

EXTRUSION PROFILES

Adpol can produce extrusions for a wide variety of applications and will be pleased to quote for requirements to sketch/drawing details.

These illustrated details represent the more commonly used profiles and can be produced in different grades/hardnesses of silicone rubber. Ribbed sections can be incorporated if required.



Tubing

0.3mm - 75mm inner diameter
0.2mm - 25mm wall thickness



Cord

0.2mm - 50mm diameter



Keyhole Section

3mm - 40mm height
6mm - 20mm base



Autoclave Seal

6mm - 40mm height
6mm - 20mm base



Triangular Section

6.4mm - 50mm height
6.4mm - 50mm base

R/angle triangular section also available



Channel Tube

4mm - 20mm tube section
Various channel dimensions from 1mm - 6mm gap



Flap Seal

From 1mm - 6mm channel gap
Various flap dimensions



Omega Tube Section

4mm - 20mm tube section
Various 'T' section base dimensions



'P' Tape

3.5mm OD - 33mm OD (bulb)



'U' Channel

0.5mm - 30mm (slot)
Various heights & widths



'e' Section

10mm - 50mm base
6mm - 25mm height
Various channel gaps



'L' Section

1mm x 1mm to 10mm x 10mm section
Various height & base dimensions



'D' Section

6mm - 50mm base
6mm - 25mm height
Hollow 'D' sections also available



'H' Section

Various channel gaps
From 12mm overall height
Various widths



Double 'P'

3.5mm dia bulbs to 12mm dia bulbs
Various widths to 50mm wide



Special Requirements

Dies to design from customer drawing details



Strip Section

10mm wide x 0.37mm thick (smallest)
150mm x 10mm (largest)

Sheeting

318mm wide x 1.0mm thick
318mm wide x 1.5mm thick
318mm wide x 2.0mm thick
318mm wide x 3.0mm thick
318mm wide x 4.75mm thick

TUBING & CORD

EXTRUSIONS

MOULDINGS

SEALS & GASKETS

CUSTOM PARTS

adpol

custom silicone rubber solutions



TECHNICAL DETAILS

Chemically, Silicones are quite different from all other materials. It is this difference which gives them their unique combination of properties, properties which permit Silicones to perform in many applications where no other Elastomer can be used.

These properties include:

- High Temperature Stability
- Low Temperature Flexibility
- Resistance to Compression Set
- Physical Strength at Extreme Temperatures
- Electrical Properties

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COMBINING EXPERTISE WITH A
PERSONAL AND PROFESSIONAL SERVICE





Adpol has been established for over 30 years and have developed production techniques that help our customers meet the most demanding design criteria.

As well as offering General Purpose grades of material we also offer higher specification grades such as Extreme High Temperature to +300°C, and Extreme Low Temperature to -100°C.

One of our key strengths is the ability to extrude difficult profiles and hold tighter tolerances than Industry Standard.

Adpol prides itself on offering a personal and professional service offering samples for approval where appropriate before production commences.

INDUSTRIES

We have established long standing relationships with some of the most prestigious companies in the following Industries:

- Aircraft & Aerospace
- Electronics
- Food & Dairy
- Chemical
- Rail & Transport
- MOD
- Ship Building
- Catering
- Pharmaceutical
- Prestige Car Manufacturing

1. TUBING AND CORD

We manufacture Tubing and Cord in most sizes, wall thickness and grades. Tubing sizes available from a minimum of 0.3mm ID to a maximum of 125mm OD.

Cord sizes available from 0.2mm DIA to 50mm DIA.

2. EXTRUSIONS

We manufacture Extrusions to customers' designs. We are able to extrude difficult profiles and maintain tight tolerance levels. We would be pleased to quote for requirements to sketch/drawing details. Please also see the sample Extrusion Profiles on the back page.

3. MOULDINGS

Mouldings, made to our customers' Requirements, are available in various grades of Silicone Rubber, or alternatively, in other materials viz: Neoprene - Nitrile - Natural EPDM and in Fluorocarbon Elastomers. We have the capacity to provide small, medium and large call offs.

4. SEALS & GASKETS

Gaskets can be supplied either from stock 60° IRHD General Purpose Silicone Rubber or, if required, to higher specification grades of Elastomer in order to meet our customers' design criteria. Gaskets can be cut both from Silicone Sponge and Solid Sheet and can be bonded to substrates using RTV adhesives.

5. SPONGE GASKETS

We supply Sponge Gaskets in LOW/MEDIUM/HIGH density formulations with standard thicknesses of 1.5mm, 3.0mm, 4.8mm and 6.0mm all being readily available in MEDIUM density material. Gaskets can be cut to a Customer's own design and an adhesive backing is available.

6. CUSTOM PARTS

We have the flexibility and expertise to supply custom parts for all design requirements, including forming extruded profiles around metal picture frame inserts and bonded with RTV Silicone Adhesive to make a seamless rigid seal with flexible flanges.

ADPOL SILICONE RUBBER GRADES

ADPOL GRADE	TYPE / APPLICATION	HARDNESS Shore A	TENSILE Mpa N/mm ²	TEAR STRENGTH N/mm	ELONGATION %	COMP SET. %	BRITTLE POINT °C	MAX. WORKING TEMP. °C
AP101/55	Sleeving to BS2848 Type 5 C1.180T	55	9.1	25	550	41	-60	200
AP201/50	High Tear Strength & High Temperature	50	9.7	35	600	30	-60	250
AP201/70	High Tear Strength & High Temperature	70	8.3	35	500	30	-60	250
AP202/30	High Tear Strength*	30	10.4	28	1000	20	-60	200
AP202/40	High Tear Strength*	40	10.7	33	870	28	-60	200
AP202/50	High Tear Strength*	50	11.5	39	790	28	-60	200
AP202/60	High Tear Strength*	60	11.3	42	690	31	-60	200
AP202/70	High Tear Strength*	70	10.2	41	660	49	-60	200
AP301/25	Very Low Shore*	25	8.4	23	950	40	-60	200
AP301/30	Very Low Shore*	30	10.0	17	820	20	-60	200
AP301/40	General Purpose*	40	12.0	21	800	20	-60	200
AP301/50	General Purpose*	50	12.0	24	680	25	-60	200
AP301/60	General Purpose*	60	11.0	24	580	12	-60	200
AP301/70	General Purpose*	70	10.0	24	500	20	-60	200
AP301/80	General Purpose*	80	9.0	22	380	25	-60	200
AP301/90	General Purpose*	90	7.0	19	320	35	-60	200
AP401/60	Translucent High Tear Strength*	60	11.3	42	690	31	-60	200
AP402/60	General Purpose (Translucent)*	60	11.0	24	580	12	-60	200
AP501/100	100% Fluorosilicone - (for chemical resistance)	60	8.5	26	325	17	-60	225
AP701/2	Carbon Loaded Semi Conductive **	70	6.0	17	200	N/A	-40	200
AP701/3	Low Durometer, Moulding Only	25	10.0	25	1000	22	-60	200
AP701/4	Low Compression Set	50	6.9	10.5	420	10	-75	300
AP701/5	Extreme High Temperature	50	8.3	18	420	25	-80	300
AP701/6	Extreme Low Temperature*	60	9.7	35	600	40	-100	200
AP701/18	Steam Resistant Grade	70	10.0	24	580	12	-60	200
AP702/5	High Temperature	50	12.0	24	680	25	-60	250
AP901/50	Platinum Cured	50	10.0	35	500	25	-70	180
AP901/60	Platinum Cured	60	10.0	33	450	25	-70	180
AP901/70	Platinum Cured	70	10.0	35	500	25	-70	180

* WRC approved and complies with FDA Regulations 21 CFR 177.2600 ** Volume Resistivity 2.2ohm/cm

MATERIAL DESIGNED FOR PUBLIC TRANSPORT SYSTEMS:	TYPE	HARDNESS Shore A	TENSILE STRENGTH Mpa N/mm	TEAR STRENGTH N/mm	ELONGATION %	TEMP INDEX °C
MF 775 (CR) *#†	Flame Retardant	68	9.0	15	270	>300
MF 749 (CR) *#††	Flame Retardant	61	7.8	10	165	>350
EP 4286 *	High Strength Flame Retardant	70	10.0	25	400	>330

* Meets BS6853: 1999 Category 1a and UL94 V0 at 3mm

Meets JAR25.853 (b) Aircraft interior use

† 35% Oxygen Index

†† 39% Oxygen Index

ADPOL GRADE	SPONGE	COMP. SET %	COMP. LOADING N/mm ² **	THERMAL CONDUCT W/(m.k)#	TENSILE STRENGTH Mpa			ELONG. @ BREAK %		
					3mm	6.4mm	10mm*	3mm	6.4mm	10mm*
AP601/Med	16lbs/cu.ft. ± 4lbs density	15	0.049	0.0695	1.58	1.03	0.64	200	180	145
AP601/High	24lbs/cu.ft. ± 4lbs density	20	0.093	0.0695	1.59	1.25	0.84	220	195	175
AP601/Ext. High	33lbs/cu.ft. ± 5lbs density	8	0.233	0.0695	2.50	2.25	1.66	245	235	205

* Sample thickness ** Sample thickness 10mm # Mean average after test

Also available: Materials designed to meet DTD and Mil. Specifications. Compounds designed to meet specific needs.

These figures are typical properties.