

expanSil™

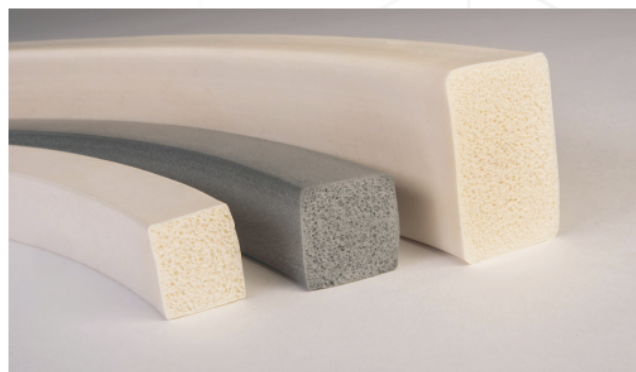
Silicone Sponge Extrusions

US400

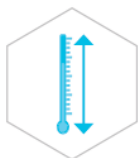
Silicone
Engineering Ltd

expanSil™US400 is a medium density, closed cell silicone sponge, available in extruded parts.

Approved to Aerospace Material Specification 3196 (AMS 3196), expanSil™US400 is commonly used where low compression set is required in Aerospace Defence and other industrial sectors. Ideal for high temperature seals, profiles and joined rings.



BENEFITS



Temperature range

-60°C to 230°C
(-76°F to 446°F)



Environmental resistance

Ozone, UV and weather resistant



Flame retardant

UL94HB
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: Red/Orange, White, Grey

ACCREDITATIONS

UL94HB

UL94 Horizontal Burn
Flammability Test
(Not Listed)

FMVSS 302

Federal Motor Vehicle
Safety Standard

**FAR 25
(Horizontal)**

Flame Test for Aerospace
Applications

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

Silicone Sponge Extrusions

US400

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)	400 (25)	ASTM D1056
Compression Force Deflection (CFD) 25%	KPa (psi)	124 (18)	ASTM D1056
Tensile Strength	MPa (psi)	0.74 (108)	ASTM D412
Compression Set 50%, 22hrs @ 100°C, 24hrs recovery	%	5.7	ASTM D1056
Elongation to Failure	%	120	ASTM D412
Water Absorption	%	< 3	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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