

The
RUBBER
company

Manufacturers · Designers · Distributors

A DETAILED GUIDE TO

EXTRUDED RUBBER PRODUCTS

Elastomeric solutions for all industries



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Manufacturers · Designers · Distributors

WHY CHOOSE THE RUBBER COMPANY?

We are the **rubber sealing experts**

The Rubber Company has over 100 years of experience in meeting customers' rubber product needs in a vast range of industries. We manufacture, convert and distribute rubber polymer and associated products. Our competence includes design support, material selection and specification, prototyping and full production.

The combination of our comprehensive product range and in-depth 'know how' means we are well placed to provide effective solutions for engineers and buyers who are facing the challenge of keeping industry moving.

As a company, we are committed to understanding and responding to our customers' needs with speed, efficiency and competitive pricing. We take great pride in our ability to meet demanding delivery requirements on a global scale. Your satisfaction is our top priority, and we are here to ensure that you receive the service you deserve, no matter where you are located.

DESIGN & MANUFACTURING

The Rubber Company manufactures high-quality rubber extrusions from an extensive range of compounds, grades, and hardnesses. We work closely with companies across diverse sectors and industries, providing expert guidance at every stage of your project.

Our extrusions are available in multiple formats to suit your needs:

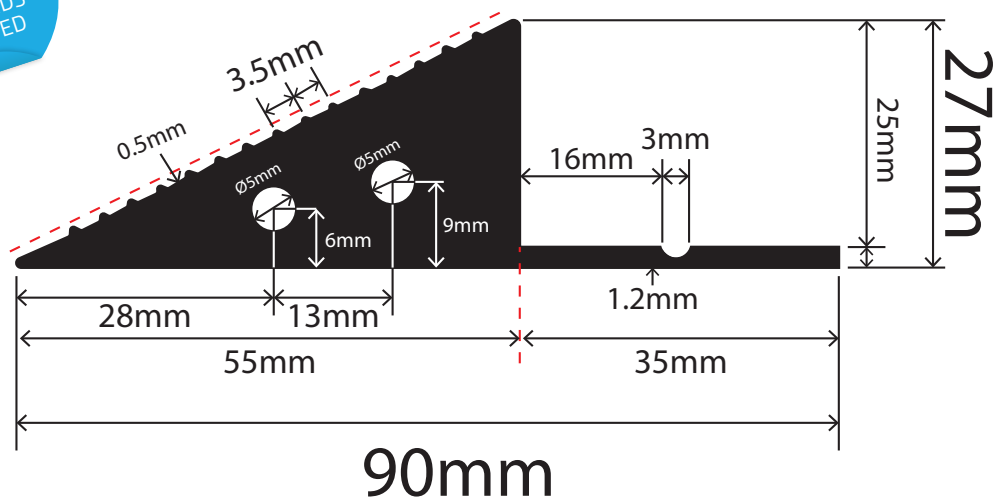
- Standard off-the-shelf items for immediate availability.
- Produced from existing tooling.
- Made-to-order with short lead times.
- Custom developments designed and developed for unique applications, offering versatile solutions across a wide range of industries.

BESPOKE DESIGN & MANUFACTURING

The Rubber Company provides a fully bespoke design and manufacturing service. Our dedicated team works closely with you at every stage - from profile design to material selection - to ensure your extrusion delivers optimal performance and an extended service life. We offer versatile solutions tailored to the requirements of a wide range of industries.



OVER
350
COMPOUNDS
DEVELOPED



MANUFACTURED TO YOUR EXACT SPECIFICATION

MATERIAL COMPOUND FLEXIBILITY

We offer over 350 different material compounds, plus varying grades, and finishes to meet diverse application needs. Where a solid rubber extrusion may be too rigid, we supply a comprehensive range of sponge rubber profiles for enhanced flexibility and compression performance.

We also produce composite extrusions, combining two or more materials to achieve specific functional characteristics. Our team works directly with material compounders to ensure each material is precisely matched to the application.

For specialist industries, such as medical, food, construction, and transportation, we can manufacture extrusions to a wide range of recognised material standards and grades. Options include Flame Retardant (EN 45545-2, UL 94), FDA-approved, and anti-static compounds, among others. All materials are selected to suit the working environment and ensure compliance with relevant health and safety regulations.



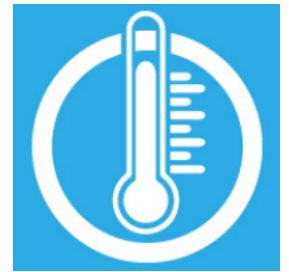
Flame Retardant
EN 45545-2



FDA Approved



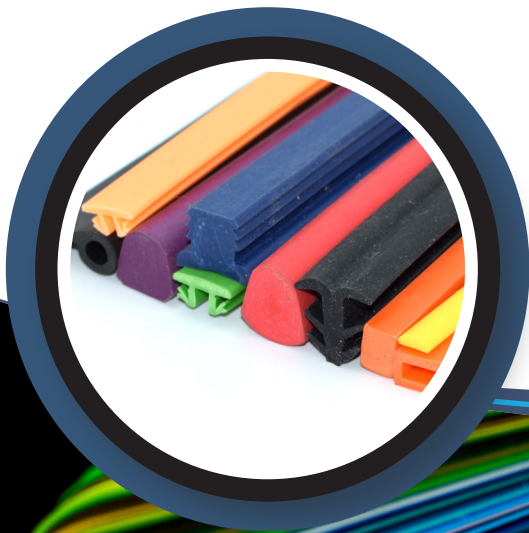
Metal Detectable



High-Temperature

RAL COLOUR MATCHING

Many of our rubber compounds are available in black as standard, but we are able to offer a RAL colour matching service to suit branding and aesthetics. This typically applies to Silicone or TPE rubber compounds during the manufacturing process and, in addition, we can also produce certain materials in non-marking grades.



**COLOUR MATCHED,
TO YOUR REQUIREMENTS**

FABRICATION & JOINING

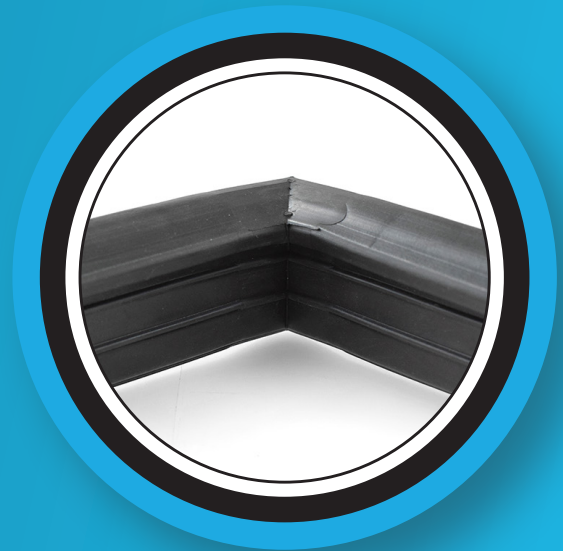
MIRROR WELDING

Rubber to rubber welding with no additional glues or materials.



MACHINE CUTTING

Extrusions cut to exact specifications from short to long lengths.



MITRE CUTTING

We are able to offer mitre cutting to your required angles.

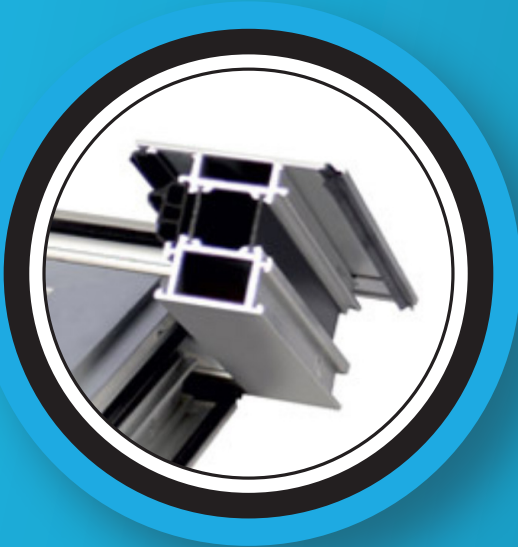


INKJET MARKING

Our inkjet marking machines are able to add any identifying details to your extrusions.

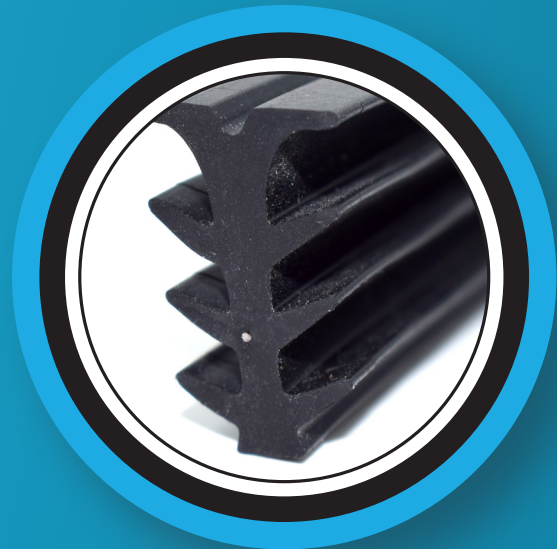
DRILLED & PUNCHED HOLES

Holes of different diameters can be created during production.



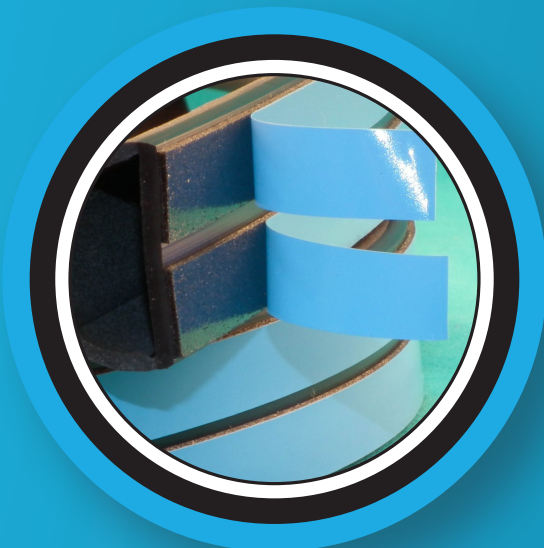
SLIDING ADDITIVE

To aid installation, a sliding agent can be sprayed on part of your profile.



ANTI-STRETCH WIRE

We can add anti-static stretch wire during extrusion to create an anisotropic elastomer.



SELF-ADHESIVE BACKING

For a quick and simple installation, we can add adhesives to the back of your extrusion.

UNDERSTANDING RUBBER HARDNESS (SHORE SCALE)

Selecting the correct material hardness is essential to the performance and longevity of any rubber extrusion. Rubber hardness is measured using the Shore Hardness Scale, which applies to elastomers such as EPDM, TPE, silicone, nitrile, neoprene, and natural rubber.

Hardness is measured using a durometer, a precision instrument that presses a standardised, needle-like indenter into the material surface with a defined force. The depth of the indentation is then converted into a numerical hardness value ranging from 0 to 100.




Different Shore scales are used depending on material softness:

- Shore OO – Very soft sponge and foam rubbers
- Shore A – Flexible to semi-rigid rubbers (most common for extrusions)
- Shore D – Hard rubbers and rigid plastics


Higher Shore values indicate harder materials with greater resistance to deformation, while lower values indicate softer, more flexible materials. Our hardness comparison chart clearly demonstrates these differences, helping you select the most suitable compound for your application.

SHORE HARDNESS COMPARISON CHART


Type	Hardness																					
	Extra Soft				Soft		Medium Soft		Medium Hard		Hard		Extra Hard									
Shore (OO)	0	10	20	30	40	50	60	70	80	90	100											
Shore (A)						0	10	20	30	40	50	60	70	80	90	100						
Shore (D)												0	10	20	30	40	50	60	70	80	90	100




Jelly Sweet




Gel Insole




Rubber Band




Pencil Eraser




Tyre Tread



Shoe Heel



Trolley Wheel



Hard Hat

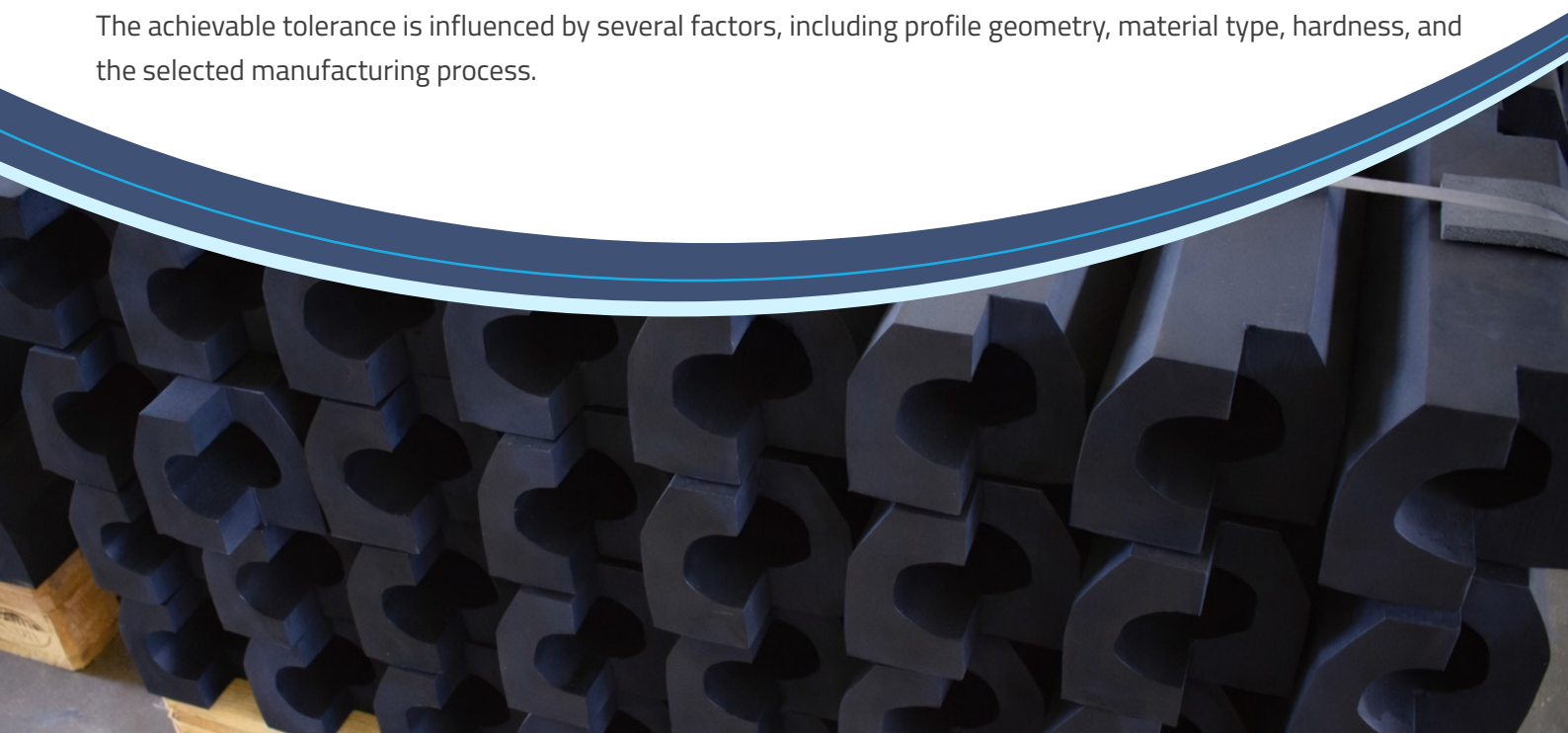
MATERIAL PROPERTIES GUIDE

	Natural	SBR	Butyl	Nitrile	Neoprene	EPDM	Silicone	Viton	Polyurethane	Hypalon	Epichlorhydrin	Fluorosilicone
Hardness (Shore A)	30° - 90°	40° - 90°	40° - 70°	40° - 95°	40° - 95°	40° - 90°	30° - 85°	55° - 95°	35° - 99°	40° - 95°	40° - 95°	40° - 80°
Tear Resistance	Very Good	Fair	Good	Fair	Good	Fair	Poor	Fair	Excellent	Excellent	Fair	Fair
Abrasion Resistance	Excellent	Very Good	Good	Excellent	Good	Good	Poor	Good	Outstanding	Excellent	Good	Good
Compression Set	Good	Good	Fair	Good	Fair	Good	Fair	Fair	Fair	Fair	Fair	Fair
Rebound – Cold	Excellent	Good	Poor	Good	Very Good	Very Good	Excellent	Fair	Good	Good	Poor	Excellent
Rebound – Hot	Excellent	Good	Very Good	Good	Very Good	Very Good	Excellent	Good	Good	Good	Poor	Good
Dielectric Strength	Excellent	Excellent	Excellent	Poor	Good	Excellent	Good	Good	Excellent	Excellent	Good	Good
Electrical Insulation	Very Good	Very Good	Very Good	Poor	Fair	Excellent	Excellent	Fair	Fair	Good	Fair	Excellent
Gas Permeability	Fairly Low	Fairly Low	Very Low	Low	Low	Fairly Low	Fairly Low	Very Low	Fairly Low	Fairly Low	Fairly Low	Fairly Low
Adhesion Properties	Good	Good	Good	Good	Good	Poor	Fair	Good	Fair	Fair	Fair	Fair
Water Absorption	Very Good	Very Good	Very Good	Good	Good	Very Good	Excellent	Very Good	Good	Very Good	Good	Good
Oxidation	Good	Fair	Excellent	Good	Very Good	Excellent	Excellent	Outstanding	Excellent	Excellent	Good	Excellent
Ozone Resistance	Poor	Poor	Excellent	Fair	Very Good	Outstanding	Excellent	Outstanding	Excellent	Outstanding	Very Good	Excellent
Sunlight Ageing	Poor	Poor	Very Good	Poor	Very Good	Outstanding	Excellent	Outstanding	Good	Outstanding	Good	Very Good
Heat Ageing	+85/-40	+90/-40	+120/-20	+115/-20	+95/-20	+145/-40	+305/-100	+205/-20	+80/-40	+120/-20	+120/-40	+200/-100
Heat Resistance	Good	Fair	Very Good	Good	Very Good	Excellent	Outstanding	Outstanding	Good	Excellent	Very Good	Good
Cold Resistance	Excellent	Very Good	Good	Fair	Good	Excellent	Outstanding	Good	Excellent	Good	Fair	Excellent

RUBBER TOLERANCE STANDARD (ISO 3302-1:2014)

Dimensional tolerances for rubber extrusions are defined by the ISO 3302-1:2014 standard, specifically the E-Class tolerances applicable to extruded products. These tolerance classes provide a practical balance between dimensional accuracy, manufacturability, and cost, and are widely applied to seals, gaskets, and rubber profiles.

The achievable tolerance is influenced by several factors, including profile geometry, material type, hardness, and the selected manufacturing process.



UNDERSTANDING E-CLASS TOLERANCES

- **Class E1 – High Precision** - Designed for critical applications requiring very tight dimensional control. This class typically involves higher tooling costs, increased inspection, and greater material scrap, making it the most expensive option.
- **Class E2 – Precision** - The most commonly specified tolerance class, offering an excellent balance between dimensional accuracy and cost. Suitable for the majority of industrial seals, gaskets, and extruded profiles.
- **Class E3 – Commercial** - Intended for non-critical applications where wider tolerances are acceptable and cost efficiency is the priority. Common uses include simple bumpers, spacers, and filler profiles.

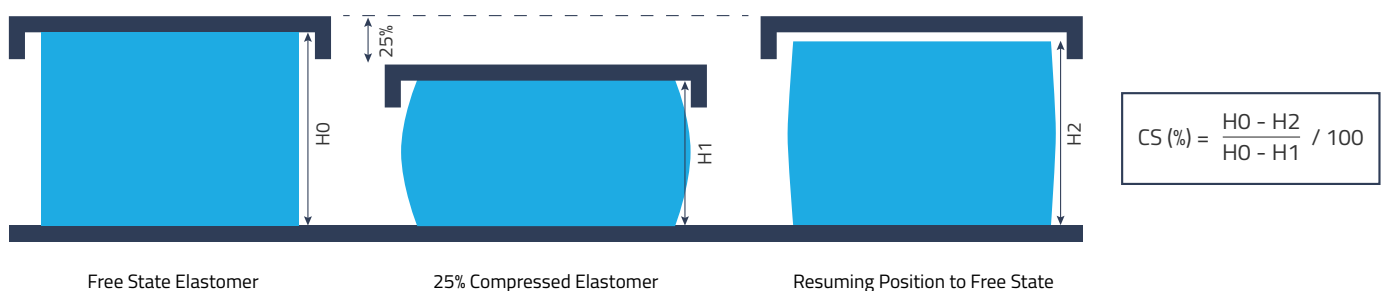
Nominal Dimension		Class E1 +/-	Class E2 +/-	Class E3 +/-
Above	Up to and including			
0.0mm	1.5mm	0.15mm	0.25mm	0.40mm
1.5mm	2.5mm	0.20mm	0.35mm	0.50mm
2.5mm	4.0mm	0.25mm	0.40mm	0.70mm
4.0mm	6.3mm	0.35mm	0.50mm	0.80mm
6.3mm	10.0mm	0.40mm	0.70mm	1.00mm
10.0mm	16.0mm	0.50mm	0.80mm	1.30mm
16.0mm	25.0mm	0.70mm	1.00mm	1.60mm
25.0mm	40.0mm	0.80mm	1.30mm	2.00mm
40.0mm	63.0mm	1.00mm	1.60mm	2.50mm
63.0mm	100.0mm	1.30mm	2.00mm	3.20mm
100.0mm	-	1.3%	2%	3.2%

COMPRESSION SET (CS)

Measuring the compression set of rubber determines its ability to return to its original thickness after prolonged compression at elevated temperatures. This property is critical when evaluating the long-term performance of seals, gaskets, and compression profiles.

Testing is typically carried out in accordance with recognised standards such as ASTM D395 (Method B) or ISO 815. A rubber specimen is compressed - commonly by 25% or 50% - using a compression jig, then exposed to a specified temperature for a defined period. After cooling, the permanent deformation is measured.

Lower compression set values indicate superior elastic recovery and sealing performance over time, making this a key consideration when selecting materials for demanding or high-temperature applications.

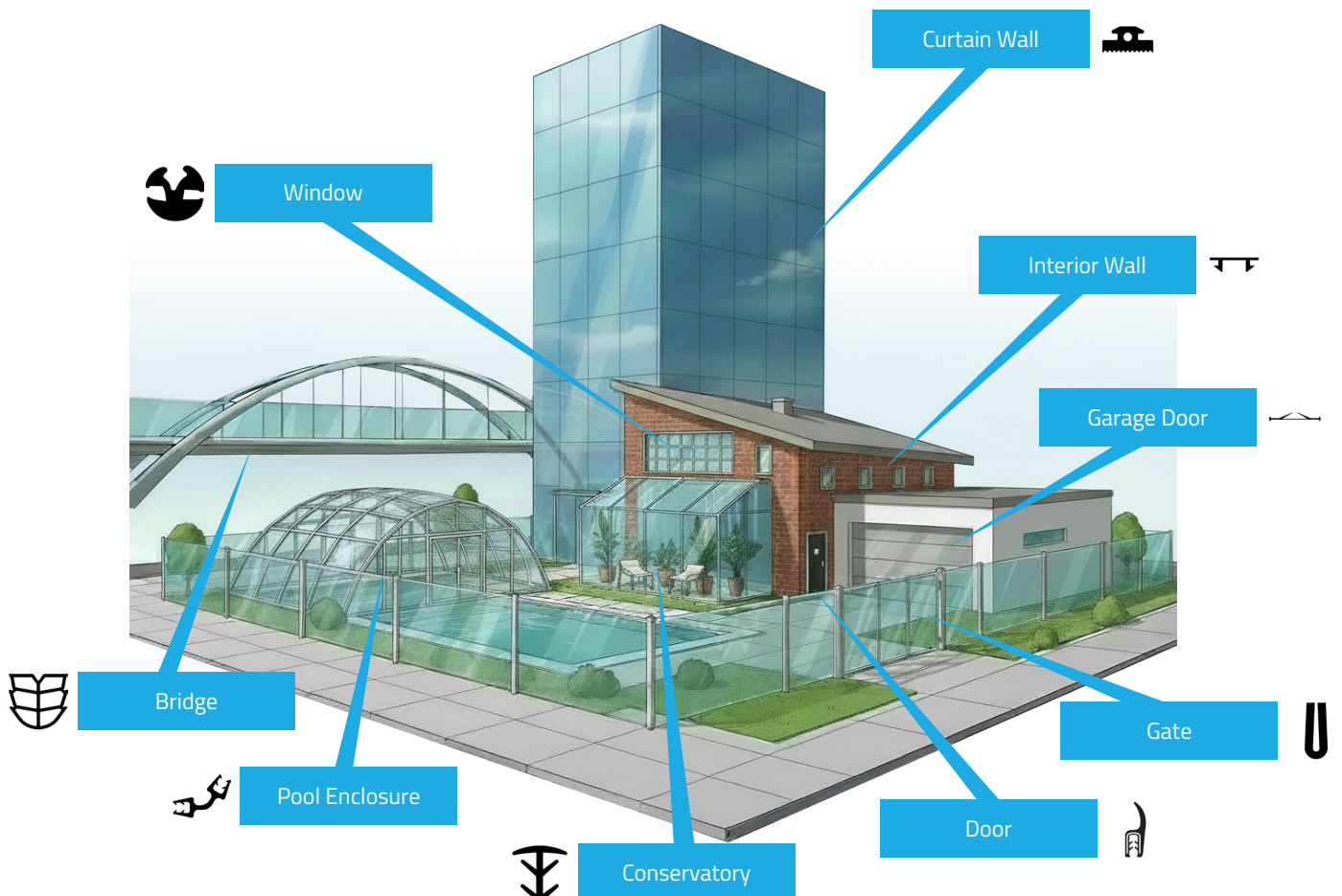


EXTRUSION APPLICATIONS

BUILDING & PUBLIC WORKS

Our profiles meet different building industry standards:

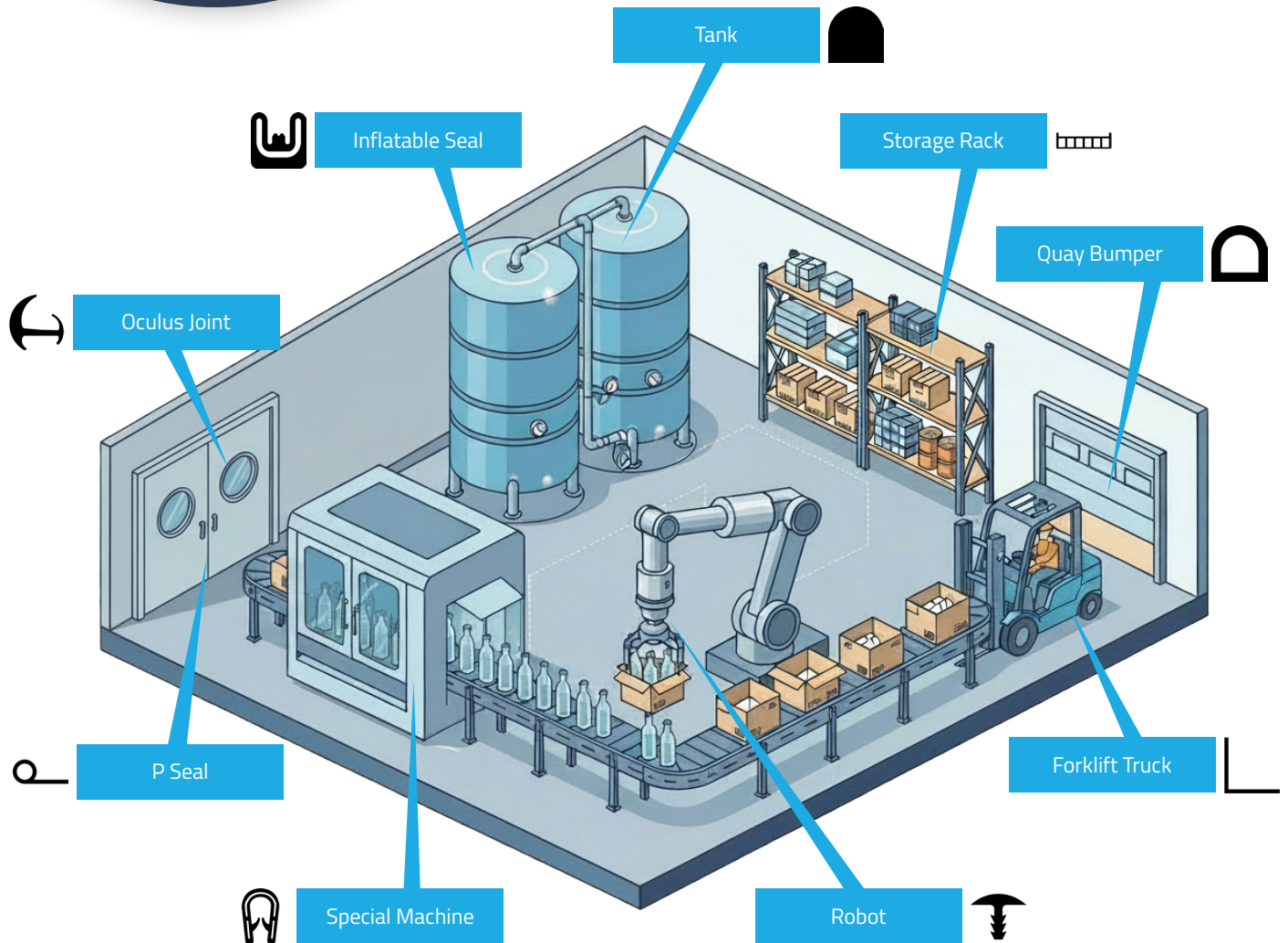
- Sealants compatible
- Compatible with self-cleaning glass
- PMMA & PC compatible
- Adhesive-backed available
- Fire retardant to EN 45545-2 and UL 94
- RAL colour matching available



INDUSTRY & FOOD

Our profiles meet different industry and food standards:

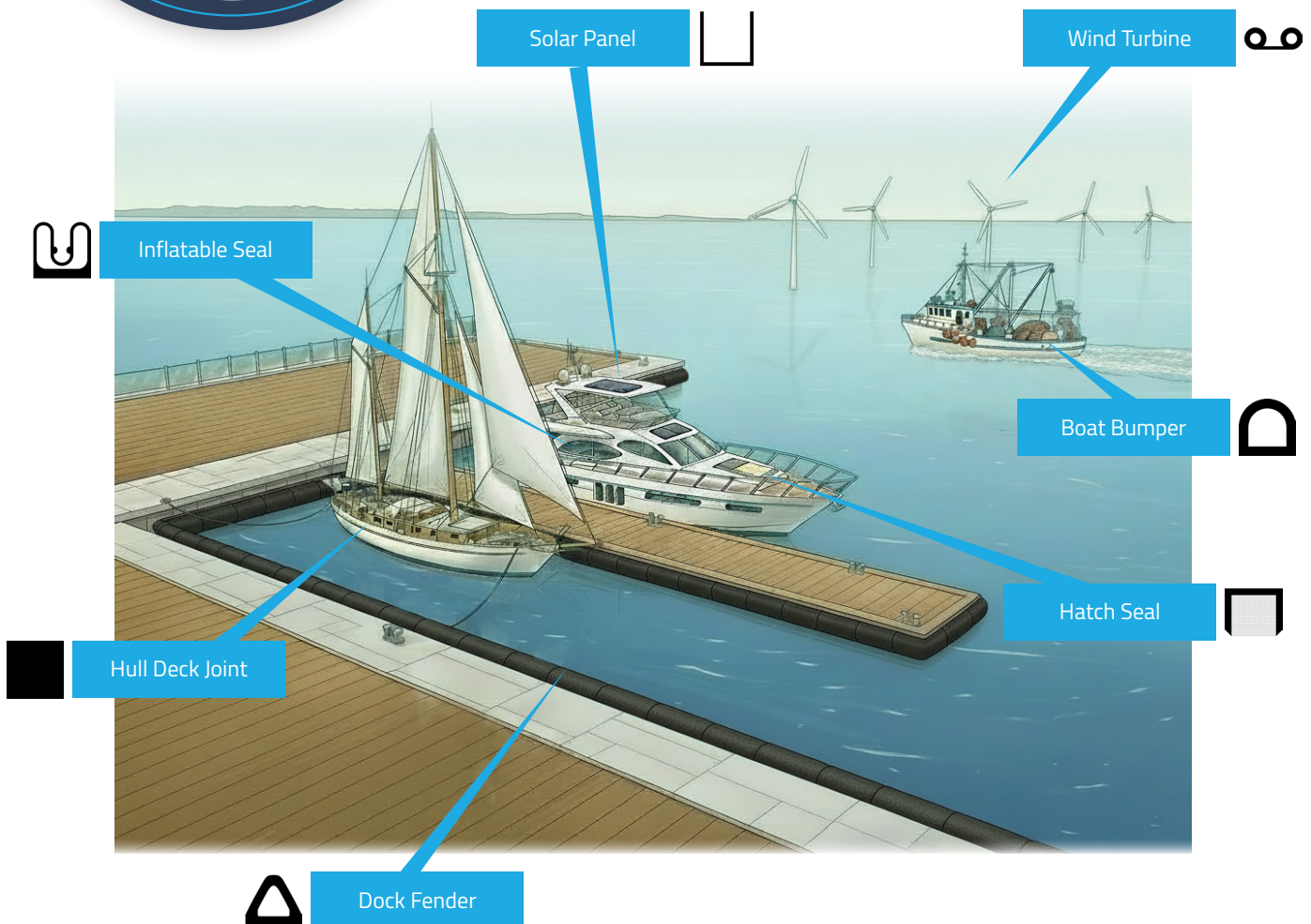
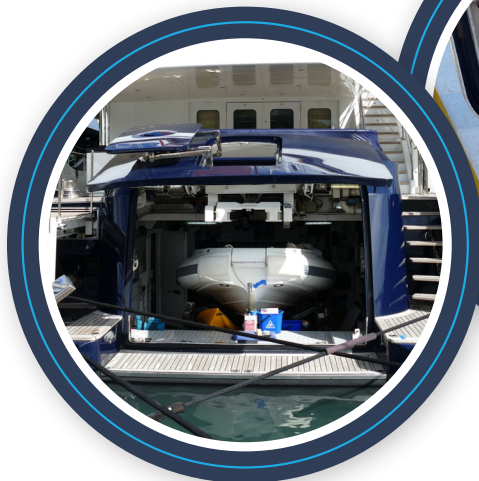
- FDA approved
- Fire retardant to EN 45545-2 and UL 94
- Adhesive-backed available
- RAL colour matching available



MARINE & NAVAL

Wide range of marine products manufactured to the highest standards to meet the demanding needs of the elements:

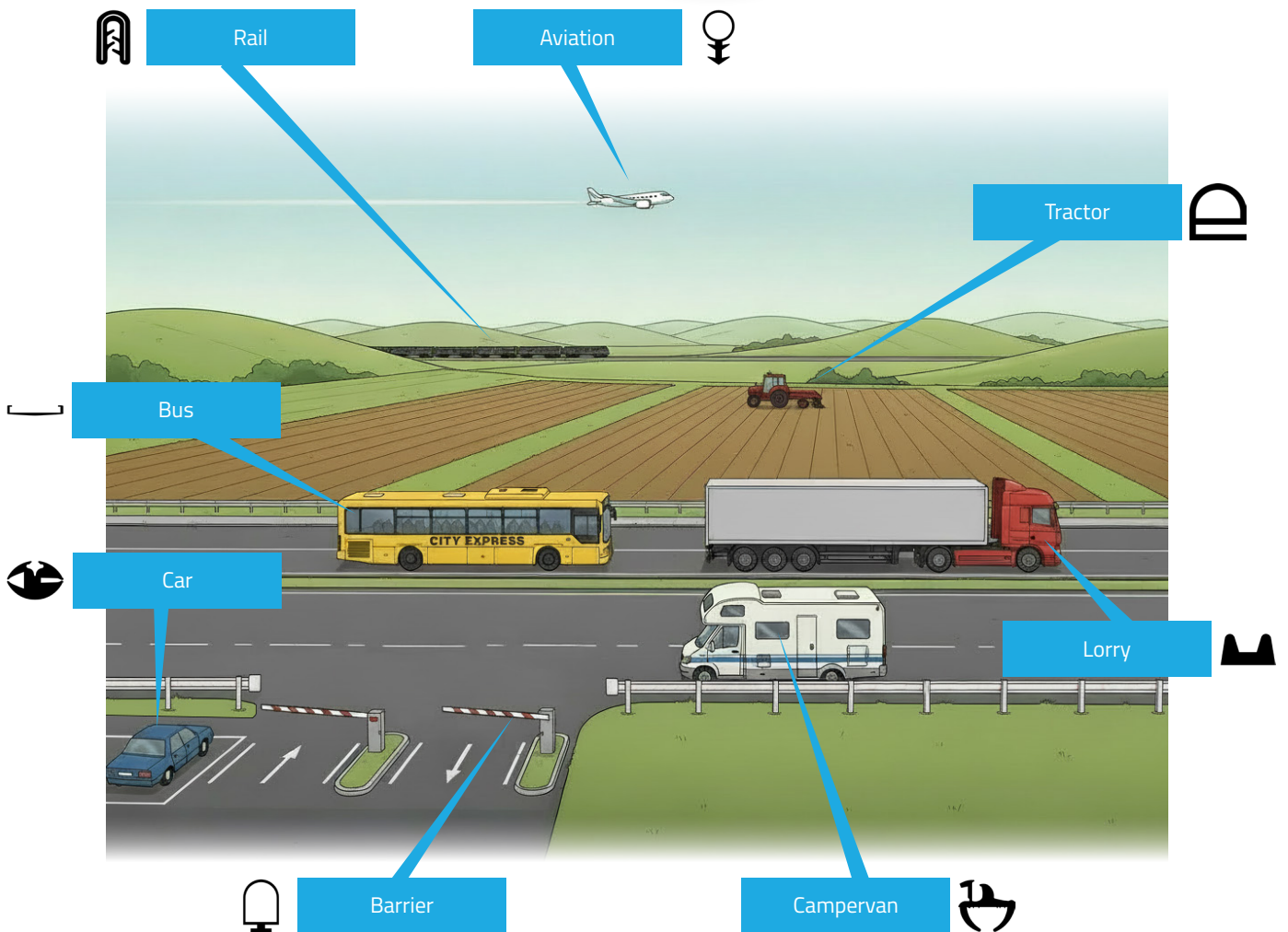
- Suitable for hatch seals, dock & boat fenders, sealing joints and expansion seals
- Excellent weathering, UV and ozone resistance
- RAL colour matching available



RAIL & MASS TRANSPORT

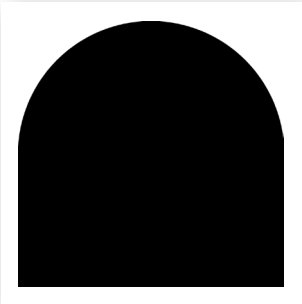
A range of profiles for the transportation sector meeting the high demands of the industry:

- Fire retardant to EN 45545-2 and UL 94
- Low smoke and toxicity
- Good weathering and ozone resistance
- Non-marking compounds
- RAL colour matching available

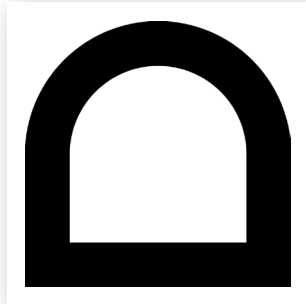


EXTRUSION PROFILE RANGE

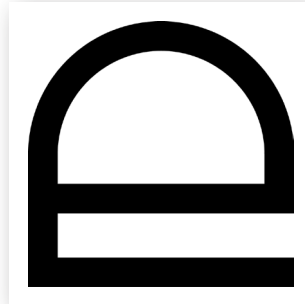
D SECTIONS



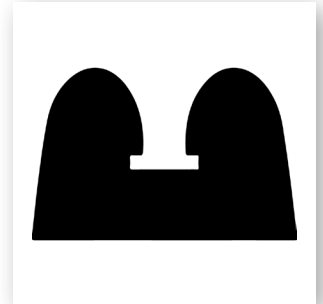
Solid D



Hollow D

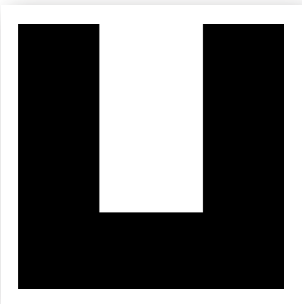


E Profile



Double D / B

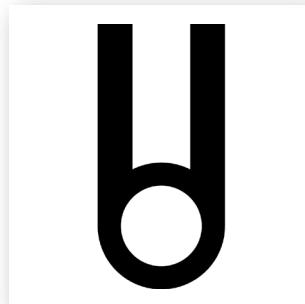
U CHANNELS



Square U Channel



Round U Channel

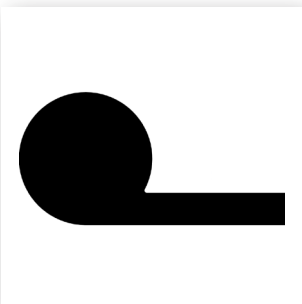


U Profile with Bulb

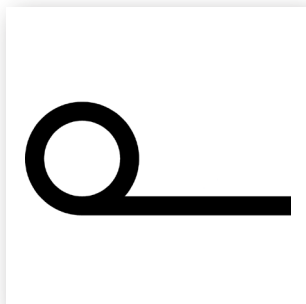


Self-Gripping U

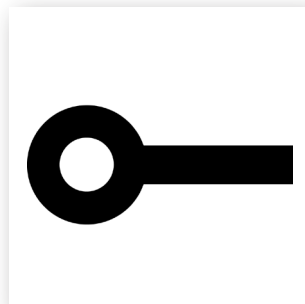
P & BEAD PROFILES



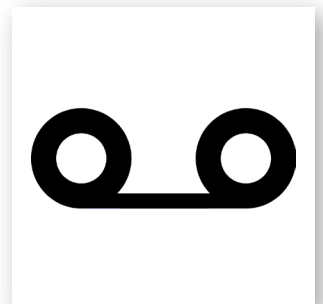
Solid P Profile



Hollow P Profile

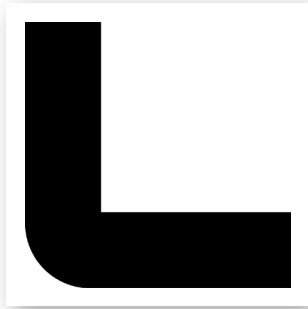


Tadpole Profile

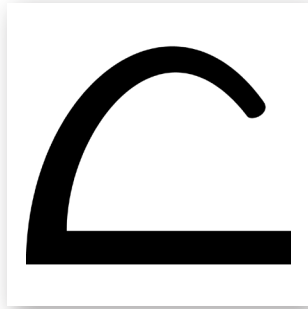


Double P Profile

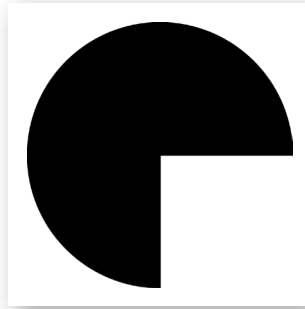
L & ANGLE PROFILES



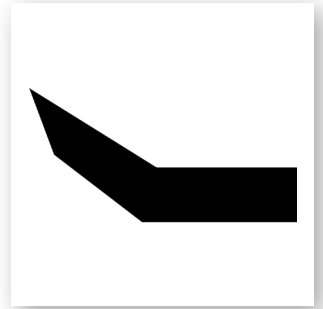
Straight L



Curved L

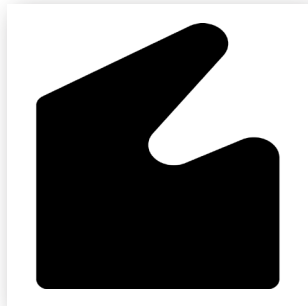


Round L

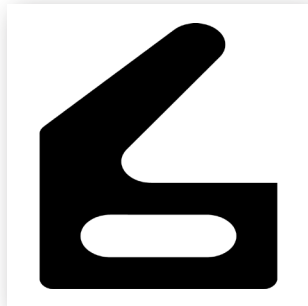


Angle Profile

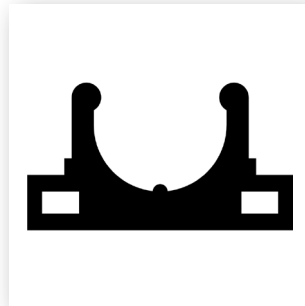
LIP SEALS



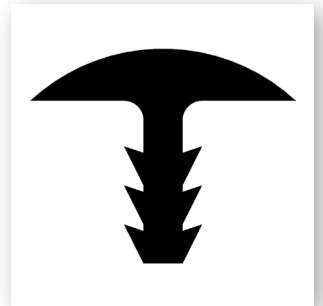
Solid Lip Seal



Hollow Lip Seal

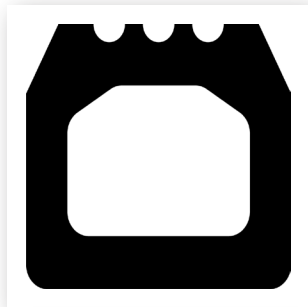


Channel Lip Seal

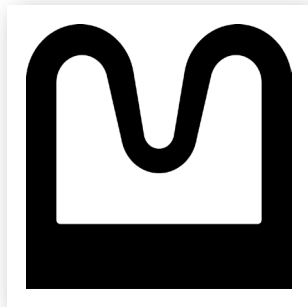


T Shape Lip Seal

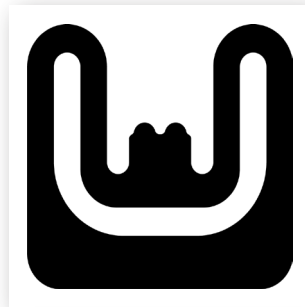
INFLATION SEALS



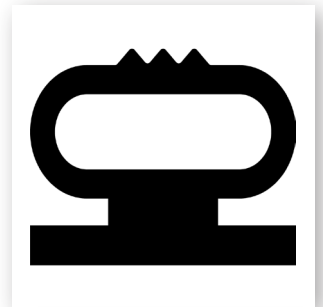
Castellated Seal



Channel Fit

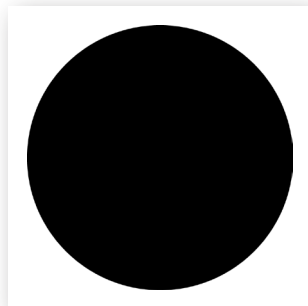


Frog Leg Seal

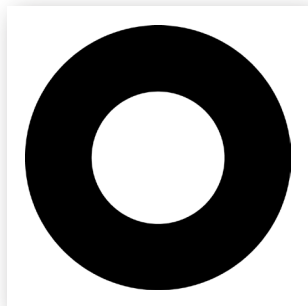


Stem Location Seal

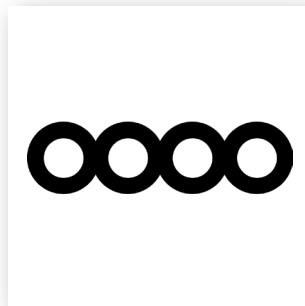
CORD & TUBING



Solid Cord



Hollow Cord

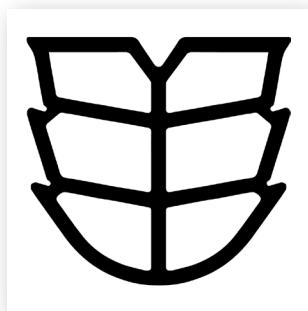


Multimen Tube

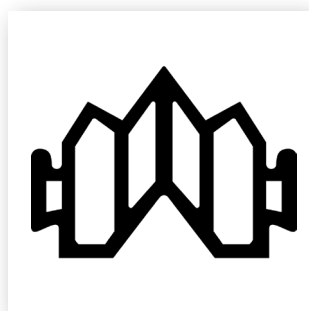
EXPANSION SEALS



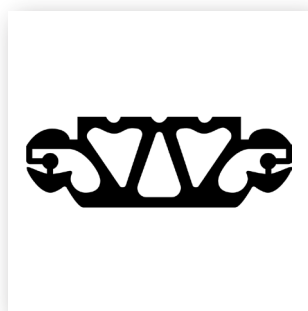
Solid Expansion



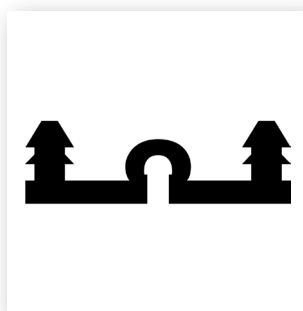
Hollow Expansion



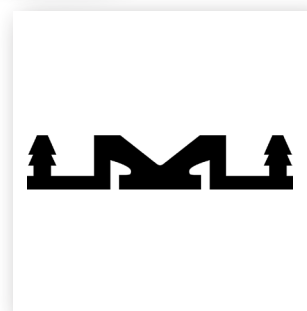
Expansion Joint



Expansion Joint

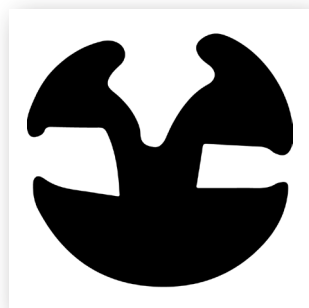


Expansion Joint

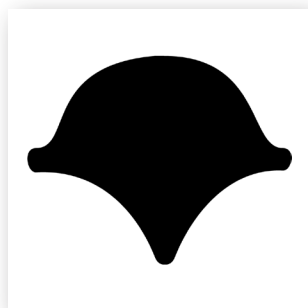


Expansion Joint

GLAZING SEALS



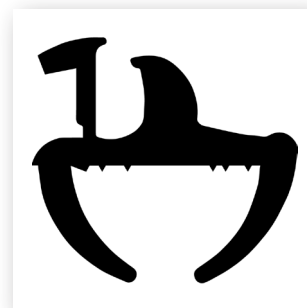
Claytonrite Seal



Glazing Filler Strip

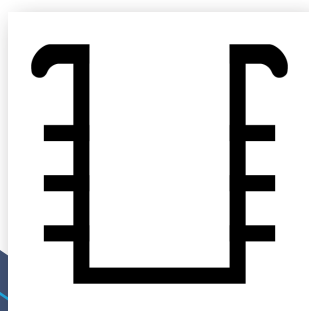


S Type Glazing

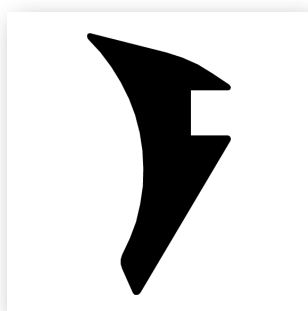


Caravan Window

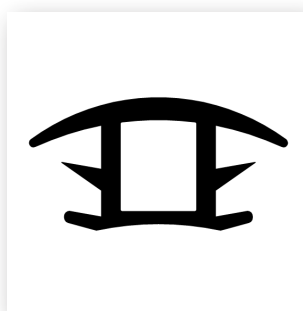
ALUMINIUM FAÇADE SEALS



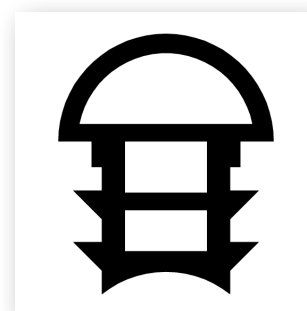
Glazing U Channel



Façade Seal

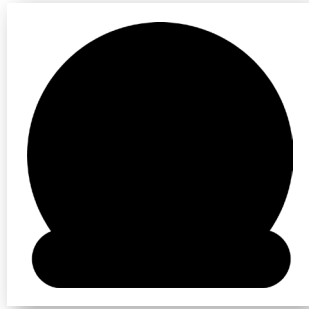


Glazing Expansion Seal

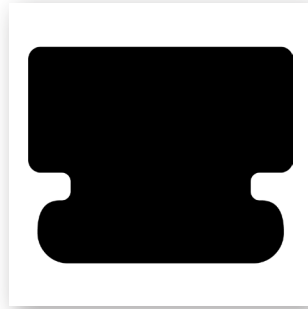


Bubble Seal

CAB TYRES



Round Cab Tyre



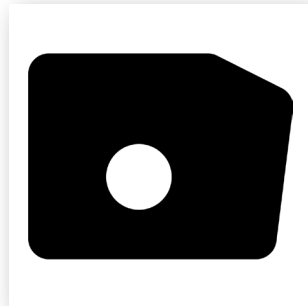
Square Cab Tyre



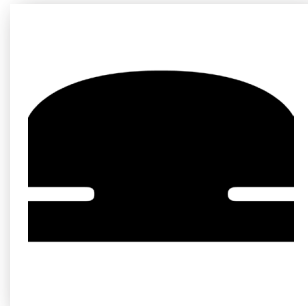
GRAB RUBBERS



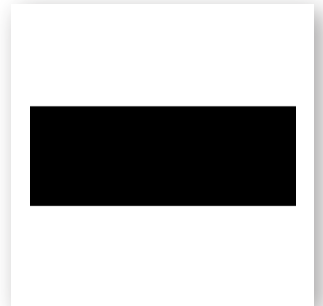
Lorry Crane



Lorry Crane

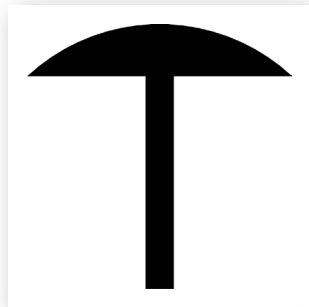


Slide Fixing

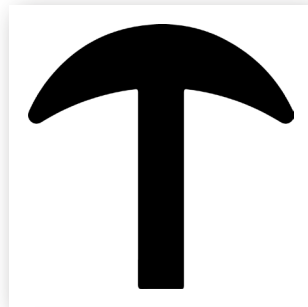


Square Fixing

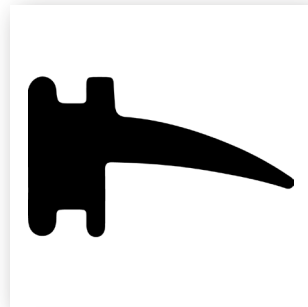
WEIGHBRIDGE & T TYPE



Weighbridge Seal

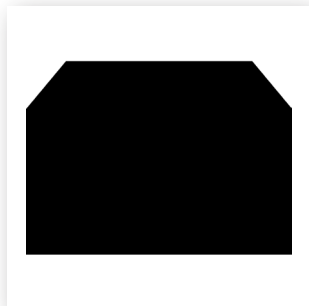


T Seal

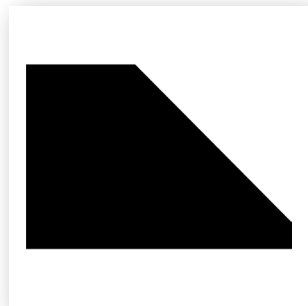


Wiper Seal

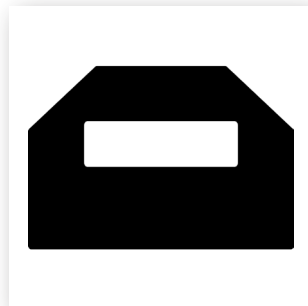
HATCH SEALS



Solid Hatch Seal



Angled Hatch Seal

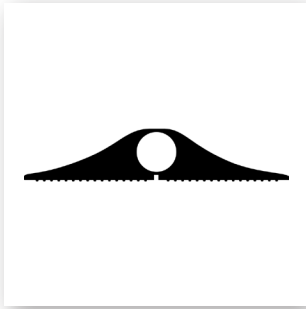


Hollow Hatch Seal

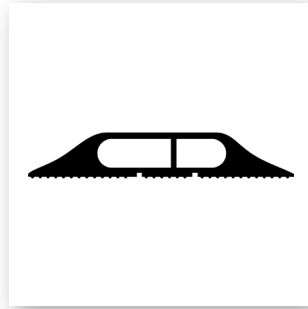


Hatch Cat Seal

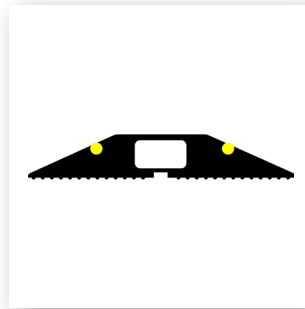
CABLE PROTECTORS



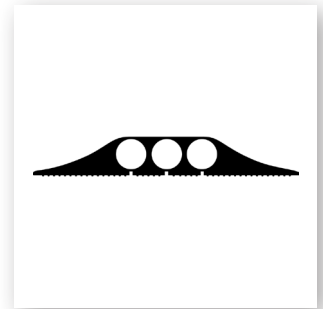
Easy Fit



Multi Fit

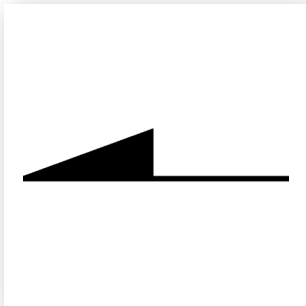


Hazard Warning

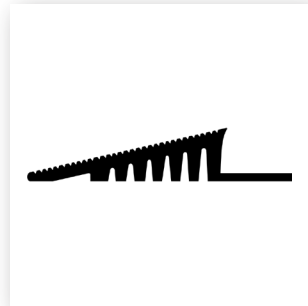


Heavy Duty

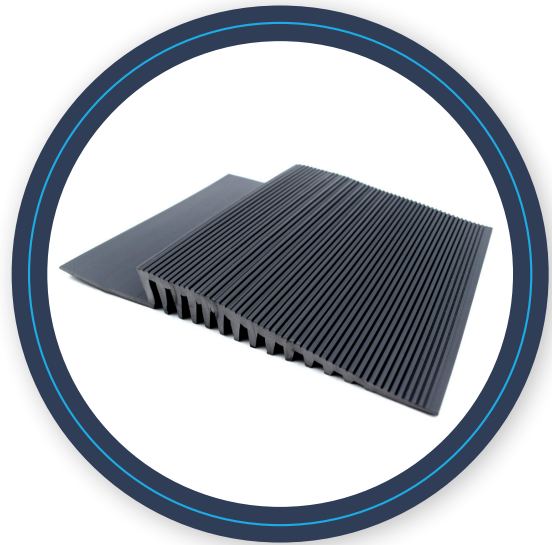
RAMP EDGES



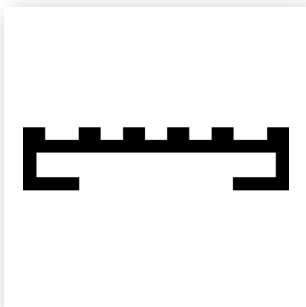
Smooth Edge



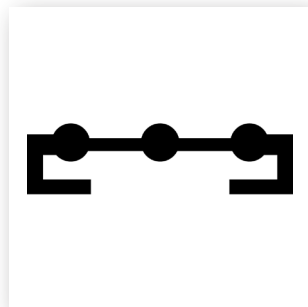
Ribbed Edge



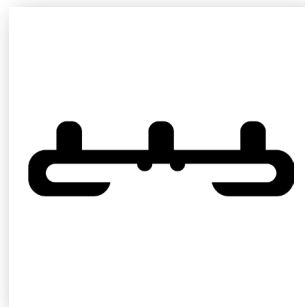
SNAP CLAMP SEALS



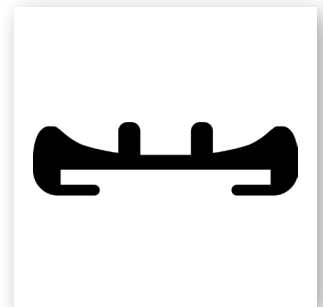
Square Clamp



Square Clamp

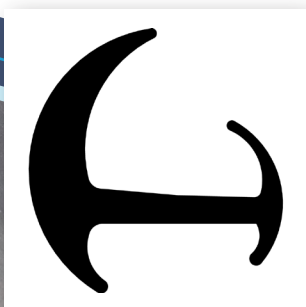


Round Clamp

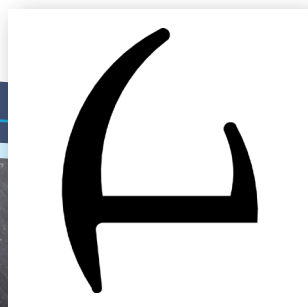


Round Clamp

CONTAINER DOOR SEALS

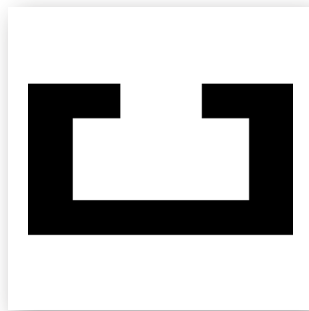


H Type

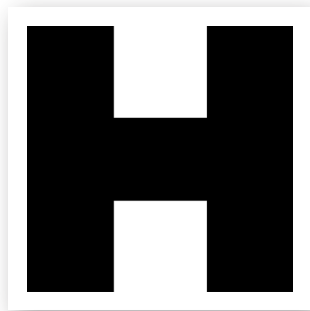


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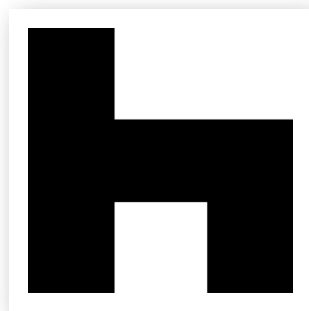
OTHER PROFILES



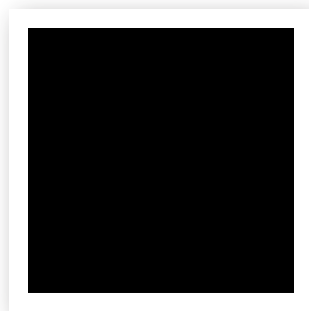
C Type



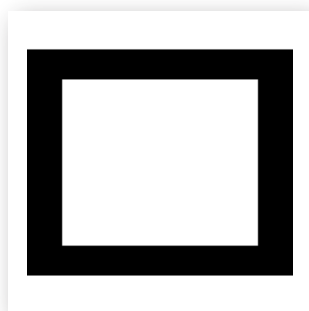
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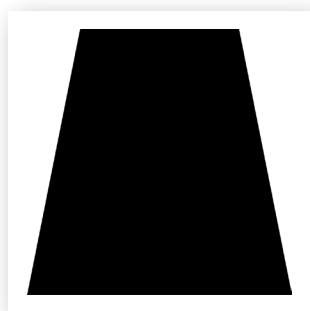
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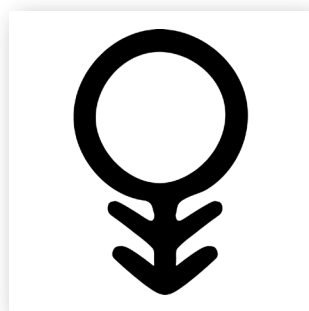
Rubber Strip



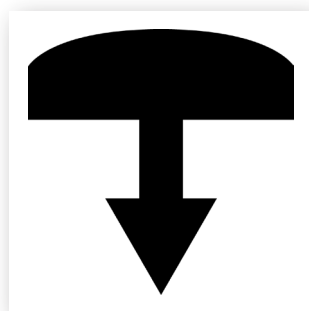
Box Profile



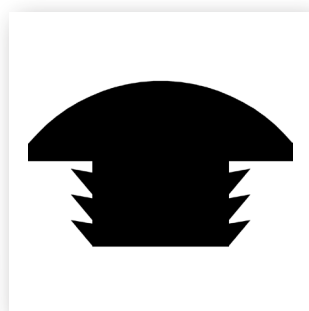
Trapesium Profile



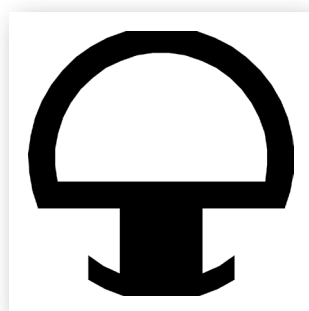
Draught Excluder



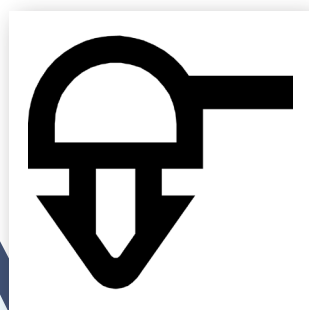
Capping Profile



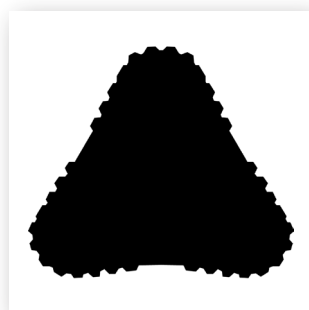
Mushroom



Bubble Seal



Arrow Head



Wheel Chock

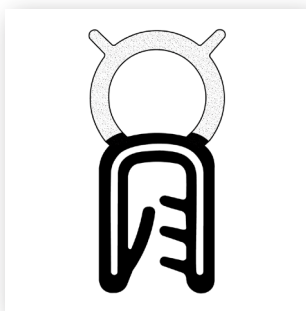


COMPOSITE EXTRUSIONS

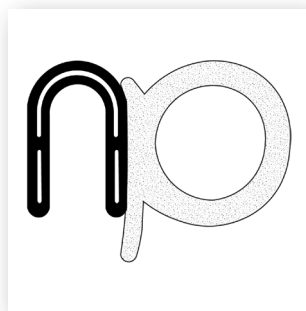
Our composite extrusions combine two or more materials within a single profile to deliver enhanced performance for demanding applications. A typical example is our Self-Grip Seal range, manufactured with a dense rubber channel reinforced with metal or rigid polymer to ensure secure retention on panels. This is integrated with a closed-cell sponge sealing section to provide reliable protection against liquid and gas ingress.

We offer a wide range of composite profiles in various dimensions, designed to provide high-performance sealing, ease of installation, and long-term durability in challenging environments.

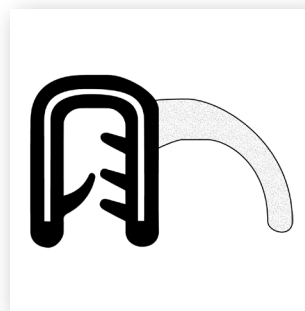
COMPOSITE DOOR & WINDOW SEALS



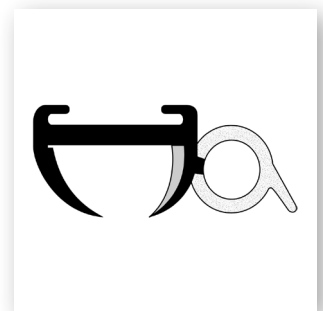
Top Seal Profile



Door Seal Profile

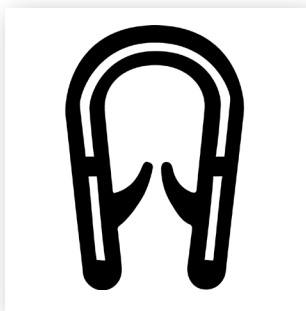


Door Seal Profile

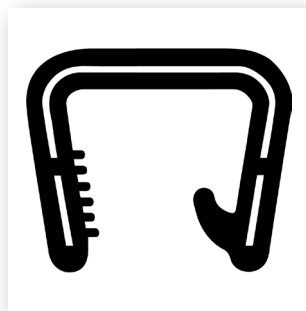


Caravan Profile

SELF-GRIP EDGE TRIM



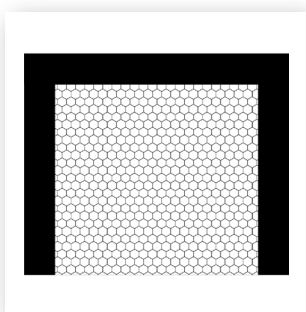
Self-Grip Profile



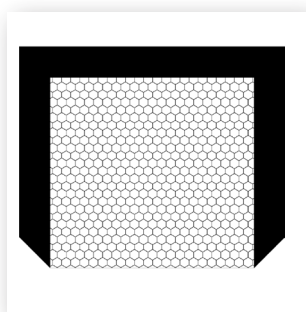
Wide Self-Grip Profile



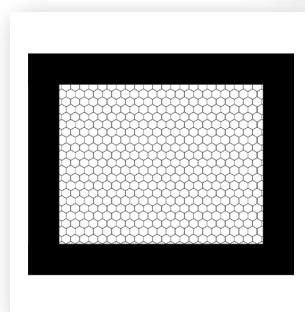
COMPOSITE HATCH SEALS



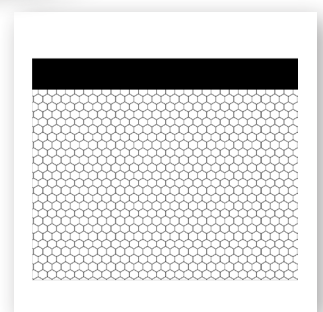
Square Seal



Chamfered Edge



Skin on All Sides



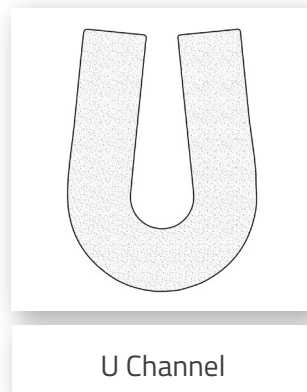
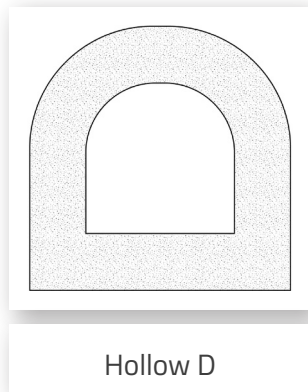
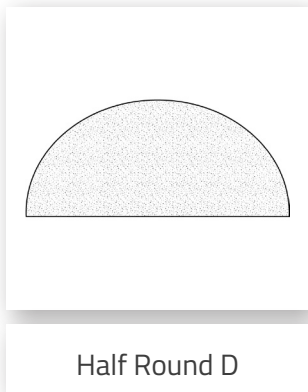
Skin on One Side

SPONGE RUBBER EXTRUSIONS

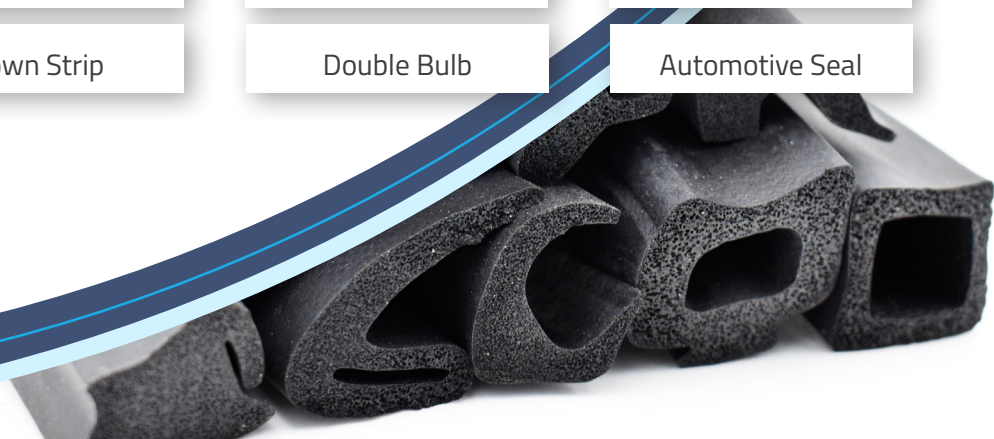
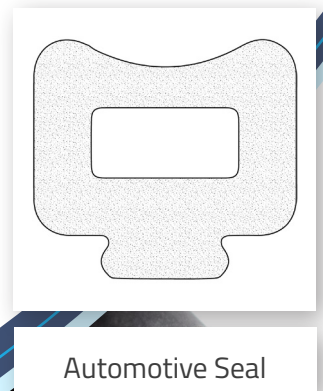
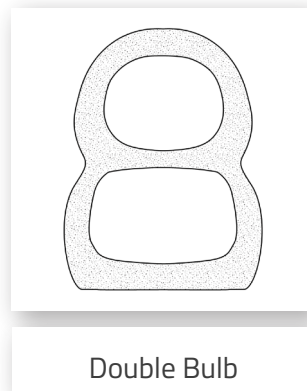
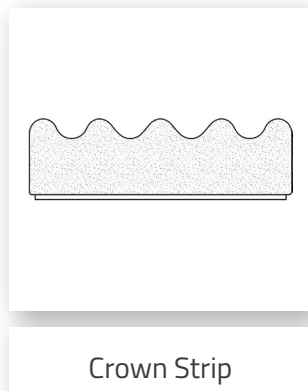
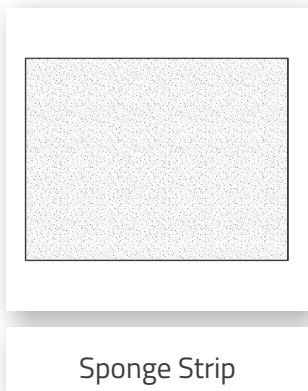
Sponge rubber extrusions can offer superior performance to solid rubber extrusions in many sealing applications. Manufactured using high-quality closed-cell sponge rubber, our sponge profiles are designed to achieve air-tight and water-tight seals with minimal compression. Their excellent compressibility and flexibility allow them to conform effectively to uneven or irregular surfaces, ensuring reliable sealing performance. In addition, sponge rubber extrusions are significantly softer than solid rubber, making them particularly suitable for applications involving personal protection or frequent skin contact.



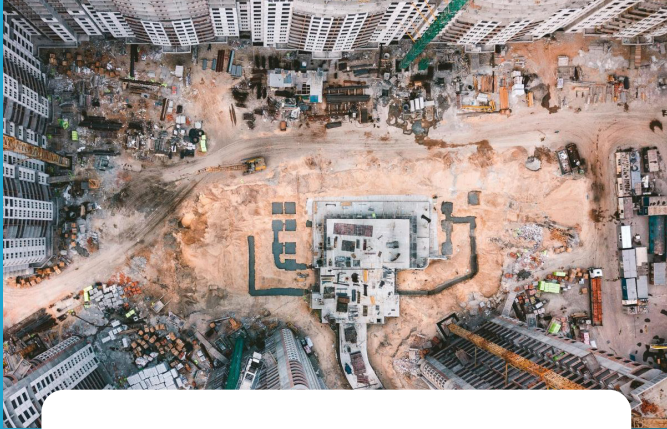
SPONGE RUBBER



COMPOSITE DOOR & WINDOW SEALS



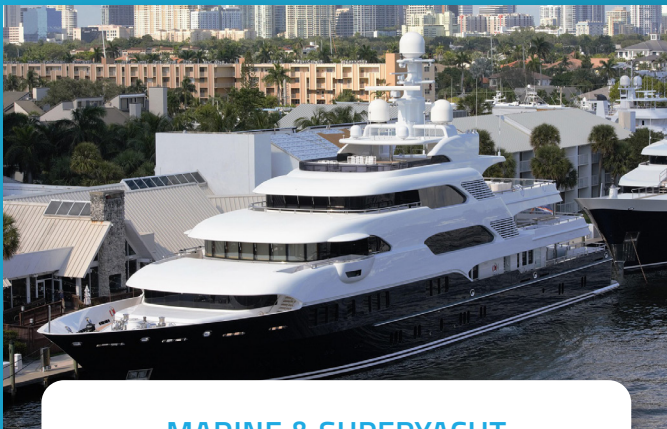
SUPPLYING INDUSTRIES WORLDWIDE



CONSTRUCTION



FOOD & BEVERAGE



MARINE & SUPERYACHT



MEDICAL & PHARMACEUTICAL



OFFSHORE



TRANSPORTATION & RAIL



Manufacturers · Designers · Distributors

THE RUBBER COMPANY

Supplying industries worldwide with a wide range of standard and custom rubber profiles.

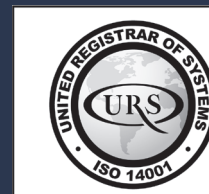
Contact us now with your requirements:

 sales@therubbercompany.com

 **+44(0) 1794 513 184**



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companies worldwide



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