	Width (mm)	Temperature Range	Density Kg M <sup>3</sup>	Colour	Flame Resistance
<b>Open Cell</b>	915	-55°C/+200°C	192	White	UL94VO
<b>Thickness</b>	1.6mm, 2.4mm, 3.2mm, 4.8mm, 6.4mm				

#### HT800

	Width (mm)	Temperature Range	Density Kg M <sup>3</sup>	Colour	Flame Resistance
<b>Closed Cell</b>	915	-55°C/+200°C	192	Grey	UL94VO
<b>Thickness</b>	1.6mm, 2.4mm, 3.2mm, 4.8mm, 6.4mm				

### Solid Silicone

#### General Purpose

	Width (mm)	Temperature Range	Hardness Shore	Colour*	Flame Resistance
	1000	-40°C/+200°C	40° or 60°	T/B/W	None
<b>Thickness</b>	0.5mm, 0.8mm, 1.0mm, 1.5mm, 2.0mm, 2.5mm, 3.0mm				

\*Colour: T=Translucent B=Black W=White  
 Please enquire as to the stock colour as a minimum quantity may apply.  
 Other shore hardness sheets and colour options are available from our own compounding and moulding facility including fluorosilicone.

### Closed Cell Expanded Chloropene Sponge (Neoprene Sponge)

Grade	Width (mm)	Temperature Range	Average Density Kg M <sup>3</sup>	Colour	Flame Resistance
<b>Medium</b>	1000	-40°C/+80°C	170	Black	Self-Extinguishing
<b>Firm</b>	1000	-40°C/+80°C	180	Black	Self-Extinguishing
<b>Thickness</b>	1.5mm, 2.5mm, 3.0mm, 4.0mm, 5.0mm, 6.0mm, 8.0mm, 10.0mm				

### Solid Neoprene Sheet

	Width (mm)	Temperature Range	Hardness Shore	Colour	Flame Resistance
	1200	-10°C/+100°C	40° or 60°	Black	None
<b>Thickness</b>	0.5mm, 0.8mm, 1.0mm, 1.5mm, 2.0mm, 2.5mm, 3.0mm				

### Closed Cell Expanded Chloropene Sponge (Neoprene Sponge)

Grade	Width (mm)	Temperature Range	Average Density Kg M <sup>3</sup>	Colour	Flame Resistance
<b>Medium</b>	1000	-40°C/+80°C	120	Black	Self-Extinguishing
<b>Firm</b>	1000	-40°C/+80°C	140	Black	Self-Extinguishing
<b>Thickness</b>	1.5mm, 2.5mm, 3.0mm, 4.0mm, 5.0mm, 6.0mm, 8.0mm, 10.0mm				

### Rogers Poron®

Grade	Width (mm)	Temperature Range	Density Kg M <sup>3</sup>	Colour	Flame Resistance
4701-30	1372	-40°C/+90°C	240-320	Black	UL94 HF1
4701-40	1372	-40°C/+90°C	240-480	Black	UL94 HF1
<b>Thickness</b>	0.8mm, 1.6mm, 2.4mm, 3.2mm, 4.8mm, 6.4mm				

### Tolerance

#### Gaskets

Finished gaskets +/-0.8mm up to 300mm  
 +/-1.2mm over 300mm  
 Hole centres +/-0.4mm

#### Material thickness

Up to 2.0mm thickness ± 0.5mm  
 2.0mm to 10.0mm thickness ± 0.8mm  
 Above 10mm thickness ± 1.5mm

\*special minimum order quantity may apply