

PREMSIL

PREMIUM SILICONE

TABLE OF CONTENTS

03 About Us

06 Why Silicone?

07 Industries

08 Materials

09 Extrusions

10 Sheets

12 Development

13 Contact details



ABOUT US

A Family Company

Premium Silicone Sponge Ltd. (PREMSIL) was founded in 2010 by Alan Willis and Anne Willis. Drawing on extensive industry experience, the business was established to deliver consistently high-quality silicone sponge solutions, supported by dependable service and technical expertise. The company remains proudly family-owned, with sons Gary and Darren playing key roles within the organisation.

Today, PREMSIL operates with a skilled team of 15 employees, manufacturing a comprehensive range of silicone sponge products to meet demanding industrial requirements. We supply hundreds of customers across the UK, Europe, and global markets, supporting both standard and bespoke applications. As a family-run business, we place strong emphasis on trust, collaboration, and long-term partnerships, working closely with our customers to provide reliable, high-performance solutions that add lasting value.

500+

CUSTOMERS GLOBALLY

Big enough to deliver, small enough to care

1000s

BESPOKE PROJECTS

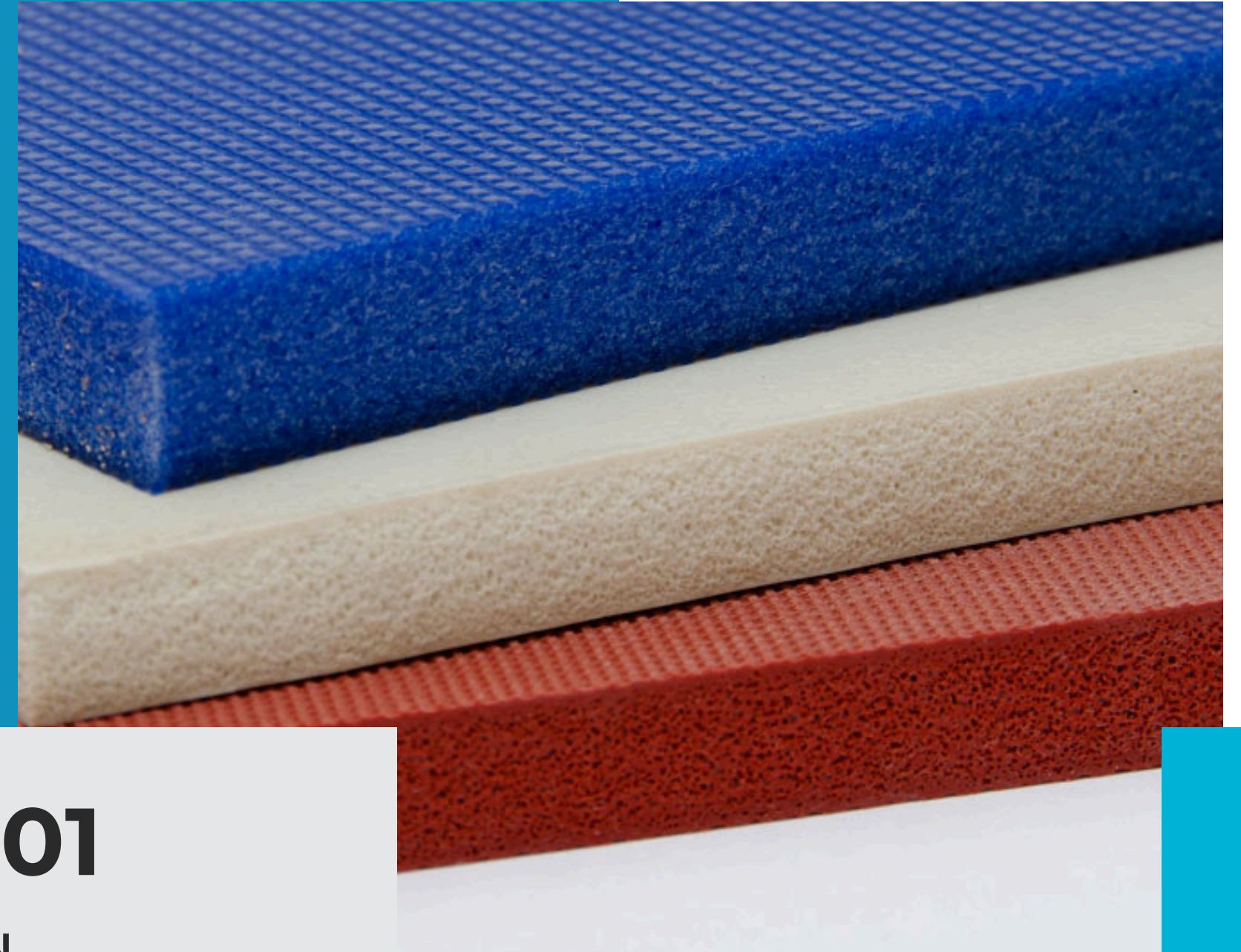
Custom solutions shaped by real-world challenges.



ABOUT US

Industry Specialists

Industry specialists in silicone sponge, boasting 50+ years experience. PREMSIL offers a trained team of experts dedicated to the production of silicone sponge. With full in-house control from raw materials through to finished product, our experienced team formulates and delivers consistently high-quality solutions. We manufacture to some of the tightest tolerances in the market in accordance with ISO 3302-2:1996, supported and maintained by our ISO 9001:2015 certified quality management system.



50+ YEARS

COMBINED EXPERIENCE

Experience built over decades, applied every day

ISO 9001

ACCREDITATION

Independent accreditation, dependable results

ABOUT US

OUR PROMISES



Premium Quality

Consistent quality, delivered by an experienced production team.
Virtually any sponge profile produced to tight tolerances.



Premium Efficiency

A dynamic, responsive service. Enquiries answered within 3 hours. Bespoke products in 15 working days, with an **express** 3-day build and dispatch option for parts needed urgently.



Premium Team

A highly skilled team with over 50 years of combined experience. Expert support on hand to guide every bespoke requirement.



Premium Partnership

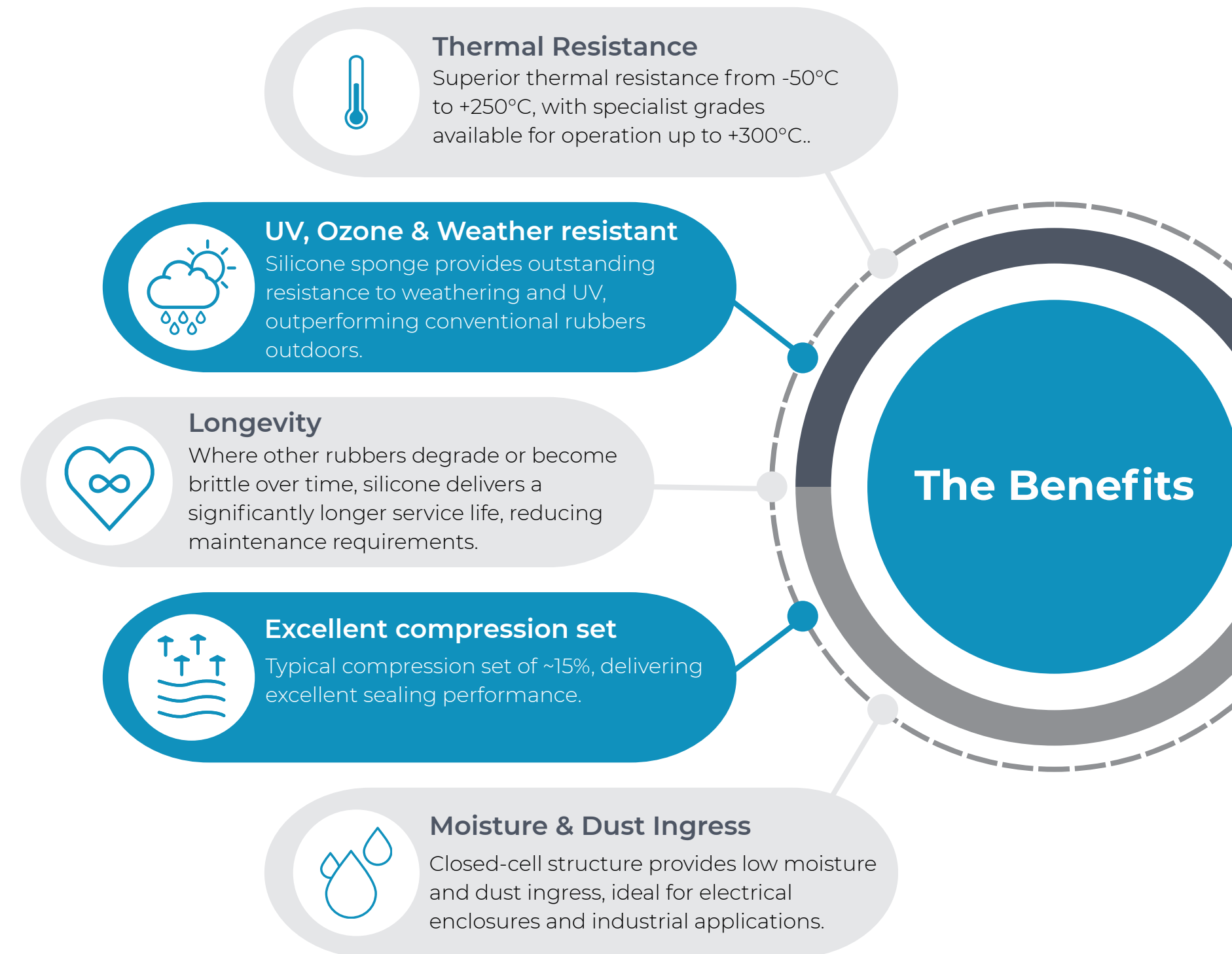
A friendly, collaborative approach built on strong relationships. Cost-effective solutions, low minimum orders and new dies with samples in just 2-3 days.

Why Choose Silicone?

Silicone vs Other Rubbers

Silicone is a man-made polymer and, while classified as a rubber, is more accurately described as a synthetic rubber or elastomer. It is specifically engineered to deliver a range of performance benefits over conventional rubbers and elastomers.

- Exceptional temperature resistance allows silicone to outperform and outlast most alternative elastomers.
- Outstanding resistance to UV, ozone, and weathering ensures silicone remains flexible and durable where other rubbers crack, degrade, or become brittle.
- As an excellent thermal insulator, silicone is widely used in applications where other rubber materials would fail.
- In sponge form, silicone offers a more cost-effective solution compared to solid silicone and many traditional rubber materials.



INDUSTRIES
WE SUPPORT



MATERIAL GUIDE

PREMSIL GRADES

General Purpose

Our general purpose grade is fit for a huge range of applications across all industries. Available in all formats/products and in any RAL colour. Produced in 4 standard densities (P10, P16, P24, P33), with custom formulations also available to suit the intended application.

P201F FDA *(photo below)*

PremSil P201F FDA is a premium, platinum-cured silicone sponge formulated for applications requiring full FDA compliance. With a 400 kg/m³ density, it provides a clean, high-quality solution ideally suited to food and beverage processing. Manufactured exclusively from pre-approved materials in accordance with FDA 21 CFR 177.2600 and tested to the same standards. FDA + metal detectable available upon request. Available in extruded profiles, cord and tubing.



FireSafe

PREMSIL FireSafe silicone sponge is designed for applications where fire performance is critical. Independently tested and certified to UL94V0 requirements, PREMSIL FireSafe provides a reliable, flame retardant solution. It is available in P16–P33 densities and across the full PREMSIOL product range.

RG250

PREMSIL RG250 is a closed cell silicone sponge formulated specifically for the rail & mass transport industries. RG250 is EN45545 tested, making it a fantastic choice of material for a range of applications, including interior and exterior seals and gaskets for rail applications. RG250 is available in 250kg/m³ density. Available in all product formats.

P20 FoodSafe

PremSil P20 FoodSafe is a custom formulated, medium-density silicone sponge with an approximate density of 300kg/m³. Tested and compliant with FDA 21 CFR 177.2600 extraction tests (Sections E–F), it provides a cost effective and versatile solution for a wide range of multipurpose applications. P20 FoodSafe is available in extruded profiles, cord, and tubing.

HT (High temperature +300 C)

Manufactured specifically for demanding applications where the product must withstand extreme temperatures, our HT grade is available in P10 - P33 and able to withstand temperatures of -50C to +280C continuous and +300C over shorter periods. Available across all products.

Technical datasheets available upon request



PRODUCTS

SILICONE SPONGE EXTRUSIONS

PREMSIL extruded silicone sponge profiles are ideally suited for demanding applications requiring effective sealing, vibration dampening, thermal insulation, flexibility, weather resistance, noise reduction, and performance in extreme temperatures.

The inherent flexibility of silicone sponge allows it to perform reliably in applications where solid profiles may fail, accommodating movement, uneven surfaces, and repeated compression. Its excellent compression set ensures long-term resilience, extended service life, and reduced maintenance requirements, delivering dependable performance over time.



Profiles & Sections

We manufacture a wide range of silicone sponge profiles in standard sizes from 2mm to 100mm. With over 50 years' combined experience, PREMSIL also delivers bespoke solutions and can produce virtually any shape or profile. Silicone sponge profiles offer a cost-effective alternative to solid profiles.



Cord

Our silicone sponge cord ranges from 1mm to 110mm and is ideal for sealing applications across a wide range of industries. It can be supplied in coils, spooled, cut to length, or fabricated into vulcanized rings. All extrusions meet strict tolerances, E3 as standard and up to E1 on request.



Tubes

The dynamic properties of silicone sponge make our extruded tubes ideal for a wide range of applications, including printing, flexography, industrial rollers, shock absorption, vibration reduction and thermal insulation. Standard sizes cover inside diameters from 2mm to 75mm and outside diameters from 4mm to >100mm.



Orings & Frames

Our in-house jointing facility allows us to manufacture precision fabricated O-rings and frames. Produced from a wide range of standard and bespoke profiles, all jointing and fabrication is completed under one roof, ensuring fast turnaround times and consistent quality from raw material to finished component.



PRODUCTS

SILICONE SPONGE EXTRUDED SHEETS

PREMSIL offers only the highest quality silicone sponge sheets. Our in-house silicone compounding facility gives us a competitive advantage, whilst maintaining full-quality control and material integrity at every stage of the process from start to finish. They offer excellent thermal stability to withstand the extremes of temperature from -50°C up to 250°C, resistance to UV and Ozone and excellent compression set of <15% typical. This makes the product particularly suited to demanding temperature applications that require a soft compressible material and is commonly used in environmental shields, electrical and automotive gaskets, are the ideal choice for gaskets and sealing applications across a wide variety of markets.

Sizes:

We produce individual sheets 1000mm x 600mm as standard in thicknesses from 1.6mm to 40mm. We also manufacture 1m x 1m and 1400mm x 600mm in thicknesses from 10mm to 25mm. Custom sizes are available on request.

Additional Options:

Self-adhesive backed, fabric finish 1 or 2 sides, cut to gaskets.

APPLICATIONS

An elastomer designed for unrivalled reliability in sealing, cushioning, vibration dampening and insulation. They offer excellent thermal stability to withstand the extremes of temperature from -50°C up to 250°C, resistance to UV and Ozone and excellent compression set of <15% typical. This makes the product particularly suited to demanding temperature applications that require a soft compressible material and is commonly used in environmental shields, electrical and automotive gaskets, are the ideal choice for gaskets and sealing applications across a wide variety of markets.



PRODUCTS

SILICONE SPONGE ROLLS



In addition to our in-house manufactured range, PREMSIL supplies high-quality closed-cell silicone sponge rolls in general purpose and flame retardant grades. The closed-cell structure provides excellent resistance to ozone, UV exposure, and weathering, while preventing moisture ingress and maintaining dimensional stability. With reliable performance across extreme temperature ranges and strong resistance to environmental degradation, this material is well suited to sealing, insulation, and cushioning applications requiring long-term durability in unstable or demanding operating conditions.

Thickness (mm)	Roll Size	Tolerance (mm)	Thickness (mm)	Roll Size	Tolerance (mm)
1.5	1m x 10m	+/-0.50mm	8.0	1m x 10m	+/-0.75mm
2.0	1m x 10m	+/-0.50mm	10	1m x 10m	+/-0.80mm
2.5	1m x 10m	+/-0.50mm	12	1m x 10m	+/-1.00mm
3.0	1m x 10m	+/-0.50mm	15	1m x 5m	+/-1.50mm
3.5	1m x 10m	+/-0.50mm			
4.0	1m x 10m	+/-0.50mm			
5.0	1m x 10m	+/-0.50mm			
6.0	1m x 10m	+/-0.75mm			
7.0	1m x 10m	+/-0.75mm			

Sizes:
See table.

Additional Options:
Self-adhesive backed,
cut to gaskets.



PRODUCT DEVELOPMENT **EXPERT SUPPORT FROM CONCEPT TO COMPLETION**

At PREMSIL, we understand that every application has unique technical requirements. Alongside a wide range of standard section sizes, we offer expert technical support to help customers select, design and develop the right silicone sponge solution. Whether optimising an existing material, solving a performance challenge or supporting a new project from concept to production, our experienced team works closely with customers to deliver reliable, high quality results.



Custom engineered silicone sponge solutions



Fast prototype and sample development



Technical support from concept to production

CONTACT DETAILS

HOW TO GET IN TOUCH

Premium Silicone Sponge Ltd
Units 1a & 2 Riverside Industrial Estate
Branch Road
Lower Darwen
BB3 0PR. UK

Email: info@premiumsilicone.co.uk
Tel: +44 (0) 1254660544
Web: www.premsil.net

Follow us on:





PREMSIL
PREMIUM SILICONE