



Product Overview

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.

Application

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.

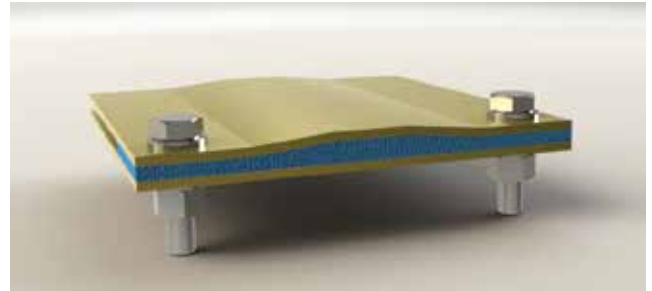
Availability

- Continuous lengths up to 5m 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.

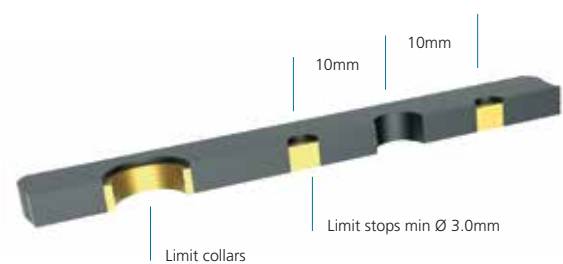
Design Considerations

- It is important that this material is not overcompressed. 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



Compression Limit Applications



Minimum Land



Horse Shoe Slot



Silicone Sponge SP16

	Width	Temp Range	Density	Colour	Flame Res
Closed Cell	1000mm	-60°C – 200°C	250 Kg/M ³	White	None

Thickness: 1.5mm, 2.5mm, 3mm, 4mm, 5mm, 6mm, 8mm, 9.5mm, 12.5mm

Silicone Sponge SP16VO

	Width	Temp Range	Density	Colour	Flame Res
Closed Cell	1000mm	-60°C – 200°C	200 Kg/M ³	Grey	UL94 V-0

Thickness: 1.5mm, 2.5mm, 3mm, 4mm, 5mm, 6mm

Rogers Bisco® Silicone Sponge BF100

	Width	Temp Range	Density	Colour	Flame Res
Open Cell	915mm	-55°C – 200°C	192 Kg/M ³	White	UL94 V-0

Thickness: 1.6mm, 2.4mm, 3.2mm, 4.8mm, 6.4mm

Rogers Bisco® Silicone Sponge HT800

	Width	Temp Range	Density	Colour	Flame Res
Closed Cell	915mm	-55°C – 200°C	192 Kg/M ³	Grey	UL94 V-0

Thickness: 1.6mm, 2.4mm, 3.2mm, 4.8mm, 6.4mm

Solid Silicone General Purpose

	Width	Temp Range	Hardness Shore	Colour	Flame Res
	1000mm	-40°C – 200°C	40 or 60	T/B/W	None

Thickness: 0.5mm, 0.8mm, 1mm, 1.5mm, 2mm, 2.5mm, 3mm

* 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	Temp Range	Density	Colour	Flame Res
	Medium	1000mm	-40°C – 80°C	170 Kg/M ³	Black	Self Extinguishing
	Firm	1000mm	-40°C – 80°C	180 Kg/M ³	Black	Self Extinguishing

Thickness: 1.5mm, 2.5mm, 3mm, 4mm, 5mm, 6mm, 8mm, 10mm

Solid Neoprene Sheet

	Width	Temp Range	Hardness Shore	Colour	Flame Res
	1200mm	-10°C – 100°C	40 or 60	Black	None

Thickness: 0.5mm, 0.8mm, 1mm, 1.5mm, 2mm, 2.5mm, 3mm

Closed Cell Expanded Chloropene Sponge (Neoprene Sponge)

	Grade	Width	Temp Range	Density	Colour	Flame Res
	Medium	1000mm	-40°C – 80°C	120 Kg/M ³	Black	Self Extinguishing
	Firm	1000mm	-40°C – 80°C	140 Kg/M ³	Black	Self Extinguishing

Thickness: 1.5mm, 2.5mm, 3mm, 4mm, 5mm, 6mm, 8mm, 10mm

Rogers Poron®

	Grade	Width	Temp Range	Density	Colour	Flame Res
	4701-30	1372mm	-40°C – 90°C	240-320 Kg/M ³	Black	UL94 HF1
	4701-40	1372mm	-40°C – 90°C	240-480 Kg/M ³	Black	UL94 HF1

Thickness: 0.8mm, 1.6mm, 2.4mm, 3.2mm, 4.8mm, 6.4mm

Tolerances

Gaskets

- Finished gaskets ± 0.8 mm up to 300mm,
 ± 1.2 mm over 300mm
- Hole centres ± 0.4 mm

Material thickness

- Up to 2mm thickness ± 0.5 mm
- 2mm to 10mm thickness ± 0.8 mm
- Above 10mm thickness ± 1.5 mm

Please note

Special minimum order quantity may apply

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.

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