

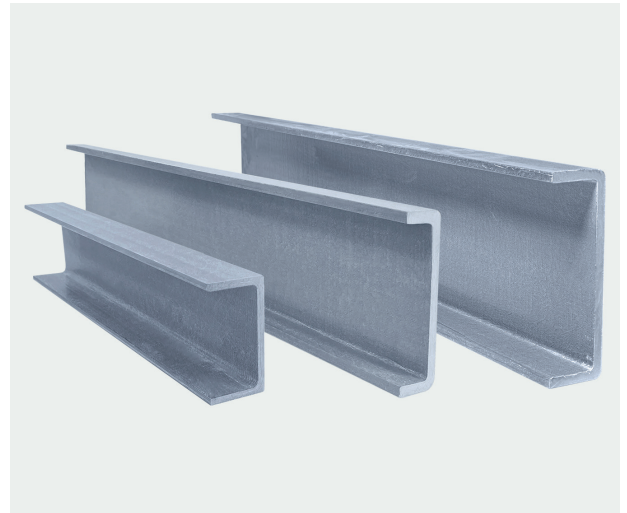
GRP U Profile

Our GRP U Profile compliments our vast range of GRP grating to provide best practice support for large openings and voids, primarily used in the load-bearing parts of structures. Our GRP U Profile is constructed from the highest quality fibreglass making it lightweight, and also chemical, rust, and corrosion resistant whilst offering longevity and durability. Certified to EN 13706.

Available in Grey (RAL 7000). Optional clips, bolts and clamps are available to purchase if required.

Features

- ◆ **Typical applications:** Perfect support solution for grating panels, or creating frames and truss structures for industrial or construction sites, chemical and shipping industries, water treatment plants as well as offshore oil rigs.
- ◆ **Material:** GRP - Glass reinforced polyester.
- ◆ **Cleaning:** Use of a stiff brush will normally be sufficient to remove everyday dirt and debris, and for more stubborn dirt a mild detergent with warm water is often effective. A pressure washer on a low pressure setting can be used to clean the GRP.
- ◆ **Sustainability:** REACH compliant.
- ◆ **Warranty:** Lifetime.



Suitable for
indoor and outdoor use



For more information about this product or, to place an order [click here](#)

Code	Size	Thickness	Weight	Colour
G-UP100GY-3	101.6mm x 50.8mm x 3m	6.35mm	6.95kg	Grey - RAL 7000
G-UP100GY	101.6mm x 50.8mm x 6m	6.35mm	13.86kg	Grey - RAL 7000
G-UP150GY-3	152.4mm x 42.8mm x 3m	9.5mm	11.85kg	Grey - RAL 7000
G-UP150GY	152.4mm x 42.8mm x 6m	9.5mm	23.70kg	Grey - RAL 7000
G-UP200GY-3	203.2mm x 55.6mm x 3m	9.5mm	16.10kg	Grey - RAL 7000
G-UP200GY	203.2mm x 55.6mm x 6m	9.5mm	32.22kg	Grey - RAL 7000

Please note, cutting tolerance +/- 3mm

Our delivery promise

We guarantee your order will be shipped on time, every time.
That's the Blue Diamond difference.

V3.11.24

Get in touch

+44 (0) 1779 841 899
sales@bluediamond.uk.com
www.bluediamond.uk.com

GRP U Profile

Technical Specification

Chemical resistant: Yes

Cut to length: Yes, tolerance +/- 3mm

Dry area: Yes

Wet area: Yes

Oily and greasy area: Yes

Environment: Suitable for indoor and outdoor use

Flame retardant: Yes

Non-conductive (Electrical): Yes

Non-conductive (HV Electrical): Yes

Product testing:

- ◆ Tensile Strength - 220Mpa - ASTM D1037-93
- ◆ Modulus of Elasticity - 21Gpa - ASTM D1037-93
- ◆ Flexural Strength - 280Mpa - ASTM D1037-93
- ◆ Compressive Strength - 145Mpa - ASTM D1037-93
- ◆ Flammability resistance - BS 476 Part 7

Sustainability: REACH (Registration, Evaluation, Authorisation and Restrictions of Chemicals)

Temperature resistance: -50°C to +110°C

UV resistant: Yes

Load and Deflection Data

UDL

Uniformly distributed load data (kg/m) @ 0.5% deflection, simple supported beam

Dimensions mm	Allowable Load	Span width (m)										
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0
101.6mm x 50.8mm x 6.35mm PFC	N	11,994	5,331	2,998	1,919	1,333	979	750	592	480	396	333
	kg	1,223	543	306	196	136	100	76	60	49	40	34
152.4mm x 42.8mm x 9.5mm PFC	N	39,409	17,515	9,852	6,305	4,379	3,217	2,463	1,946	1,576	1,303	1,095
	kg	4,017	1,785	1,004	643	446	328	251	198	161	133	112
203.2mm x 55.6mm x 9.5mm PFC	N	96,101	42,712	24,025	15,376	10,678	7,845	6,006	4,746	3,844	3,177	2,669
	kg	9,796	4,354	2,449	1,567	1,088	800	612	484	392	324	272

U Profile - all considered only in the C position, the normal loading position for a U Profile

GRP U Profile

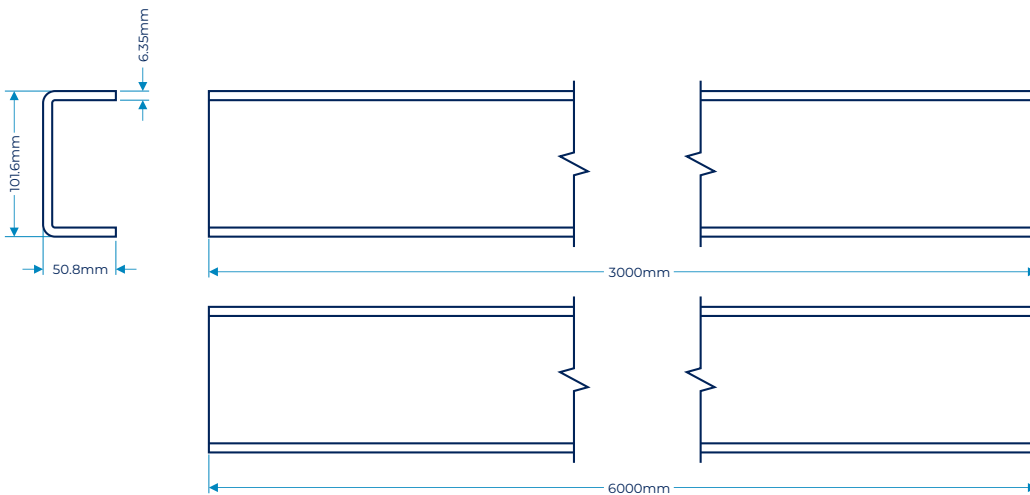
Load and Deflection Data

Point Load

Concentrated load data (kg/m) @ 0.5% deflection, simple supported beam												
Dimensions mm	Allowable Load	Span width (m)										
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0
U Profile - all considered only in the C position, the normal loading position for a U Profile												
101.6mm x 50.8mm x 6.35mm PFC	N	7,496	3,332	1,874	1,199	833	612	469	370	300	248	208
	kg	764	340	191	122	85	62	48	38	31	25	21
152.4mm x 42.8mm x 9.5mm PFC	N	24,631	10,947	6,158	3,941	2,737	2,011	1,539	1,216	985	814	684
	kg	2,511	1,116	628	402	279	205	157	124	100	83	70
203.2mm x 55.6mm x 9.5mm PFC	N	60,063	26,695	15,016	9,610	6,674	4,903	3,754	2,966	2,403	1,986	1,668
	kg	6,123	2,721	1,531	980	680	500	383	302	245	202	170

GRP U Profile Diagrams

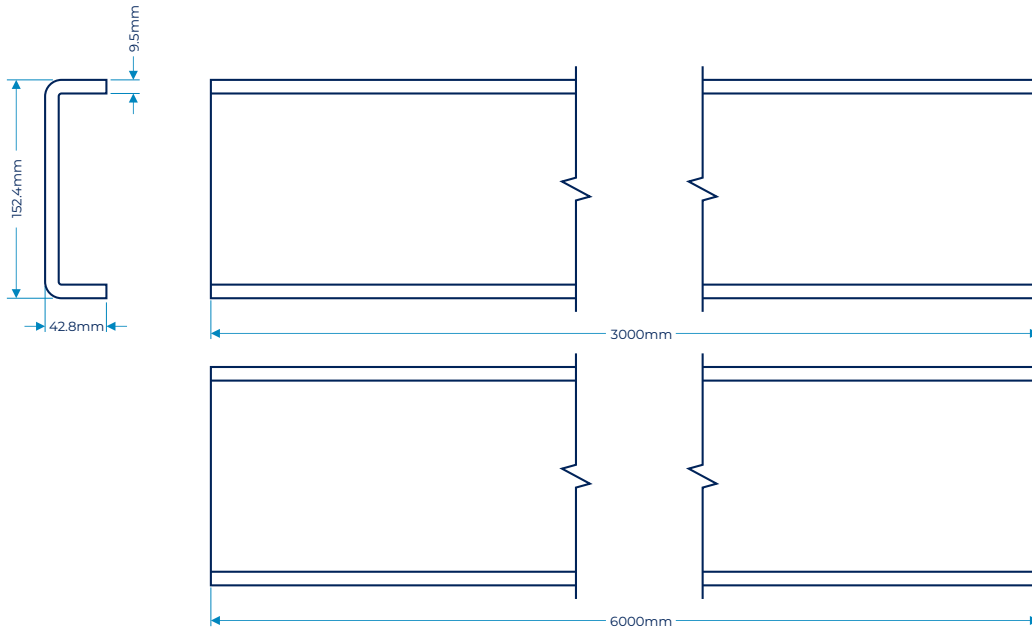
101.6mm x 50.8mm x 6.35mm



GRP U Profile

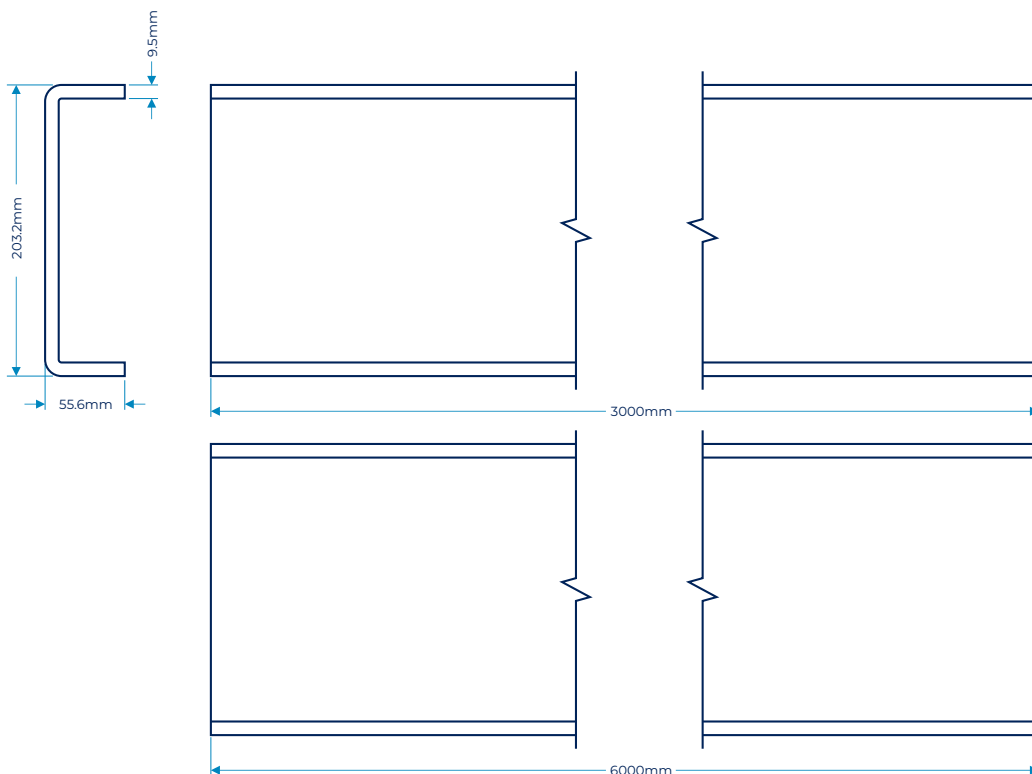
GRP U Profile Diagrams

152.4mm x 42.8mm x 9.5mm



GRP U Profile Diagrams

203.2mm x 55.6mm x 9.5mm



GRP U Profile

GRP Chemical Resistance Chart

Environment	%Conc.	Max.Oper. Temp.F/C.
Acetic Acid	50	125/52
Aluminum Hydroxide	100	160/71
Ammonium Chloride	ALL	170/77
Ammonium Bicarbonate	15	125/52
Ammonium Hydroxide	28	N/R
Ammonium Sulphate	ALL	170/77
Benzene	ALL	N/R
Benzoic Acid	SAT	150/66
Borax	SAT	170/77
Calcium Carbonate	ALL	170/77
Calcium Nitrate	ALL	180/82
Carbon Tetrachloride	100	N/R
Chlorine Dry Gas	-	140/60
Chlorine Water	SAT	80/27
Chromic Acid	5	70/21
Citric Acid	ALL	170/77
Copper Chloride	ALL	170/77
Copper Cyanide	ALL	170/77
Copper Nitrate	ALL	170/77
Ethanol	50	75/24
Ethylene Glycol	100	90/32
Ferrous Chloride	ALL	170/77
Formaldehyde	50	75/24
Glucose	100	170/77
Gasoline	100	80/27
Glycerine	100	150/66
Hydrobromic Acid	50	120/49
Hydrochloric Acid	37	75/24
Hydrogen Peroxide	5	100/38
Lactic Acid	ALL	170/77

Environment	%Conc.	Max.Oper. Temp.F/C.
Lithium Chloride	SAT	150/66
Magnesium Chloride	ALL	170/77
Magnesium Nitrate	ALL	140/60
Magnesium Sulphate	ALL	170/77
Mercuric Chloride	100	150/66
Mercurous Chloride	ALL	140/60
Nickel Chloride	ALL	170/77
Nickel Sulphate	ALL	170/77
Nitric Acid	20	70/21
Oxalic Acid	ALL	75/24
Perchloric Acid	10	N/R
Phosphoric Acid	100	120/49
Potassium Chloride	ALL	170/77
Potassium Dichromate	ALL	170/77
Potassium Sulphate	ALL	170/77
Propylene Glycol	ALL	170/77
Sodium Acetate	ALL	160/71
Sodium Bisulphate	ALL	170/77
Sodium Bromide	ALL	170/77
Sodium Cyanide	ALL	170/77
Sodium Hydroxide	N/R	N/R
Sodium Nitrate	ALL	170/77
Sodium Sulphate	ALL	170/77
Stannic Chloride	ALL	160/71
Sulfuric Acid	25	75/24
Tartaric Acid	ALL	170/77
Vinegar	100	170/77
Water Distilled	100	170/77
Zinc Nitrate	ALL	170/77
Zinc Sulphate	ALL	170/77