Product Data Sheet

GRP Open Mesh Grating

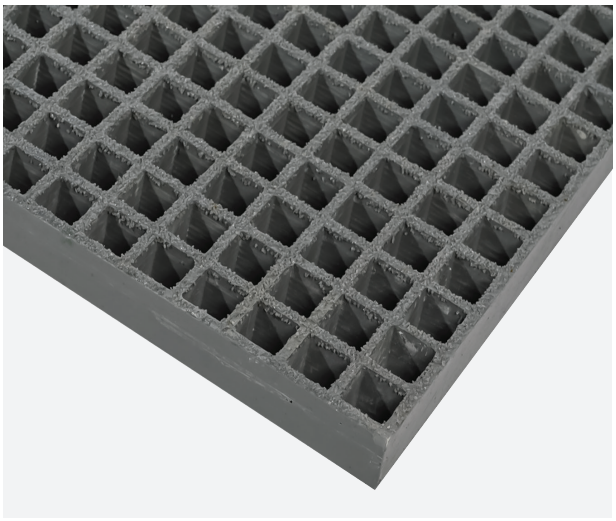
Our GRP Grating is a specially designed and moulded non-slip composite floor solution, constructed from the highest quality fibreglass making it lightweight and also chemical, rust, and corrosion resistant whilst offering longevity and durability. With limited tooling and installation costs, we can offer a vast range of standard length and width sizes, plus our in-house cutting service means we can offer bespoke sizes for that perfect fit.

Available in 25mm, 38mm and 50mm thickness and an array of colours.

Optional clips, bolts and clamps are available to purchase if required.

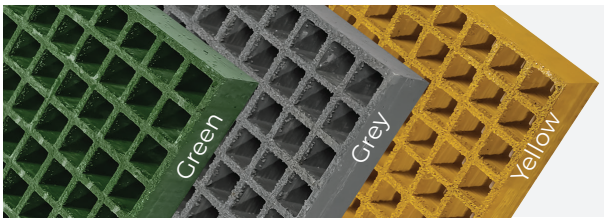
Features

- **Typical applications**: Suitable for service riser decks, maintenance platforms, and access walkways, when designed in accordance with BS EN ISO 14122:2016, along with pontoons, flooring, ramps, and covers across industrial, construction, chemical, marine, and offshore environments.
- **Material**: GRP - Glass reinforced polyester with a resin coated gritted surface.
- **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.



Suitable for indoor and outdoor use





For more information about this product or, to place an order **click here**

Code	Size	Thickness	Weight	Colour	RAL
GR3939-25GN	996mm x 996mm	25mm	12.5kg	Green	6010
GR3939-25GY	996mm x 996mm	25mm	12.5kg	Grey	7000, 7043, 7047
GR3939-25YL	996mm x 996mm	25mm	12.5kg	Yellow	1003
GR3960-25GN	1492mm x 996mm	25mm	18kg	Green	6010

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

bluediamond

Product Data Sheet

GRP Open Mesh Grating

Code	Size	Thickness	Weight	Colour	RAL
GR3960-25GY	1492mm x 996mm	25mm	18kg	Grey	7000, 7043, 7047
GR3960-25YL	1492mm x 996mm	25mm	18kg	Yellow	1003
GR3979-25GN	1985mm x 996mm	25mm	25kg	Green	6010
GR3979-25GY	1985mm x 996mm	25mm	25kg	Grey	7000, 7043, 7047
GR3979-25YL	1985mm x 996mm	25mm	25kg	Yellow	1003
GR3910-25GN	3010mm x 996mm	25mm	37kg	Green	6010
GR3910-25GY	3010mm x 996mm	25mm	37kg	Grey	7000, 7043, 7047
GR3910-25YL	3010mm x 996mm	25mm	37kg	Yellow	1003
GR4812-25GN	3660mm x 1220mm	25mm	55kg	Green	6010
GR4812-25GY	3660mm x 1220mm	25mm	55kg	Grey	7000, 7043, 7047
GR4812-25YL	3660mm x 1220mm	25mm	55kg	Yellow	1003
GR3939-38GN	996mm x 996mm	38mm	19.5kg	Green	6010
GR3939-38GY	996mm x 996mm	38mm	19.5kg	Grey	7000, 7043, 7047
GR3939-38YL	996mm x 996mm	38mm	19.5kg	Yellow	1003
GR3960-38GN	1492mm x 996mm	38mm	29kg	Green	6010
GR3960-38GY	1492mm x 996mm	38mm	29kg	Grey	7000, 7043, 7047
GR3960-38YL	1492mm x 996mm	38mm	29kg	Yellow	1003
GR3979-38GN	1985mm x 996mm	38mm	40kg	Green	6010
GR3979-38GY	1985mm x 996mm	38mm	40kg	Grey	7000, 7043, 7047
GR3979-38YL	1985mm x 996mm	38mm	40kg	Yellow	1003
GR3910-38GN	3010mm x 996mm	38mm	58.5kg	Green	6010
GR3910-38GY	3010mm x 996mm	38mm	58.5kg	Grey	7000, 7043, 7047
GR3910-38YL	3010mm x 996mm	38mm	58.5kg	Yellow	1003
GR4812-38GN	3660mm x 1220mm	38mm	87kg	Green	6010
GR4812-38GY	3660mm x 1220mm	38mm	87kg	Grey	7000, 7043, 7047
GR4812-38YL	3660mm x 1220mm	38mm	87kg	Yellow	1003

bluediamond

Product Data Sheet

GRP Open Mesh Grating

Code	Size	Thickness	Weight	Colour	RAL
GR3910-50GN	3003mm x 1020mm	50mm	78.5kg	Green	6010
GR3910-50GY	3003mm x 1020mm	50mm	78.5kg	Grey	7000, 7043, 7047
GR3910-50YL	3003mm x 1020mm	50mm	78.5kg	Yellow	1003
GR4812-50GN	3665mm x 1225mm	50mm	115kg	Green	6010
GR4812-50GY	3665mm x 1225mm	50mm	115kg	Grey	7000, 7043, 7047
GR4812-50YL	3665mm x 1225mm	50mm	115kg	Yellow	1003
CC-25SS	C Clip for 25mm Grating c/w fixing bolt		0.04kg	Stainless Steel	
CC-38SS	C Clip for 38mm Grating c/w fixing bolt		0.06kg	Stainless Steel	
CC-50SS	C Clip for 50mm Grating c/w fixing bolt		0.07kg	Stainless Steel	
MC-25	M Clip for 25mm Grating		0.03kg	Stainless Steel, Yellow	
MC-38	M Clip for 38mm Grating		0.04kg	Stainless Steel, Yellow	
MC-50	M Clip for 50mm Grating		0.05kg	Stainless Steel, Yellow	
JC-38SS	J Clamp		0.07kg	Stainless Steel	
FC45SS	Square Fixing Clip 45mm		0.02kg	Stainless Steel	
FD45SS	Fixing Disc 45mm		0.1kg	Stainless Steel	
M8-35SS	M8 x 34mm Bolt/Nut/Washer Set		0.03kg	Stainless Steel	

Cut-to-size orders will be cut as per the measurements specified; this may not always result in a closed cell finish. If a closed cell finish is required, ensure to specify on order *

*Please note, cutting tolerance +/- 5mm

Technical Specification

Slip resistant:	Excellent slip resistance to level 3
Wear resistant:	Excellent wear resistance to level 3, suitable for heavy footfall
Chemical resistant:	Yes
Cut to size:	Yes, tolerance +/- 5mm
Disability friendly:	Yes, the low profile makes it suitable for wheelchair users
Dry area:	Yes
Wet area:	Yes
Oily and greasy area:	Yes

bluediamond

GRP Open Mesh Grating

Technical Specification	
Heavy area:	Yes
Wheeled area:	Yes
Environment:	Suitable for indoor and outdoor use
Flame retardant:	Yes
Impact resistant:	Yes
Non-conductive (Electrical):	Yes
Non-conductive (HV Electrical):	Yes

Product testing:	• Slip resistance
	  • Tested to BS 7976.2 - PTV 'Extremely Low' for wet and dry conditions, PTV 'Low' for oily and greasy conditions
	  • Coefficient of Friction (CoF): Dry 72; Wet 68 and Oil 63
	• Fire certificate
	  • EN 13501-12018 - Class Bfl-s1
	  • ASTM-E84-2018 - Class 1
	• Load standard
	  • BS EN ISO 14122:2016
	• UV certificate
	  • UV Weather ISO 4892-2 Xenan Arc 5000hrs

Sustainability:	REACH (Registration, Evaluation, Authorisation and Restrictions of Chemicals)
Temperature resistance:	-50°C to +110°C
UV Resistant:	Yes

bluediamond

GRP Open Mesh Grating

* The differences between Class 1 and Class 2

Both are classifications of the surface spread of flame test (BS 476 part 7). They refer to the degree of flame spread on an ignited panel 900mm x 230mm cut from a laminate. The panel is exposed at right angles to a radiant panel to reproduce the effect of a fire on an adjoining wall or ceiling. It is ignited at the hotter end and allowed to burn for 10 minutes. Flame spread is measured along a line 75mm from the base.

- Class 1 rating is given if the spread of flame is no greater than 165mm.
- Class 2 rating is given if the spread of flame is no greater than 215mm in the first 1½ minutes and on overall spread of no more than 455mm.
- Class 0 rating is a Building Regulations rating and not a British Standard Classification. To attain Class 0, a sample must meet Class 1 for spread of flame and also meet the fire propagation requirements of BS476 Part 6.
- The Part 6 test was introduced because investigations into the growth of building fires showed that spread of flame was not the only significant factor. Fire propagation (or the amount of heat added to a fire by the energy output of burning materials) was also an important consideration.

Pendulum Slip Testing

The pendulum slip testing was carried out on 17.02.23 and concluded that our GRP Grating achieved the highest slip resistant classification of 'Extremely Low' pedestrian slip risk for wet and dry conditions and 'Low' for oily/greasy areas.

Pendulum Test Value (PTV)	Slip Risk
0 - 24	High
25 - 35	Moderate
36 - 64	Low
65+	Extremely Low

Pendulum test results	Coefficient of Friction (CoF)		
	Dry	Wet	Oil
Standard Grit	72	68	63

bluediamond

GRP Open Mesh Grating

GRP Care and Maintenance

- **Cleaning**

  Being a highly durable material, using a stiff brush will normally be sufficient to remove everyday dirt and debris, and for more stubborn dirt, wash with warm water and a mild detergent. A pressure washer on a low-pressure setting can also be used, however, care should be taken to ensure that this does not harm the integrity of the fixings being used, likely to be screws and/or adhesive.

  We recommend always testing any cleaning method and liquids on a small inconspicuous section before applying to the full area. Any spills should be cleaned immediately in line with the product data sheets and the company's own safety procedures.

- **General Routine Maintenance**

  The integrity of all fixings should be checked on a regular basis to ensure that the grating remain in a firm and stable position. The gritted surfaces and GRP substrate should also be checked regularly, the frequency would depend on the nature and volume of footfall. As a guide, for high traffic areas a monthly inspection would be advisable.

- **Life expectancy**

  Our GRP Grating have a design life of 10+ years, however, the life expectancy of any flooring product will be dictated by the nature and volume of the traffic it receives. Factors such as footwear type and material, weight of individual, pedestrian or non-pedestrian traffic, and any contamination such as dirt or grit are all factors that will influence the life term through natural wear and tear of the GRP.

Installation

- **Handling**

  Safe handling practices should always be employed. GRP should also be stored face down to prevent damage.

- **Cutting**

  Minor adjustments, small cut outs, can be made with a hacksaw or a jigsaw with a suitable blade. We offer a full in-house cutting service, however, should you wish to cut the grating yourself, this is easily to do by using orbital cutting equipment with either a stone or diamond blade. Cutting should be carried out externally, or where there is dust extraction, or suitable ventilation. Appropriate protective equipment should always be worn.

We're here to help

Should you have any questions about our GRP Grating, or need advice regarding care, maintenance or installation, we're only a phone call away.

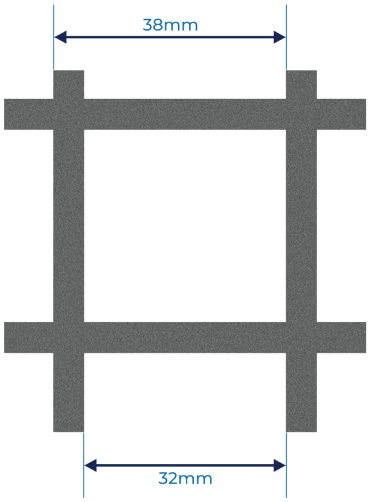
bluediamond

GRP Open Mesh Grating

Closed Edge Sizes

32mm x 32mm internal, applicable to both 25mm and 38mm grating.

46mm	84mm	122mm	160mm	198mm	236mm
274mm	312mm	350mm	388mm	426mm	464mm
502mm	540mm	579mm	616mm	654mm	692mm
730mm	767mm	806mm	844mm	882mm	920mm
958mm	996mm	1034mm	1072mm	1110mm	1148mm
1186mm	1225mm	1262mm	1301mm	1339mm	1377mm
1415mm	1454mm	1491mm	1529mm	1567mm	1605mm
1643mm	1681mm	1719mm	1757mm	1795mm	1833mm
1870mm	1908mm	1947mm	1985mm	2023mm	2061mm
2099mm	2136mm	2175mm	2213mm	2251mm	2289mm
2327mm	2366mm	2404mm	2442mm	2479mm	2518mm
2555mm	2593mm	2631mm	2669mm	2707mm	2745mm
2784mm	2821mm	2860mm	2898mm	2936mm	2974mm
3012mm	3050mm	3088mm	3126mm	3165mm	3203mm
3240mm	3278mm	3316mm	3354mm	3392mm	3430mm
3468mm	3506mm	3545mm	3582mm	3620mm	3660mm

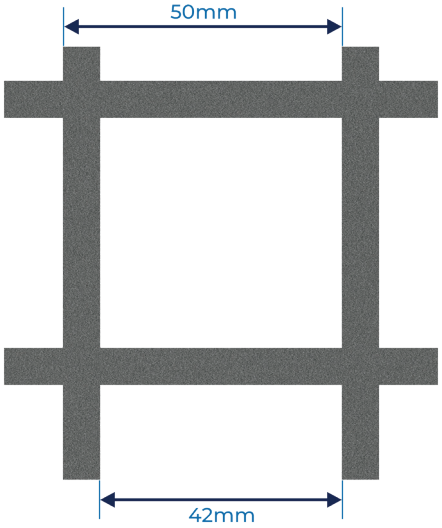


bluediamond

GRP Open Mesh Grating

42mm x 42mm internal, applicable to 50mm grating.

57mm	108mm	159mm	211mm	261mm	313mm
363mm	413mm	464mm	515mm	565mm	616mm
667mm	718mm	769mm	820mm	870mm	922mm
972mm	1023mm	1074mm	1124mm	1175mm	1226mm
1277mm	1328mm	1379mm	1430mm	1480mm	1530mm
1581mm	1632mm	1683mm	1734mm	1785mm	1836mm
1887mm	1938mm	1988mm	2039mm	2090mm	2140mm
2191mm	2242mm	2293mm	2344mm	2394mm	2445mm
2495mm	2547mm	2597mm	2649mm	2700mm	2750mm
2801mm	2852mm	2903mm	2953mm	3005mm	3056mm
3106mm	3157mm	3208mm	3259mm	3309mm	3360mm
3410mm	3462mm	3512mm	3561mm	3613mm	3665mm



bluediamond

GRP Open Mesh Grating

Load Bearing Specification

Load bearing capacity and panel deflection depend on panel thickness and unsupported span.

Standard Mesh Grating - Load and Deflection (Kg/metre @ 0.5% Deflection)									
Panel Thickness (mm)	Span Type of Loading	250mm	500mm	600mm	750mm	1000mm	1200mm	1500mm	2000mm
25	Point Load	1,792.5kg	232kg	161kg	103kg	58kg	40kg	25.5kg	14.5kg
	UDL	1,375.5kg	688kg	425kg	435kg	92kg	53kg	27kg	11.5kg
38	Point Load	1,907kg	849kg	590kg	378kg	212kg	147kg	94kg	53kg
	UDL	3,815kg	1,907kg	1,590kg	917kg	387kg	224kg	115kg	48.5kg
50	Point Load	2,966kg	1,483kg	1,207kg	773kg	434kg	302kg	193kg	109kg
	UDL	5,933kg	2,967kg	2,472kg	1,877kg	792kg	458kg	235kg	99kg

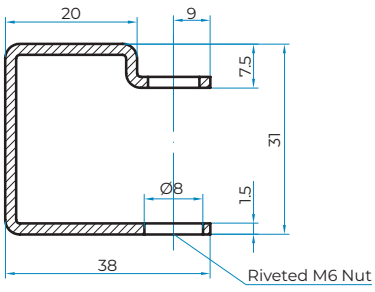
Standard Mesh Grating - Load and Deflection (Kg/metre @ 1% Deflection)									
Panel Thickness (mm)	Span Type of Loading	250mm	500mm	600mm	750mm	1000mm	1200mm	1500mm	2000mm
25	Point Load	1,585kg	464kg	322kg	206kg	116kg	80kg	51kg	29kg
	UDL	2,751kg	1,375kg	850kg	435kg	184kg	106kg	54kg	23kg
38	Point Load	3,814kg	1,698kg	1,179kg	755kg	424kg	294kg	188kg	106kg
	UDL	7,629kg	3,814kg	3,179kg	1,834kg	774kg	448kg	229kg	97kg
50	Point Load	5,933kg	2,967kg	2,414kg	1,545kg	868kg	603kg	386kg	217kg
	UDL	11,866kg	5,933kg	4,944kg	3,754kg	1,584kg	916kg	469kg	198kg

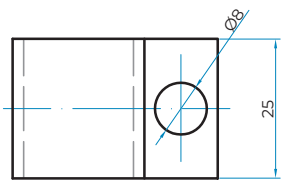
GRP Grating Accessories

GRP grating clips and clamps complement our range of GRP grating and provide best-practice fixing methods for fastening and joining grating panels.

C Clip - 25mm





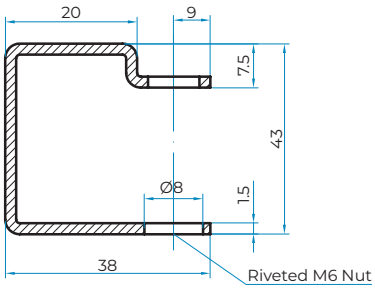


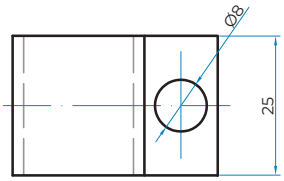
bluediamond

GRP Open Mesh Grating

C Clip - 38mm

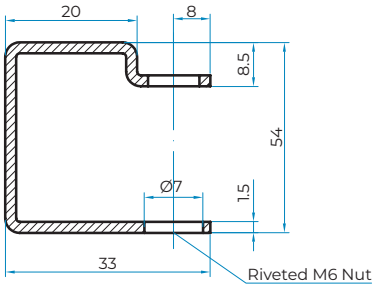


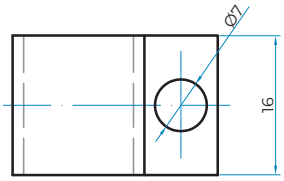




C Clip - 50mm

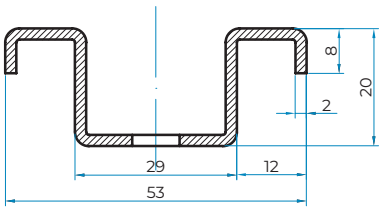


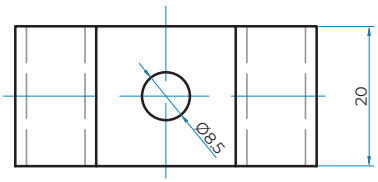




M Clip - 25mm

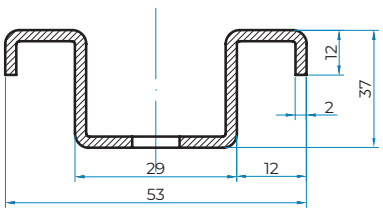


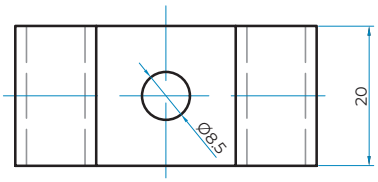




M Clip - 38mm





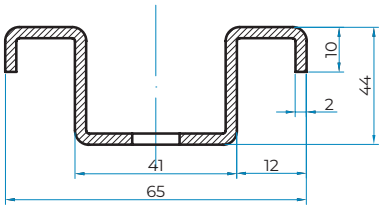


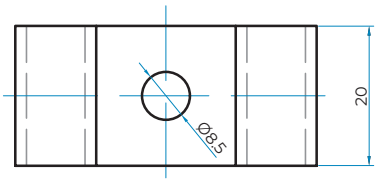
bluediamond

GRP Open Mesh Grating

M Clip - 50mm

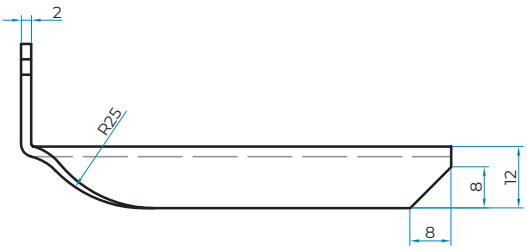


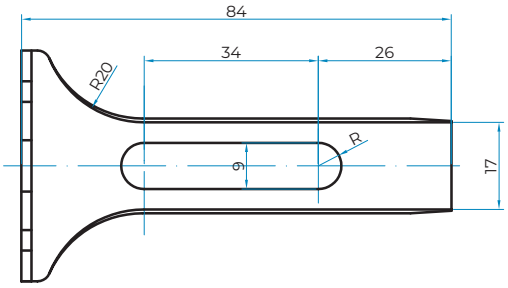


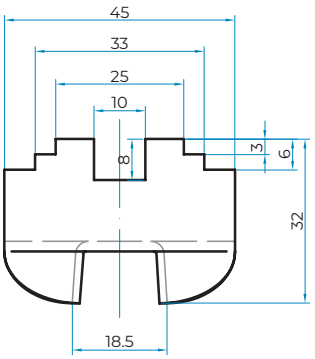


J Clamp



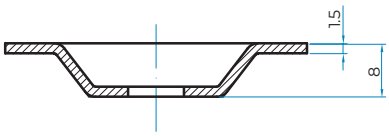


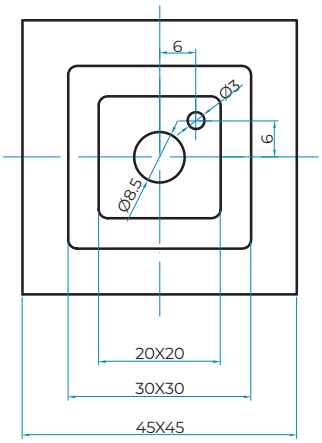




Square Fixing Clip 45mm





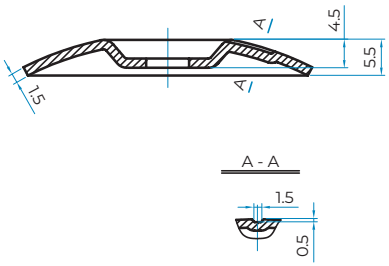


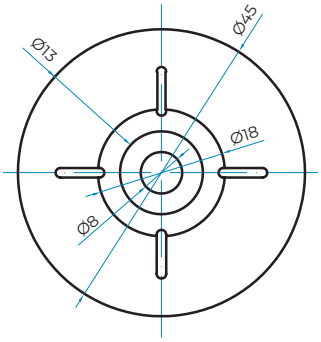
bluediamond

GRP Open Mesh Grating

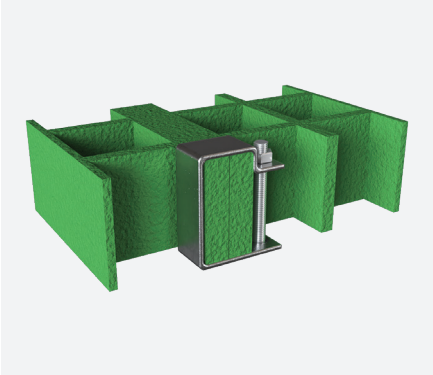
Fixing Disc 45mm



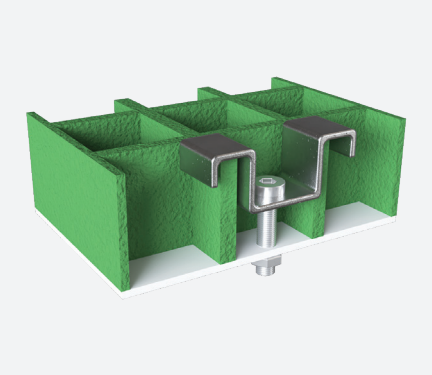




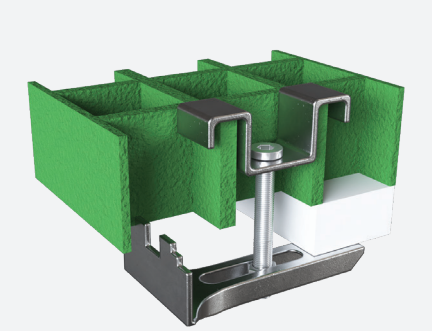
Installation Diagrams



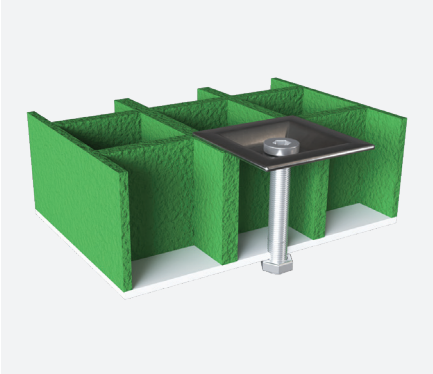
C Clip



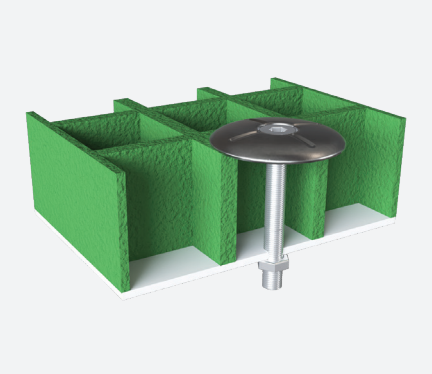
M Clip



J Clamp



Square Fixing Clip



Fixing Disc

bluediamond

GRP Open Mesh Grating

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