

Metal reinforced silicone profiles

A metal reinforcement is a reliable way of fixing a profile to an end product without the need for tape, adhesive or a separate fixing plate or profile. There is also no need to use a mounting rail or groove when installing the profile. This in turn, allows the customer to simplify the design of the end product. Our metal reinforced silicone profiles withstand vibration, shock, and abrasion and above all, they are also fire resistant.

Custom made profiles

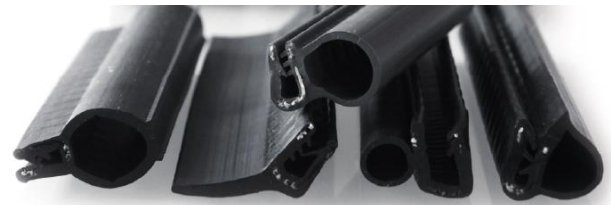
C B Frost specialises in high quality, custom made extruded metal reinforced silicone profiles, which conform to the EN45545-2, DIN5510-2, NF F16-101, BS6853, NFPA130 and GOST 12.1.044-89 fire safety standards demanded in the global rail sector. These profiles contain a stainless-steel wire, which is vulcanized inside the profile during the extrusion process. This wire provides rigidity to the profile and allows ease of installation and a guaranteed fit.

Suitable for a wide range of applications

These sealing solutions are used in a wide range of applications on rolling stock ranging from windows, door systems, ceilings, floors and walls to air conditioning systems, lighting systems and luggage compartment racks.

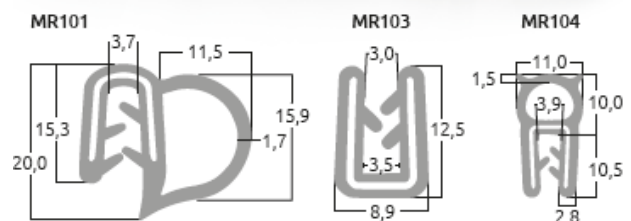
Standard meters or vulcanized frames

All profiles can be supplied in either standard meters, or as complete vulcanized frames or rings.



Standard profiles

In addition to custom made profiles, C B Frost are also able to offer several standard profiles. The tooling for these profiles is owned by C B Frost, which means that customers are free to utilise these in any of their products or projects.



Fire safety standards

EN45545-2	DIN5510-2	BS6853	NF F16-101	NFPA 130	GOST 12.1.044-89	UL94
●	●	●	●	●	●	●
<p>Flammability (Acc. EN45545-2)</p> <p>Classification R22/R23, HL 1-3</p> <p>Smoke density (Ds max) 36.9</p> <p>Oxygen Index (LOI) 79.9</p> <p>Toxicity (CIT NLP) 0.0</p>						

Typical properties

PROPERTY	UNIT	VALUE 60A	VALUE 70A	TEST METHOD
Specific Gravity	g/cm ³	1.14	1.18	ISO 1183-1 A
Hardness	Shore A	60	70	DIN 53 505
Tensile Strength	N/mm ²	11	11	DIN 53 504 S1
Elongation at break	%	490	520	DIN 53 504 S1
Tear strength	KN/m	21	26	ASTM D 624 B
Rebound resistance	%	59	51	DIN 53 512
Compression set (22h/175°C)	%	25	35	ISO 815-B
Ignition temperature approx.	850°C			
Operating temperature	-60°C / +280°C			

Tolerances

ISO 3302-1 Rubber tolerances for products
Part 1: Dimensional tolerances
Class E1 for silicone and E2 for profiles with metal carrier

Appearance

Tested colour is black. According to standard EN45545-2; chapter 4.2, f) test results are valid for any colour.