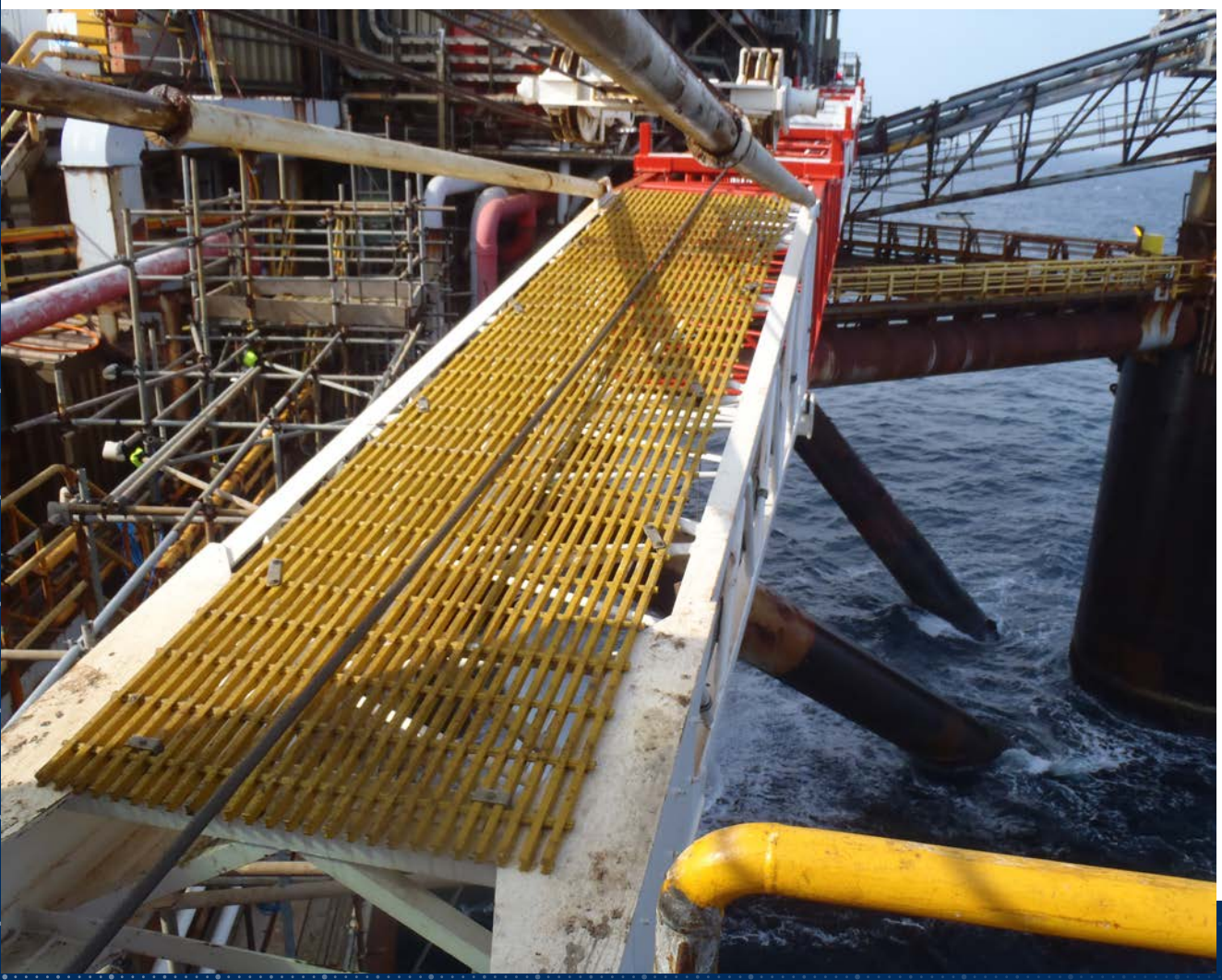
FibreSPAN

GRP Pultruded Grating



DESIGN | SUPPLY | FABRICATE | INSTALL

FIBREGRID

FibreSpan Pultruded Fibreglass Grating is a composite of fibreglass reinforcements (fibres and mat) and a thermosetting resin system produced by the pultrusion process. The bearing bars use both longitudinal (glass roving) and multi-directional (glass mat) reinforcements, as well as a synthetic surfacing veil, to provide strength and excellent corrosion resistance. The unique pultruded system consists of two continuous, pultruded spacer bars and a centre core wedge.

The spacers are notched at each bearing bar so the bars are both mechanically locked and chemically bonded to the web of each bearing bar. This separates and affixes bearing bars firmly in position and distributes concealed load to adjacent bars.

CHARACTERISTICS

- Extremely durable
- Impact resistant
- Anti slip surface
- Fire retardant
- Chemical resistant
- Corrosion resistant
- Lightweight
- Non-magnetic

SUITABLE APPLICATIONS

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

TECHNICAL DATA

Description	Slip resistant pultruded fibreglass flooring system
Top finish:	Standard grit top
Stock colours:	Green or Yellow (any RAL or BS colour subject to extended lead time)
Stock depths:	25mm or 38mm
Panel sizes:	See enclosed list
Chemical resistance:	Made from Iso resin as standard. Please refer to the enclosed list.

TECHNICAL DATA

Tolerances (including cut):	+/- 6mm width, length and diagonal
Depth tolerances:	+/- 1.5mm
Service temperatures:	-50˚C to 105˚C
Load capabilities:	See enclosed list
Flame resistance:	Tested to BS 476: Part 7: 1997 Class 1

SLIP RESISTANCE VALUES

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

Top Surface	Dry Reading	Wet Reading
Grit Top	**70**	**65**

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

CLEANING & MAINTENANCE GUIDE

Whilst Pultruded Grating is extremely resilient to dirt and contaminants, it can as with most other things, become dirty.

Dirt and debris can easily be removed using a stiff brush and should be carried out on a regular basis.

If Pultruded Grating has been subjected to spillages or the dirt has become embedded; detergents such as our SlipGrip® Heavy Duty Degreaser or similar can be used. It is always advisable to test any cleaning product on Pultruded Grating before starting the cleaning procedure. This can be done on an inconspicuous area of the installation, or if preferred, a sample can be sent free of charge for testing purposes.

Using the detergent, warm water and a suitable brush, scrub the areas until clean. The excess water can be removed using a wet/dry vacuum cleaner or suitable absolvable materials.

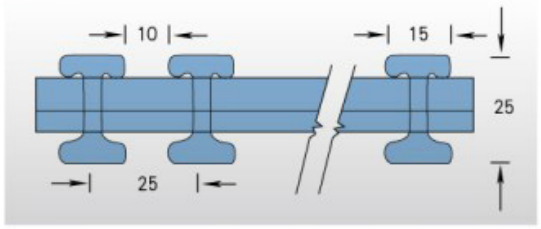
Where circumstances allow, Pultruded Grating can be power washed without causing harm.

The security of the fixings should be checked on a regular basis. Circumstances will vary, based upon the volume of foot traffic etc. but as a guide; monthly inspections would be advisable.

GRATING SPECIFICATION/TYPES

*I—4010

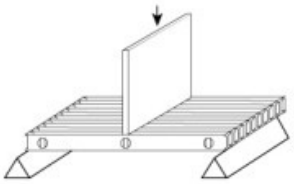
*12 week lead time required



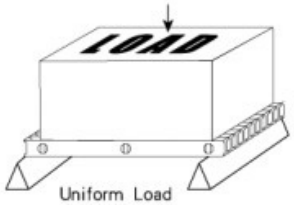
Thickness(mm): 25

Open Area: 40%

Weight(kg/m²): 17.85



Concentrate Line Load



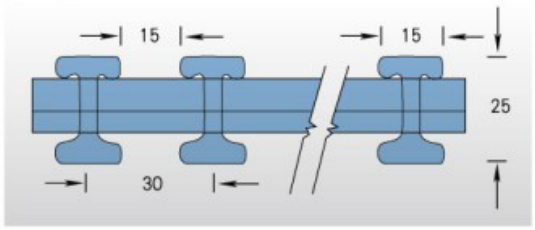
Uniform Load

Deflection (mm) / Loading (kg/m) / Span(mm)	75	150	300	600	750	2000	1% Deflection Load
600	0.167	0.335	0.67	1.34	1.675	4.466	2694
900	0.565	1.13	2.26	4.522	5.652	--	1194
1200	1.34	2.68	5.369	10.718	--	--	671
1500	2.617	5.233	10.467	--	--	--	429

Deflection (mm) / Loading (kg/m²) / Span(mm)	250	500	750	1000	1500	2000	1% Deflection Load
600	0.209	0.419	0.628	0.837	1.256	1.675	7177
900	1.06	2.12	3.179	4.239	6.359	8.478	2122
1200	3.349	6.699	10.048	--	--	--	895
1500	8.117	--	--	--	--	--	458

*I—5010

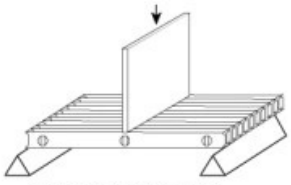
*12 week lead time required



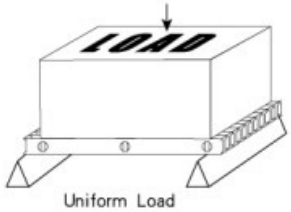
Thickness(mm): 25

Open Area: 50%

Weight(kg/m²): 15.12



Concentrate Line Load



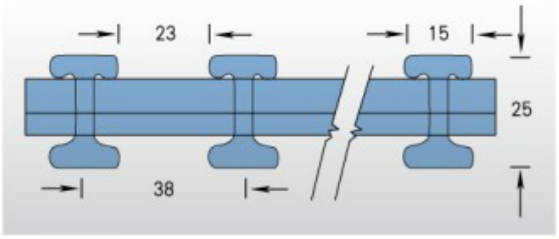
Uniform Load

Deflection (mm) / Loading (kg/m) / Span(mm)	75	150	300	600	750	1000	1% Deflection Load
600	0.197	0.39	0.788	1.576	1.97	2.627	2284
900	0.665	1.33	2.66	5.32	6.65	8.866	1015
1200	1.576	3.15	6.305	--	--	--	571
1500	3.079	6.157	12.314	--	--	--	365

Deflection (mm) / Loading (kg/m²) / Span(mm)	250	500	750	1000	1500	2000	1% Deflection Load
600	0.246	0.49	0.739	0.985	1.478	1.97	6097
900	1.247	2.49	3.74	4.987	7.481	--	1804
1200	3.94	7.88	11.822	--	--	--	761
1500	9.62	--	--	--	--	--	389

*I—6010

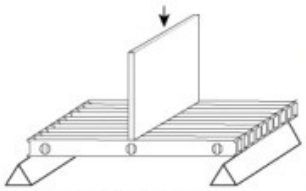
*Available to buy online



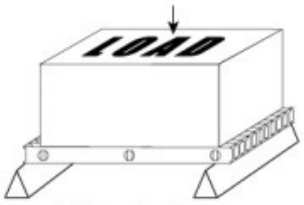
Thickness(mm): 25

Open Area: 60%

Weight(kg/m²): 12.4



Concentrate Line Load



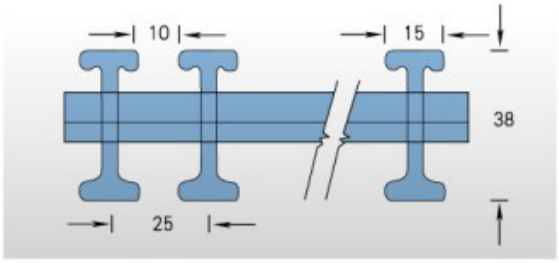
Uniform Load

Deflection (mm) / Loading (kg/m) / Span(mm)	75	150	300	450	600	750	1% Deflection Load
600	0.248	0.496	0.99	1.489	1.985	2.48	1814
900	0.837	1.675	3.349	5.024	6.699	8.374	806
1200	1.985	3.97	7.939	11.909	—	—	453
1500	3.877	7.75	—	—	—	—	290

Deflection (mm) / Loading (kg/m²) / Span(mm)	250	500	750	1000	1500	2000	1% Deflection Load
600	0.3	0.62	0.93	1.24	1.86	2.48	4838
900	1.57	3.14	4.71	6.28	—	—	1433
1200	4.96	9.924	—	—	—	—	604
1500	12.115	—	—	—	—	—	309

*I—4015

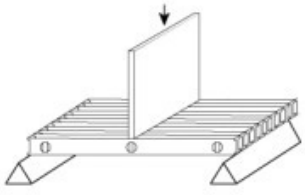
*12 week lead time required



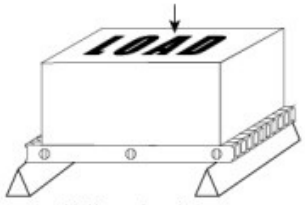
Thickness(mm): 38

Open Area: 40%

Weight(kg/m²): 22.45



Concentrate Line Load



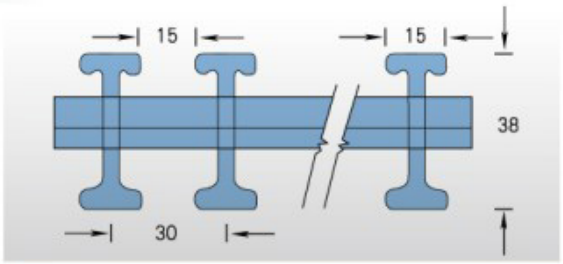
Uniform Load

Deflection (mm) / Loading (kg/m) / Span(mm)	75	150	300	600	1000	1500	1% Deflection Load
900	0.197	0.393	0.786	1.57	2.62	3.93	3426
1200	0.466	0.93	1.863	3.726	6.21	9.316	1931
1500	0.91	1.819	3.639	7.278	12.13	—	1236
1800	1.57	3.14	6.289	12.576	—	—	858
2000	2.156	4.31	8.626	17.25	—	—	695

Deflection (mm) / Loading (kg/m²) / Span(mm)	250	500	750	1000	1500	2000	1% Deflection Load
900	0.368	0.737	1.105	1.474	2.21	2.948	6114
1200	1.164	2.329	3.49	4.658	6.987	9.316	2577
1500	2.84	5.686	8.529	11.372	—	—	1319

*I—5015

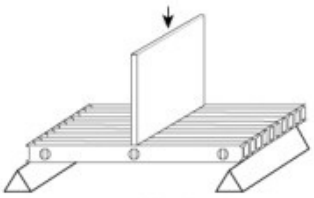
*12 week lead time required



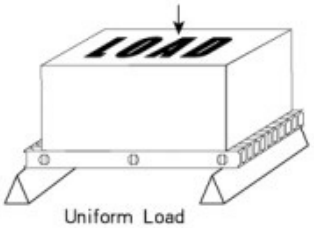
Thickness(mm): 38

Open Area: 50%

Weight(kg/m²): 19.1



Concentrate Line Load



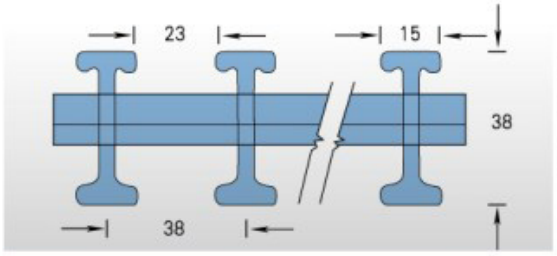
Uniform Load

Deflection (mm) / Loading (kg/m) / Span(mm)	150	300	600	1000	1500	2500	1% Deflection Load
900	0.462	0.925	1.849	3.08	4.624	7.706	2922
1200	1.096	2.192	4.384	7.307	10.96	--	1642
1500	2.14	4.28	8.562	14.27	--	--	1051
1800	3.699	7.398	14.796	--	--	--	730

Deflection (mm) / Loading (kg/m²) / Span(mm)	250	500	750	1000	1500	2000	1% Deflection Load
600	0.086	0.17	0.257	0.34	0.514	0.685	17441
900	0.433	0.867	1.3	1.734	2.601	3.468	5196
1200	1.37	2.74	4.11	5.48	8.22	10.96	2189
1500	3.345	6.689	10.03	13.379	--	--	1121

*I—6015

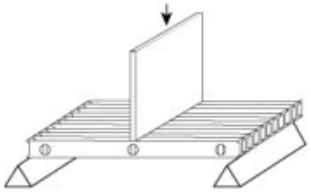
*Available to buy online



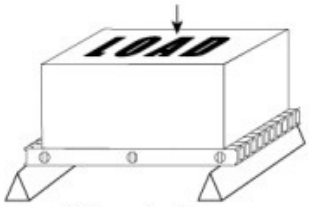
Thickness(mm): 38

Open Area: 60%

Weight(kg/m²): 16.1



Concentrate Line Load



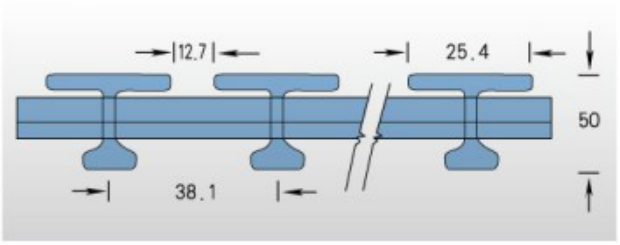
Uniform Load

Deflection (mm) / Loading (kg/m) / Span(mm)	150	300	450	600	1000	2000	1% Deflection Load
600	0.173	0.345	0.518	0.69	1.15	0.86	5232
900	0.58	1.164	1.747	2.329	3.88	4.367	2319
1200	1.38	2.76	4.14	5.52	9.201	--	1304
1500	2.696	5.39	8.087	10.78	--	--	834
1800	4.658	9.316	13.97	--	--	--	579

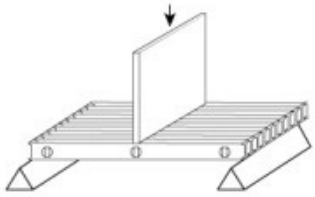
Deflection (mm) / Loading (kg/m²) / Span(mm)	250	500	750	1000	1500	2000	1% Deflection Load
600	0.108	0.216	0.32	0.43	0.647	0.86	13888
900	0.546	1.09	1.638	2.18	3.275	4.367	4120
1200	1.725	3.45	5.175	6.091	10.35	--	1739
1500	4.21	8.42	12.635	--	--	--	890

*T—3320

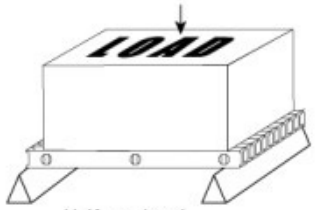
*12 week lead time required



Thickness(mm): 50
Open Area: 33%
Weight(kg/m²): 22.1


Concentrate Line Load

Deflection (mm) / Loading (kg/m) / Span(mm)	300	600	1000	1500	2000	2500	1% Deflection Load
900	0.485	0.97	1.617	2.425	3.234	4.04	5578
1200	1.15	2.3	3.833	5.749	7.665	9.58	3135
1500	2.246	4.49	7.486	11.229	14.97	--	2005
2000	5.32	10.646	17.74	--	--	--	1126
2500	10.397	20.79	--	--	--	--	721

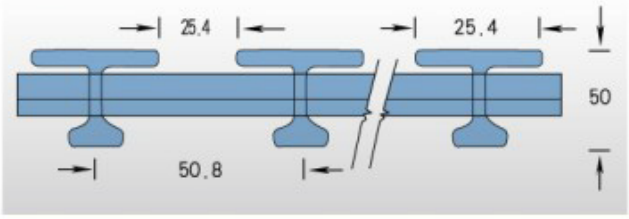


Uniform Load

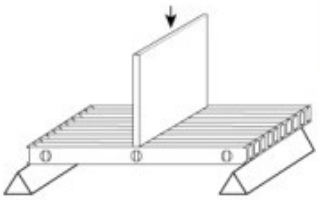
Deflection (mm) / Loading (kg/m²) / Span(mm)	250	500	1000	1500	2000	2500	1% Deflection Load
900	0.227	0.455	0.9	1.36	1.819	2.27	9911
1200	0.719	1.437	2.87	4.31	5.749	7.186	4172
1500	1.75	3.509	7.018	10.527	14.036	--	2137
2000	5.545	11.09	--	--	--	--	901

*T—5020

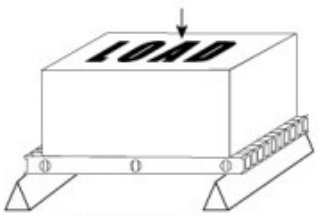
*12 week lead time required



Thickness(mm): 50
Open Area: 50%
Weight(kg/m²): 17.5

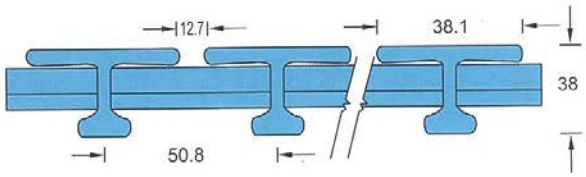

Concentrate Line Load

Deflection (mm) / Loading (kg/m) / Span(mm)	150	300	600	1000	1500	2000	1% Deflection Load
900	0.327	0.655	1.31	2.18	3.27	4.365	4115
1200	0.776	1.55	3.104	5.17	7.76	10.348	2319
1500	1.516	3.03	6.06	10.106	--	--	1484
1800	2.619	5.239	10.478	17.46	--	--	1030
2000	3.59	7.186	14.37	--	--	--	834



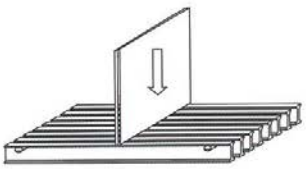
Uniform Load

Deflection (mm) / Loading (kg/m²) / Span(mm)	250	500	1000	1500	2000	2500	1% Deflection Load
900	0.307	0.614	1.228	1.84	2.456	3.07	7328
1200	0.97	1.94	3.88	5.82	7.76	9.701	3092
1500	2.369	4.737	9.47	14.21	--	--	1582
1800	4.91	9.82	--	--	--	--	916
2000	7.486	14.97	--	--	--	--	667



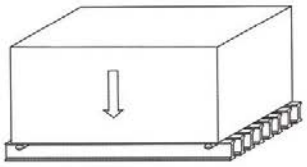
Thickness: 38mm
Open area: 25%
With 3 core interlocking rods: 16.7kg/m^2

T-2515



Concentrated line load-deflection in mm

Span (mm)	Kg/m						Max load
	150	300	450	750	1500	3000	
450	<0.254	0.254	0.254	0.508	1.016	2.286	7539.4
600	0.254	0.508	0.508	1.016	2.032	4.064	6019.6
900	0.508	1.27	1.778	3.048	6.35	12.446	4023
1200	1.524	2.794	4.318	7.112	--	--	3009.8



Uniformed load-deflection in mm

Span (mm)	Kg/m						Max load
	450	950	1450	2400	4850	9500	
450	<0.254	0.254	0.254	0.508	1.016	2.032	16494.4
600	0.254	0.508	0.762	1.27	2.54	5.08	12346.4
900	1.27	2.286	3.556	5.842	11.684	--	8247.2
1200	3.556	7.112	10.668	--	--	--	4928.8

CHEMICAL RESISTANCE TABLE

Chemical	Iso concentration (%)	Temperature F/°C	Vinyl Ester concentration (%)	Temperature F/°C
Acetic Acid	50	125/50	50	185/85
Acetone	N/R	N/R	100	75/25
Aluminium Salts	All	160/70	All	195/90
Ammonium Chloride	All	160/70	All	185/85
Ammonium Hydroxide	28	N/R	28	100/38
Ammonium Carbonate	N/R	N/R	All	150/65
Ammonium Bicarbinate	15	125/50	All	125/50
Ammonium Nitrate	All	160/70	All	185/85
Benzene	N/R	N/R	100	140/60
Benzene Sulfuric Acid	25	115/45	All	195/90
Benzoic Acid	All	150/65	All	195/90
Calcium Hydroxide	25	150/65	35	185/85
Calcium Hypochlorite	All	150/65	All	185/85
Calcium Salts	All	150/65	All	195/90
Calcium Nitrate	All	185/85	All	195/90
Carbonic Acid	All	125/50	All	185/85
Carbon Tetrachloride	100	75/25	100	140/60
Chlorine Dioxide	N/R	140/60	All	140/60
Chlorine Water	All	150/65	All	125/50
Chromic Acid	100	75/25	10	185/85
Citric Acid	All	N/R	All	185/85
Copper Salts	All	150/65	All	185/85
Ethanol	50	75/25	50	85/30
Ferric Chloride	100	150/65	100	185/85
Ferric Salt	All	150/65	All	185/85
Glycerine	100	150/65	100	195/90
Heptane	100	105	100	125/50
Hydrobeomic Acid	50	125/50	50	125/50
Hydrochloric Acid	37	75/25	37	95/35
Hydrocyanic Acid	All	150/65	All	185/85
Hydrogen Peroxide	10	75/25	30	125/50
Hypochlorides Acid	20	85/30	20	150/65
Lactic Acid	All	170/75	All	195/90
Lead Acetate	All	170/75	All	195/90
Lead Chloride	All	140/60	All	195/90
Lead Nitrate	All	150/65	All	195/90
Lime Slurry	All	150/65	All	185/85
Magnesium Salts	All	150/65	All	185/85
Maleic Acid	100	150/65	100	185/85
Mercury Chloride	100	150/65	100	185/85
Nickel Salts	All	170/75	All	195/90
Nitric Acid	20	75/25	20	105/40
Perchloric Acid	N/R	N/R	30	85/30
Phosphoric Acid	100	125/50	100	195/90
Potassium Salts	All	150/65	All	185/85
Opthalmic Acid	-	-	All	185/85
Silver Nitrate	100	150/65	100	185/85
Sodium Hypochlorite	N/R	N/R	10	150/65
Sodium Salts	All	75/25	All	105/40
Stannic Chloride	All	160/70	All	195/90

Chemical	Iso concentration (%)	Temperature F/°C	Vinyl Ester concentration (%)	Temperature F/°C
Sulfuric Acid	50	N/R	50	185/85
Sulfuric Acid	25	75/25	25	195/90
Tartaric Acid	All	170/75	All	195/90
Trisodium Phosphate	N/R	N/R	All	170/65
Urea	All	125/50	All	140/60
Vinegar	100	170/75	100	195/90
Water, Distilled	100	170/75	100	195/90
Water, Sea	All	170/75	All	195/90
Zinc Salts	100	150/65	100	185/85

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.

FITTING THE PANELS

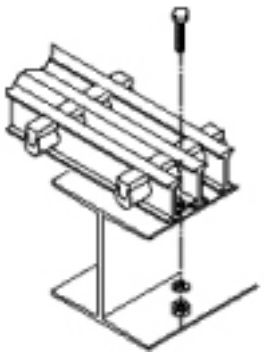
'M' Clips:

Set out where you will be positioning your grating clips, a guide would be in each corner and then every 500mm space.

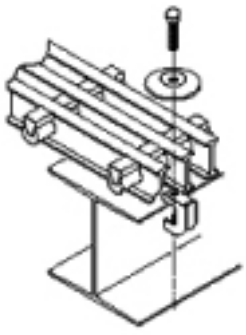
Push the clips into the open mesh so that the clip sits neatly on the load bar(s) and the base of the clip is sitting close to the bottom of the grating panel.

If you are fixing directly onto the existing surface; pilot drill through the hole in the clip and into the substrate, then fix using the appropriate screw and plug. If you are fixing into a support frame you will need to drill through the frame and then put through bolt fitting and tighten the washer and nut underneath the frame.

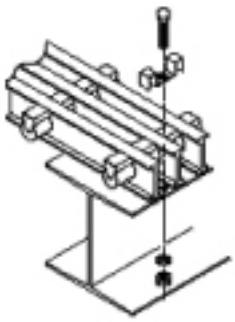
All clips are made from 316 stainless steel. Installation recommendation, whenever possible, provided for a minimum of 40mm bearing support at all grating support points. Hold down clips should be used at the rate of one clip for every 6 square feet (0.56 square metres) of grating minimum, or at least 4 clips for any square or rectangular piece, or at least 3 for a triangular piece.



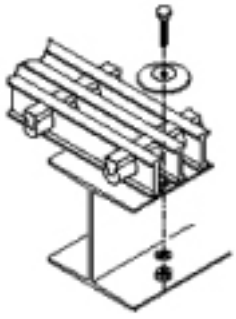
PP Fixing



GP Fixing



MP Fixing



WP Fixing

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