

expansil™

Silicone Sponge Extrusions

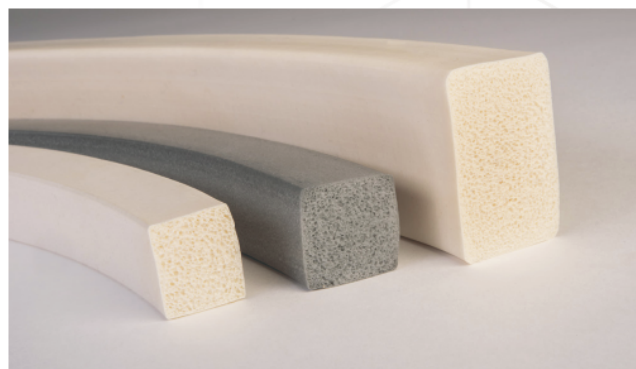
FR200

Silicone
Engineering Ltd

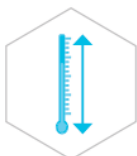
The expansil™FR range is a flame retardant, closed cell silicone sponge, ideal for extrusions.

Formulated for use in extreme temperature applications where additional flame resistance is required.

expansil™FR range is commonly used for joined gaskets, gap fillers and flexible sealing solutions.



BENEFITS



Temperature range

-60°C to 230°C
(-76°F to 446°F)



Environmental resistance

Ozone, UV and weather resistant



Flame retardant

UL94V1
FAR 25/JAR 25



Long life service

vs
other elastomers

AVAILABILITY

Tubes, Cords, Profiles, Strips & Sections

Pressure Sensitive Adhesive (PSA)

Joined Rings & Gaskets

Standard Colours: Black, White, Grey and Natural

ACCREDITATIONS

UL94V1

UL94V1 Flammability Test
(Not Listed)

FMVSS 302

Federal Motor Vehicle
Safety Standard

**FAR 25
(Vertical)**

Flame Test for Aerospace
Applications

Silicone
Engineering Ltd

The logo for expansil, featuring the word "expansil" in a lowercase, sans-serif font. The "i" in "sil" has a small trademark symbol (TM) above it.

Silicone Sponge Extrusions

FR200

The logo for Silicone Engineering Ltd, featuring the word "Silicone" in a stylized, cursive font, with "Engineering Ltd" in a smaller, sans-serif font below it.

MECHANICAL PROPERTIES

Property	Units	Typical Value	Test Method
Density (*Measured on 25mm cord sample)	kg/m ³ (lb/ft ³)	200 (12.2)	ISO 845
Hardness	Shore OO (Sh A)	41 (6.4)	ASTM D2240
Compression Force Deflection 40%	kPa (psi)	53 (7.7)	ISO 3386
Tensile Strength	MPa (psi)	0.43 (62.4)	ISO 1798
Elongation to Failure	%	208	ISO 1798
Compression Set 50%, 24hrs recovery, 22hrs @ 70°C	%	2	ISO 1856
Compression Set 50%, 24hrs recovery, 22hrs @ 100°C	%	5	ASTM D1056
Water Absorption	%	< 5	ASTM D1056

CAPABILITIES

Thickness mm (inches)	Width mm (inches)	Length m (ft)
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GENERAL CHARACTERISTICS

Test	Typical Value	Standard
Brittle Point	-80°C (112°F)	ASTM D746
Limiting Oxygen Index	24%	BS 2782 Part 1
Thermal Conductivity	6.4x10 ⁻² W.m ⁻¹ .K ⁻¹	BS 874 Part 2
Radiation Resistance	>10 ⁵ Grays (10 ⁷ Rads) typical	

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