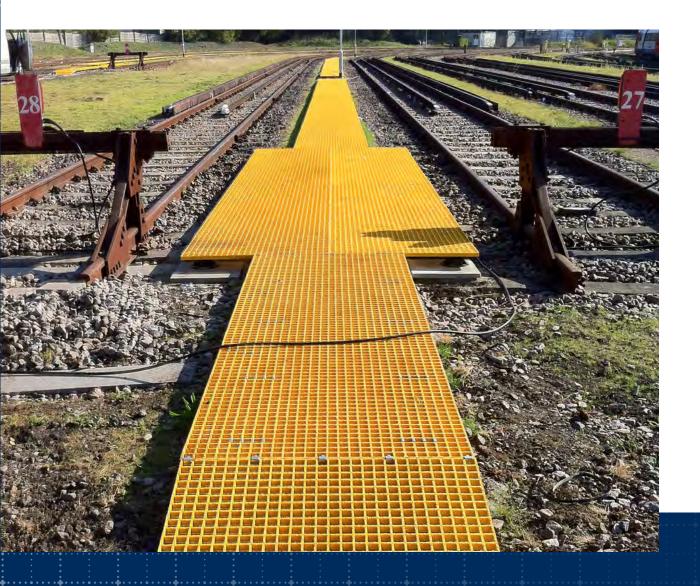
Standard GRP Grit Grating



DESIGN

SUPPLY

FABRICATE

INSTALL













FibreGrid's Standard GRP Grit Top Grating is a high performance open mesh flooring system, made from high quality GRP (glass reinforced plastic). Our grating is produced by weaving continuous glass fibres vertically and horizontally into a mould, creating an integral, one-piece panel which offers excellent corrosion resistance as well as bidirectional strength.

Our grating is fire retardant, chemical and corrosion resistant, and with its 10 year guarantee makes it perfect for a variety of applications from vertical building risers and cooling towers, to walkways and railway crossing

If required, grating panels can be trimmed on site to suit using an industrial jigsaw and appropriate cutting blades (Bosch "T101 A1F" or similar are ideal).

CHARACTERISTICS

- Extremely durable
- Impact resistant
- Anti slip surface
- Fire retardant

- Chemical resistant
- Lightweight
- Maintenance free
- Non-conductive

SUITABLE APPLICATIONS

- Walkways
- Gullies
- ✓ Trenches
- Cooling towers
- Overhead gantries
- Railway crossing points

TECHNICAL DATA

Description	High performance composite grating system
Top finish:	Standard GRP Mesh grit top
Stock colours:	Green, Grey or Yellow (any RAL or BS colour subject to extended lead time)
Stock depths:	25mm, 38mm and 50mm (other sizes are available subject to lead time)
Panel sizes:	See enclosed list
Mesh patterns:	See enclosed list
Chemical resistance:	Made from Iso resin as standard. Different chemical resistance available, please refer to the enclosed list.



TECHNICAL DATA

Tolerances (including cut):	+/- 7mm width, length and diagonal
Depth tolerances:	+/- 1.5mm
Service temperatures:	-50°C to 105°C
Load capabilities:	See enclosed list
Design life:	25+ years (subject to traffic analysis)
General use:	Standard pedestrian traffic
Standards: Fire:	Tested to BS 476: Part 7: 1997 Class 2

SLIP RESISTANCE VALUES

Measured using the Pendulum test method (WF rubber slider) - certificate available on request.

Top Surface Dry Reading Wet Reading Standard Grit 69 65 Top

To ensure that the above slip resistance levels are maintained, the grating panels should be kept clean.

The UK Slip Resistance Group guide to slip resistance of a floor for able bodied pedestrians:

Four S Pendulum Value	Potential for Slip
Above 65	Extremely Low
35 - 65	Low
25 - 35	Moderate
25 & Below	High

FABRICATION TIPS

A major advantage of FibreGrid GRP Grating is the ease of fabrication - sawing, grinding, drilling and machining is similar to working with wood, metals and plastics. If possible, perform fabrication "on-site" to increase accuracy. Be sure to allow for saw kerf (usually 4-6mm) when performing takeoffs and layouts. For a nice looking installation, cut panels so bars of adjoining panels are aligned and leave a solid bar on all sides.

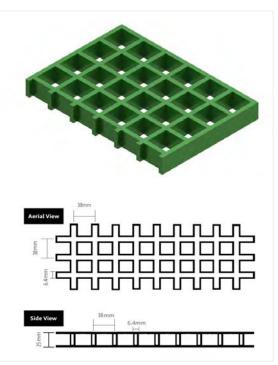
Provide a minimum of 38mm support around all edges. Use M-Clips spaced a maximum of every 1220mm, with a minimum of four clips per panel. Support panel security to prevent flex or shift during cutting. Mark cuts clearly and carefully. Avoid splitting 6.4mm and 8mm bars. Moulded construction allows "stubs" to support weight. Cut from the smooth side (bottom) of a grit top panel. Use even, steady pressure when cutting. Excessive pressure may cause heat and/or ragged edges. Replace dull blades to prevent heat buildup. For best results, sand all edges with open-grit sandpaper using light, even pressure to prevent wavy, uneven surfaces. Cut edges are to be sealed using a polyurethane yacht varnish. This is to prevent corrosive chemicals from reaching exposed glass fibres.



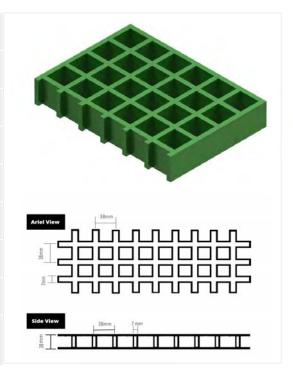
FibreGRATING

STOCKED GRATING SPECIFICATION/TYPES

Grating Name	FG03SD
Grid Size	38X38 SM
Panel Depth	25
Load Bar Thickness	6.4
Load Bar Centres	38
No. Bars per foot	8
Open Area	70%
Approx. Weight	12 kg's/sq.m
Panel Sizes Available (mm)	3660 x 1220, 3016 x 996, 1988 x 996



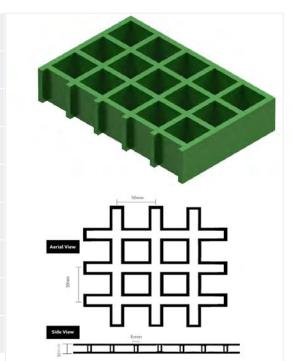
Grating Name	FG04SD
Grid Size	38X38 SM
Panel Depth	38
Load Bar Thickness	7
Load Bar Centres	38
No. Bars per foot	8
Open Area	68%
Approx. Weight	19.5 kg's/sq.m
Panel Sizes Available (mm)	3660 x 1220, 3016 x 996, 1988 x 996







Grating Name	FG05SD
Grid Size	50x50 SM
Panel Depth	50
Load Bar Thickness	8
Load Bar Centres	50
No. Bars per foot	8
Open Area	71%
Approx. Weight	23.51 kg's/sq.m
Panel Sizes Available (mm)	3660 x 1220





FibreGRATING

UNIFORM LOAD TABLE - DEFLECTION (IN MM)

Moulded Grating Uniform Load Tables - Deflection In Millimetres																		
Clear Span		Style			Load (kN/m²)								Max Recommended Load (kN/m²)					
(mm)	Name	Depth (mm)	Mesh (mm)	3	5	8	10	13	15	20	25	39	50	60	70	80	90	
	FG03SD	25	38 x 38	0.4	0.7	1.1	1.3	1.7	2.0	2.6	3.3	5.1	6.6	7.9	9.2	10.5	11.8	48
400	FG04SD	38	38 x 38	0.1	0.2	0.4	0.5	0.6	0.7	0.9	1.2	1.8	2.3	2.8	3.3	3.7	4.2	100
	FG05SD	50	50 x 50	0.1	0.1	0.2	0.3	0.4	0.4	0.6	0.7	1.1	1.4	1.7	2.0	2.3	2.6	154
	FG03SD	25	38 x 38	1.8	3.0	4.8	6.0	7.8	9.0	12.0	15.0	-	-	-	-	-	-	20
600	FG04SD	38	38 x 38	0.6	1.0	1.6	2.0	2.6	3.0	3.9	4.9	7.7	9.9		13.8	15.8	-	45
	FG05SD	50	50 x 50	0.1	0.2	0.3	0.3	0.4	0.5	0.7	0.8	1.3	1.6	2.0	2.3		2.9	73
	FG03SD	25	38 x 38	5.7	9.5	15.1	-	-	-	-	-	-	-	-	-	-	-	9
800	FG04SD	38	38 x 38	1.8	3.0	4.7	5.9	7.7	8.9	11.8	14.8	-	-	-	-	-	-	26
	FG05SD	50	50 × 50	0.3	0.6	0.9	1.1	1.5	1.7	2.3	2.8	44	5.7	6.8	8.0	9.1	10.2	35
	FG03SD	25	38 x 38	13.9	-	-	-	-	-	-	-	-	-	-	-	-	-	5
1000	FG04SD	38	38 x 38	4.3	7.1	11.4	14.3	-	-	-	-	-	-	-	-	-	-	14
	FG05SD	50	50 x 50	2.3	3.8	6.1	7.7	9.9	11.5	15.3	-	-	-	-	-	-	-	21
4200	FG04SD	38	38 x 38	8.9	14.8	-	-	-	-	-	-	-	-	-	-	-	-	9
1200	FG05SD	50	50 x 50	4.7	7.8	12.5	15.6	-	-	-	-	-	-	-	-	-	-	14
1400	FG05SD	50	50 x 50	8.5	14.2	-	-	-	-	-	-	-	-	-	-	-	-	8

(1 kilonewton is equal to 101.97 kilograms)

All gratings were tested in accordance with BS4592-0:2006. For pedestrian traffic, the deflection of a floor panel under the design load shall not exceed 10mm or 1/2200th of the span, whichever is the lesser. The difference in level between a loaded and a neighbouring unloaded flooring shall not exceed 4mm.

The designer should not exceed Maximium Recommended Load at any time.

For covered grating use a multiplier of 0.5. This is limited to gratings of 25mm - 51mm depths.

Max recommended and ultimate loads do not change as a result of adding a 3mm deep covered plate.

Load tables are for reference only. FibreGrid are not responsible for the use of these tables, and cannot warrant the performance of grating through the use of these tables. Load tables are set at ambient temperatures. For applications at elevated temperatures, or for further information, please call 01440 712722 for assistance.



POINT LOAD TABLE

Point Load Table - Deflection In Millimetres											
Clear		Style		Point Load (kN)							
Span (mm)	Name	Depth (mm)	Mesh (mm)	1.5	3.5	5	7.5	10	15	20	30
	FG03SD	25	38 x 38	-	0.44	0.60	1.04	1.43	1.82	2.84	3.56
300	FG04SD	38	38 x 38	-	0.32	0.39	0.72	0.93	1.21	1.89	2.32
	FG05SD	50	50 x 50	-	0.41	0.52	0.79	1.11	1.51	2.44	2.93
	FG03SD	25	38 x 38	0.27	0.67	0.88	1.54	2.05	2.65	4.21	5.21
450	FG04SD	38	38 x 38	-	0.40	0.56	1.01	1.34	1.74	2.76	3.42
	FG05SD	50	50 x 50	0.27	0.59	0.71	1.12	1.62	2.19	3.60	4.32
	FG03SD	25	38 x 38	0.77	1.58	2.08	3.15	4.50	6.12	-	-
600	FG04SD	38	38 x 38	0.52	1.05	1.36	2.06	2.93	4.08	6.74	-
	FG05SD	50	50 x 50	0.42	0.85	1.11	1.72	2.45	3.29	5.39	6.45
	FG03SD	25	38 x 38	1.27	2.95	3.76	6.04	8.80	-	-	-
750	FG04SD	38	38 x 38	0.85	1.96	2.56	3.96	5.79	7.80	-	-
	FG05SD	50	50 x 50	0.67	1.59	2.05	3.12	4.62	6.37	9.92	-
	FG03SD	25	38 x 38	1.75	4.30	5.50	8.79	13.12	-	-	-
900	FG04SD	38	38 x 38	1.19	2.89	3.69	5.89	8.63	11.72	-	-
	FG05SD	50	50 x 50	0.92	2.38	2.98	4.73	6.99	10.17	-	-
	FG03SD	25	38 x 38	2.90	7.40	10.34	15.19	-	-	-	-
1200	FG04SD	38	38 x 38	1.90	4.83	6.87	9.96	14.79	-	-	-
	FG05SD	50	50 x 50	1.63	3.98	5.59	8.09	10.78	15.59	-	-



CHEMICAL RESISTANCE TABLE

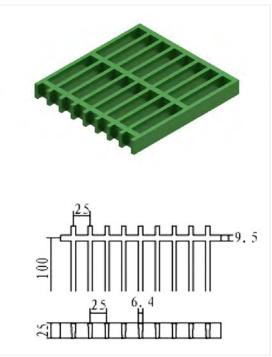
Chemical	lso concentration (%)	Temperature F/°C
Acetic Acid	50	125/52
Ammonium Hydroxide	100	160/71
Ammonium Chloride	All	170/77
Ammonium Bicarbonate	15	125/52
Ammonium Sulfate	All	170/77
Benzene	All	1/0/ / / N/R
Benzoic Acid	SAT	150/66
Borax	SAT	170/77
Calcium Carbonate	All	170/77
Calcium Nitrate	All	180/82
Carbon Tetrachloride	1000	N/R
Chlorine Water	SAT	80/27
Citric Acid	All	170/77
Copper Chloride	All	170/77
Copper Cyanide	All	170/77
Copper Nitrate	All	170/77
Ferric Chloride	All	170/77
Ferrous Chloride	All	170/77
Formaldehyde	50	75/24
Gasoline	100	80/27
Glucose	100	170/77
Glycerin	100	150/66
Lithium Choride	SAT	150/66
Magnesium Chloride	All	170/66
Magnesium Nitrate	All	140/60
Magnesium Sulfate	All	170/77
Mercuric Chloride	100	150/66
Mercurous Chloride	All	140/50
Nickel Chloride	All	170/77
Nickel Sulfate	All	170/77
Nitric Acid	20	70/21
Oxalic Acid	All	75/24
Potassium Chloride	All	170/77
Potassium Dichromate	All	170/77
Potassium Nitrate	All	170/77
Potassium Sulfate	All	170/77
Propylene Glycol	All	170/77
Sodium Cyanide	All	170/77
Sodium Nitrate	All	170/77
Sodium Chloride	All	160/71
Vinegar	100	170/77
Zinc Nitrate	All	170/77

ALL = All concentrations N/R = Not Recommended SAT = Saturated Solution

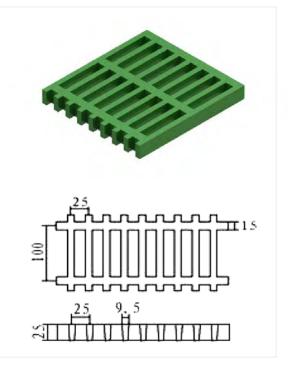
The corrosion resistance data listed above is for general information only. Resin manufacturers have provided test data which indicates that the specific resin can withstand the corrosion conditions listed above. FibreGrid Limited believes the data to be true and accurate but no guarantee is expressed or implied as to specific performance. Testing for specific environments is recommended. Our responsibility for claims arising from breach of warranty, negligence or otherwise is limited to the purchase price of the material sold by FibreGrid Limited.



Grating Name	FG01	
Grid Size	25X100 RM	
Panel Depth	25	
Load Bar Thickness	6.4	
Load Bar Centres	25	
No. Bars per foot	12	12.5
Open Area	67%	
Approx. Weight	13.9 kg's/sq.m	ĭ
Panel Sizes (mm)	3660 x 1220, 2440 x 1220, 3050 x 915	ЯШL

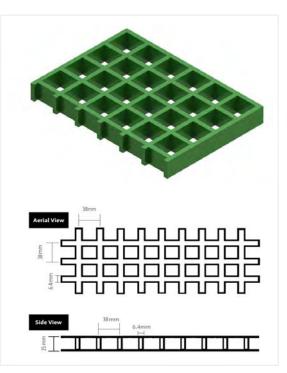


Grating Name	FG02
Grid Size	25x100 RM
Panel Depth	25
Load Bar Thickness	9.5
Load Bar Centres	25
No. Bars per foot	12
Open Area	52%
Approx. Weight	19.3 kg's/sq.m
Panel Sizes (mm)	3660 x 1220, 2440 x 1220, 3050 x 915

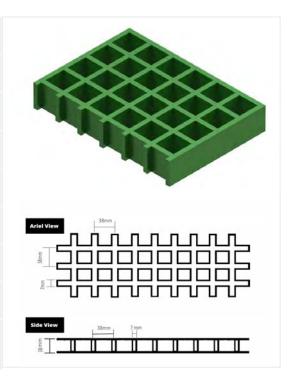




Grating Name	FG03
Grid Size	38X38 SM
Panel Depth	25
Load Bar Thickness	6.4
Load Bar Centres	38
No. Bars per foot	8
Open Area	70%
Approx. Weight	12 kg's/sq.m
Panel Sizes Available (mm)	3660 x 1220, 3016 x 996, 1988 x 996

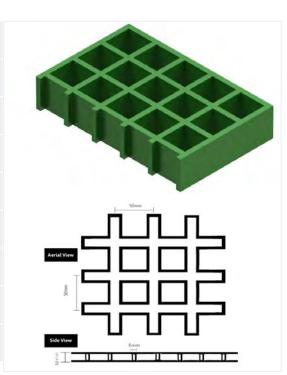


Grating Name	FG04
Grid Size	38X38 SM
Panel Depth	38
Load Bar Thickness	7
Load Bar Centres	38
No. Bars per foot	8
Open Area	68%
Approx. Weight	19.5 kg's/sq.m
Panel Sizes Available (mm)	3660 x 1220, 3016 x 996, 1988 x 996

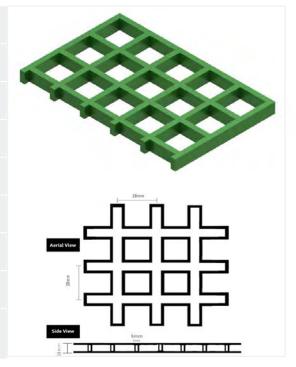




Grating Name	FG05
Grid Size	50×50 SM
Panel Depth	50
Load Bar Thickness	8
Load Bar Centres	50
No. Bars per foot	8
Open Area	71%
Approx. Weight	23.51 kg's/sq.m
Panel Sizes Available (mm)	3660 x 1220

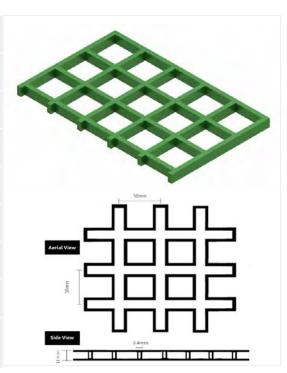


Grating Name	FG06
Grid Size	38X38 SM
Panel Depth	13
Load Bar Thickness	6
Load Bar Centres	38
No. Bars per foot	8
Open Area	78%
Approx. Weight	6 kg's/sq.m
Panel Sizes (mm)	3660 x 1220, 3016 x 996, 3050 x 915

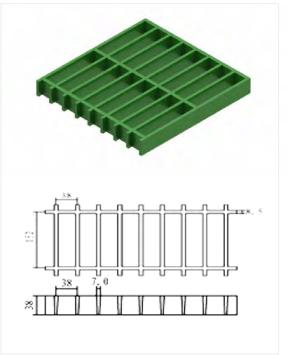




Grating Name	FG07
Grid Size	50X50 SM
Panel Depth	13
Load Bar Thickness	6.4
Load Bar Centres	50
No. Bars per foot	6
Open Area	82%
Approx. Weight	5.77 kg's/sq.m
Panel Sizes (mm)	3660 × 1220, 2440 × 1220, 3050 × 915

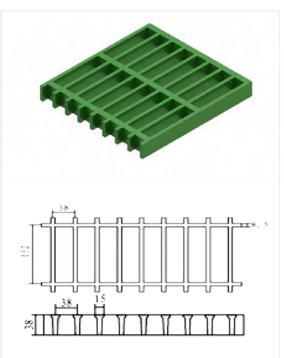


Grating Name	FG08
Grid Size	38X152 RM
Panel Depth	38
Load Bar Thickness	7
Load Bar Centres	38
No. Bars per foot	8
Open Area	67%
Approx. Weight	15.93 kg's/sq.m
Panel Sizes (mm)	3660 x 1220

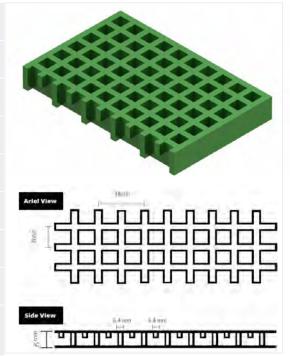




Grating Name	FG09	
Grid Size	38X152 RM	
Panel Depth	38	
Load Bar Thickness	15	
Load Bar Centres	38	
No. Bars per foot	8	
Open Area	67%	53
Approx. Weight	18.62 kg's/sq.m	1-4
Panel Sizes (mm)	3660 x 1220	



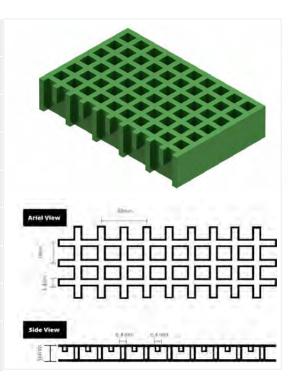
Grating Name	FG10
Grid Size	19X19 SM
Panel Depth	25
Load Bar Thickness	6.4
Load Bar Centres	19
No. Bars per foot	16
Open Area	42%
Approx. Weight	16.81 kg's/sq.m
Panel Sizes (mm)	4000 x 1220, 3660 x 1220, 2440 x 1220, 3050 x 915



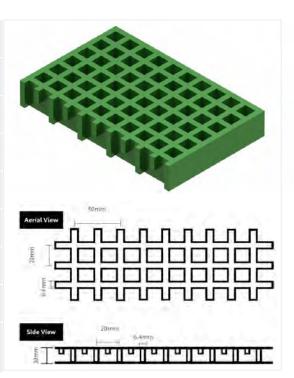


Fibre GRATING

Grating Name	FG11
Grid Size	19X19 SM
Panel Depth	38
Load Bar Thickness	6.4
Load Bar Centres	19
No. Bars per foot	16
Open Area	42%
Approx. Weight	23.51 kg's/sq.m
Panel Sizes (mm)	4000 x 1220, 3660 x 1220, 2440 x 1220, 3050 x 915

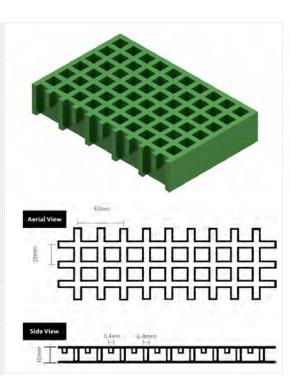


Grating Name	FG12
Grid Size	20X20 SM
Panel Depth	30
Load Bar Thickness	6.4
Load Bar Centres	20
No. Bars per foot	16
Open Area	42%
Approx. Weight	18.03 kg's/sq.m
Panel Sizes (mm)	3007 × 1007

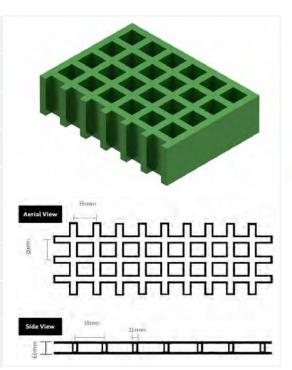




Grating Name	FG13
Grid Size	20X20 SM
Panel Depth	40
Load Bar Thickness	6.4
Load Bar Centres	20
No. Bars per foot	16
Open Area	42%
Approx. Weight	23.7 kg's/sq.m
Panel Sizes (mm)	4007 × 1007, 3007 × 1007



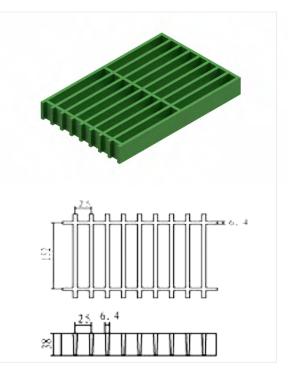
Grating Name	FG14
Grid Size	38X38 SM
Panel Depth	60
Load Bar Thickness	11
Load Bar Centres	38
No. Bars per foot	8
Open Area	57%
Approx. Weight 50.43 kg's/sq.m	
Panel Sizes (mm)	4000 x 1220, 3660 x 1220, 2440 x 1220, 3050 x 915





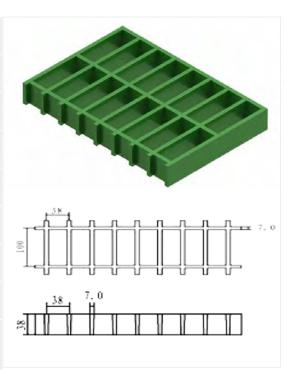
Grating Name	FG15	111
Grid Size	25X100 RM	
Panel Depth	38	
Load Bar Thickness	6.4	
Load Bar Centres	25	15
No. Bars per foot	12	T4####################################
Open Area	46%	
Approx. Weight	21.01 kg's/sq.m	25 13
Panel Sizes (mm)	3660 x 1220	

Grating Name	FG16
Grid Size	25X152 RM
Panel Depth	38
Load Bar Thickness	6.4
Load Bar Centres	25
No. Bars per foot	12
Open Area	56%
Approx. Weight	23.02 kg's/sq.m
Panel Sizes (mm)	3050 × 565

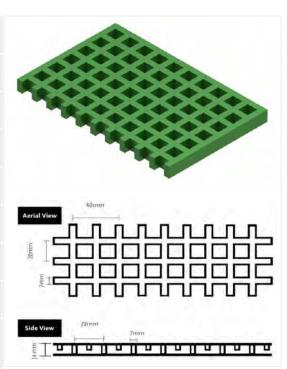




Grating Name	FG17
Grid Size	38X100 RM
Panel Depth	38
Load Bar Thickness	7
Load Bar Centres	38
No. Bars per foot	8
Open Area	62%
Approx. Weight	15.2 kg's/sq.m
Panel Sizes (mm)	3660 x 1220

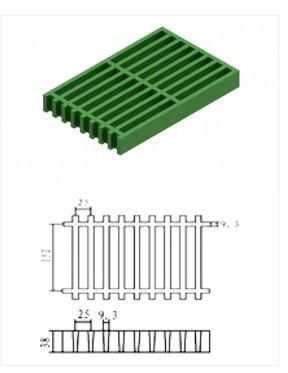


Grating Name	FG18
Grid Size	20X20 SM
Panel Depth	14
Load Bar Thickness	7
Load Bar Centres	20
No. Bars per foot	16
Open Area	42%
Approx. Weight	10 kg's/sq.m
Panel Sizes (mm)	4007 × 1007, 4047 × 1247

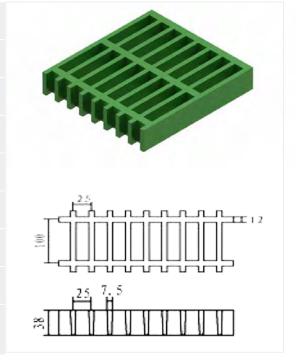




Grating Name	FG19
Grid Size	25X152 RM
Panel Depth	38
Load Bar Thickness	9.3
Load Bar Centres	25
No. Bars per foot	12
Open Area	56%
Approx. Weight	22.43 kg's/sq.m
Panel Sizes (mm)	3660 x 1220, 2440 x 1220, 3050 x 915

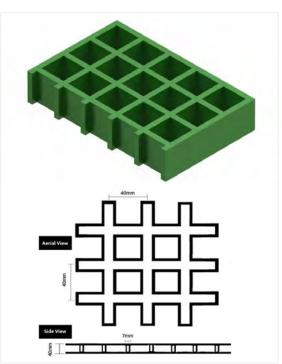


Grating Name	FG20
Grid Size	25X100 RM
Panel Depth	38
Load Bar Thickness	7.5
Load Bar Centres	25
No. Bars per foot	12
Open Area	68%
Approx. Weight	22.43 kg's/sq.m
Panel Sizes (mm)	3660 X 1220, 2440 X 1220, 3050 X 915

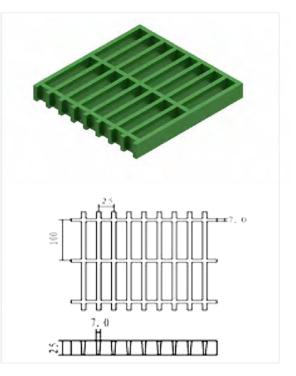




Grating Name	FG21
Grid Size	40X40 SM
Panel Depth	40
Load Bar Thickness	7
Load Bar Centres	40
Open Area	67%
Approx. Weight	19.2 kg's/sq.m
Panel Sizes (mm)	3007 × 1007

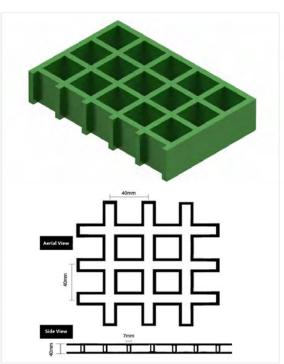


Grating Name	FG22
Grid Size	25X100 RM
Panel Depth	25
Load Bar Thickness	7
Load Bar Centres	40
Open Area	67%
Approx. Weight	19.2 kg's/sq.m
Panel Sizes (mm)	3007 × 1007

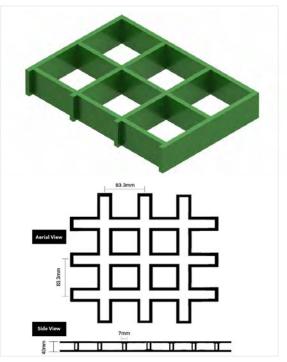




Grating Name	FG23	
Grid Size	40X40 SM	
Panel Depth	25	4
Load Bar Thickness	7	
Load Bar Centres	40	
Open Area	67%	Aerial View
Approx. Weight	12 kg's/sq.m	40rm
Panel Sizes (mm)	3007 × 1007	Side View



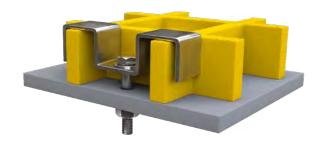
Grating Name	FG24
Grid Size	83.3X83.3 SM
Panel Depth	40
Load Bar Thickness	7
Load Bar Centres	83.3
Open Area	83%
Approx. Weight	9.5 kg's/sq.m
Panel Sizes (mm)	3007 × 1007





GRATING CLIPS

M-CLIP



Grating	Open Mesh	Pultruded
Depth	25mm / 38mm / 50mm	25mm / 38mm

- Direct fixing to support underneath
- M8 Bolt (length to suit grating depth
- Bolt recessed to prevent trip hazard
- Compatible with numerous bolt and screw types
- Stainless steel 316

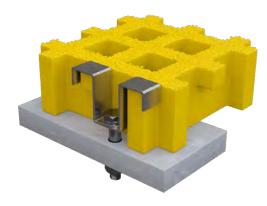
L-CLIP



Grating	Open Mesh
Depth	25mm / 38mm

- Direct fixing to support underneath
- M6 Bolt (length to suit grating depth
- Bolt sunken to prevent trip hazard
- Compatible with numerous bolt and screw types
- Stainless steel 316

TWINGRID (MINI MESH) M-CLIP



Grating	TwinGrid / Mini Mesh
Depth	14mm / 30mm / 38mm

- Direct fixing to support underneath
- M6 Bolt (length to suit grating depth
- Bolt sunken to prevent trip hazard
- Compatible with numerous bolt and screw types
- Stainless steel 316



FibreGRATING

C-CLIP



Grating	Open Mesh	
Depth	25mm / 38mm / 50mm	

- For joining bound edges of 2 panels together
- M6 Bolt with socket head
- Nut fixed in place for easy installation
- Stainless steel 316

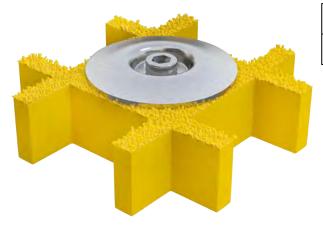
J CLAMP

Grating	Open Mesh	TwinGrid / Mini Mesh	Solid Top	Pultruded
Depth	25mm / 38mm / 50mm	14mm / 30mm / 38mm	28mm / 41mm / 54mm	25mm / 38mm / 50mm



- For clamping to the underside of supports
- Used where direct fixing through supports are not permitted
- Can be used with most grating top clips
- Does not require tightening from underneath
- M8 & M6 bolt compatible (hex nuts required)
- Stainless steel 316

GRATING DISC



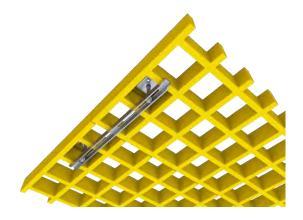
Grating	Open Mesh	Pultruded
Depth	25mm / 38mm	25mm / 38mm / 50mm

- Direct fixing to support underneath
- M6 Bolt (length to suit grating depth
- Bolt sunken to prevent trip hazard
- Compatible with numerous bolt and screw types
- Stainless steel 316



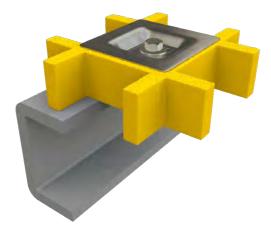
CHANNEL CLAMP

Grating	Open Mesh	TwinGrid / Mini Mesh	Solid Top	Pultruded
Depth	25mm / 38mm / 50mm	14mm / 30mm / 38mm	28mm / 41mm / 54mm	25mm / 38mm / 50mm



- For joining panels together without 2 bound edges
- Can be used with most grating top clips
- 2 of each clip required
- M8 Bolt (length to suit depth of grating)
- Does not require tightening from underneath
- Stainless steel 316

SQUARE RECESSED CLIP



Grating	Open Mesh
Depth	25mm / 38mm / 50mm

- Direct fixing to support underneath
- M8 Bolt (length to suit grating depth
- Bolt recessed to prevent trip hazard
- Compatible with numerous bolt and screw types
- Stainless steel 316

DOME FIXING (WLP)



Grating	TwinGrid / Mini Mesh	Solid Top
Depth	14mm / 30mm / 38mm	28mm / 41mm / 54mm

- Direct fixing to support underneath
- M6 Bolt (length to suit grating depth
- Bolt recessed to prevent trip hazard
- Compatible with numerous bolt and screw types
- Stainless steel 316 or Zinc

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