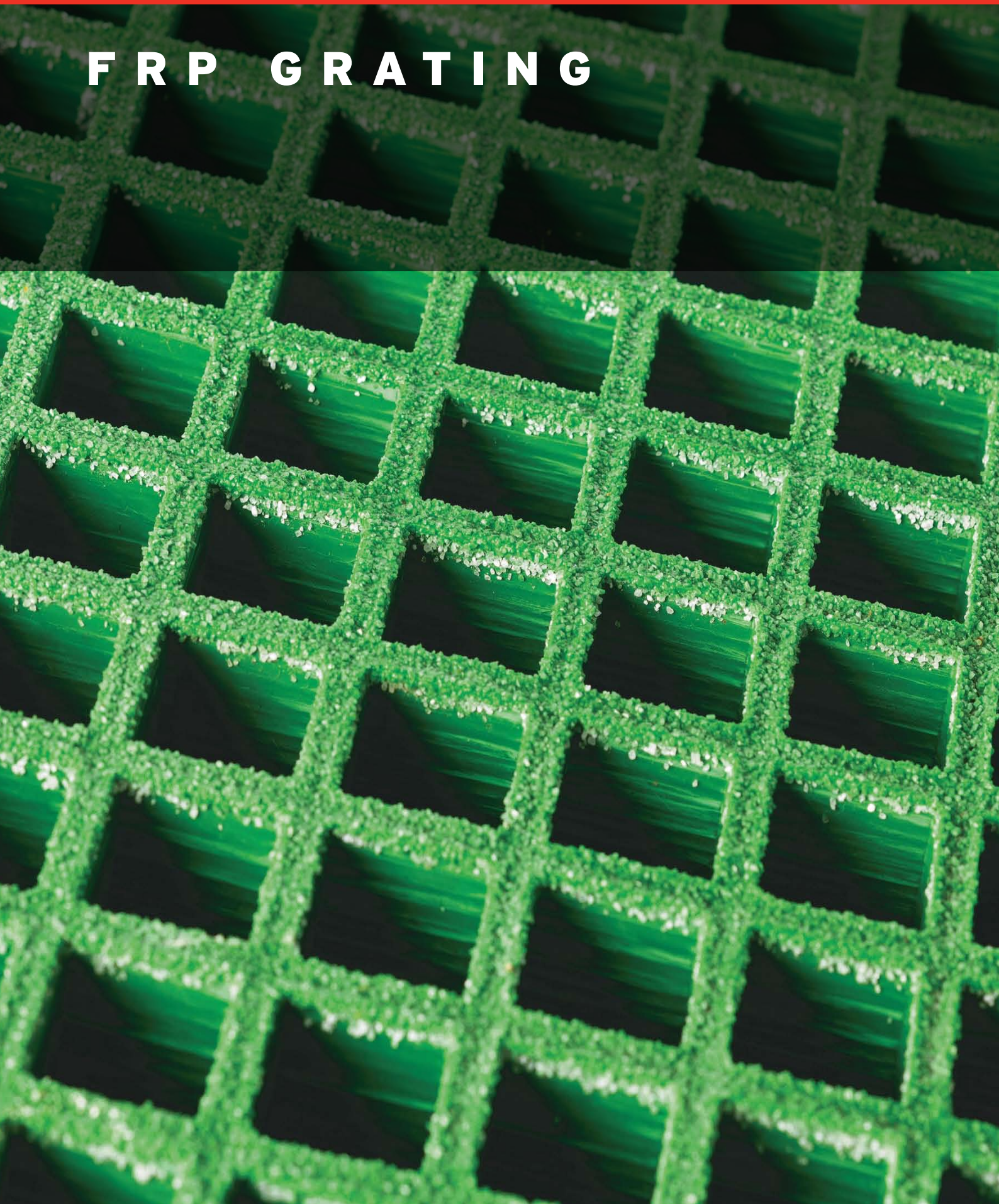




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# FRP GRATING



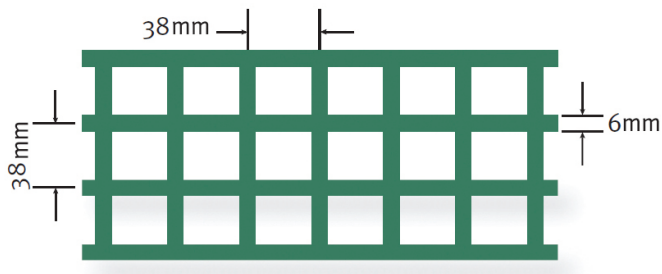




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## Patterns:

### Standard Mesh



### Standard panel size:

3660 x 1220mm

### Weight of standard panel:

25mm depth = 51kg (11.4kg/m<sup>2</sup>)

38mm depth = 82kg (18.3kg/m<sup>2</sup>)

Integral, one piece moulded construction distributes load evenly to bi-directional bearing bars.

### One mesh pattern:

38 x 38 square mesh 70% open area

6mm thick load bearing bars in both directions

### Two resin types:

**Type 'I'** (green) uses isopathalic polyester resin with Class 1 flame spread rating of 25 or less, while providing excellent corrosion resistance over a broad range of chemicals.

**Type 'V'** (yellow) uses vinyl ester resin base with Class 1 flame spread rating of 25 or less, providing superior corrosion resistance to acidic environments and moderate resistance to caustic and solvent applications.

### Product Coding:

Part No.	Description
<b>Isopathalic 'I' Green Fibreglass Grating</b>	
ISO25-3660x1220	25mm Green FRP Grating 3660 x 1220
ISO38-3660x1220	38mm Green FRP Grating 3660 x 1220
ISO38ST-3054x565	38mm Green FRP Grating 3054 x 565
<b>Vinyl Ester 'V' Yellow Fibreglass Grating</b>	
VE25-2440 x 1220	25mm Yellow FRP Grating 2440 x 1220
VE25-3660 x 1220	25mm Yellow FRP Grating 3660 x 1220
VE38-2440 x 1220	38mm Yellow FRP Grating 2440 x 1220
VE38-3660 x 1220	38mm Yellow FRP Grating 3660 x 1220
VE38ST-3054 x 565	38mm Yellow FRP Grating 3054 x 565

Other colours and grid sizes are available.  
Conditions apply.

## FRP Grating

### What is FRP?

Locker Group FRP is a one piece, fully moulded fibre reinforced plastic grating. Primarily used for flooring, access walkways, platforms, screening, battery racks, bridges, sump / trench covers, machine guards and stair treads.

Initially designed for caustic or corrosive environments, the product is also a viable alternative to flooring products such as aluminium or stainless steel grating.

Locker Group can supply panels as stock sheets (3660x1220 mm)

### Benefits

- **Excellent strength** to weight ratio. Its interwoven fibre one piece square pattern construction allows for applied loads to be evenly distributed to adjoining bars.
- Grit top surface provides superb anti-slip properties.
- Locker Group FRP has **excellent corrosion** resistance properties. Please refer to the chemical resistance table.
- **Fire Resistant:** Locker Group FRP has a Class 1 flame spread rating of 25 or less, and has been tested with ASTM E-84 Tunnel test method.
- **Non-Sparking:** Locker Group FRP is ideally suited for areas where combustible gases may be present, which have the potential to explode or cause fire from accidental sparks caused by steel objects being dropped on steel grating.
- **Non - Magnetic:** Locker Group FRP is also ideal for installations sensitive to magnetic fields.
- **Non-Conductive:** Ideal for work platforms in potential electrically hazardous areas.
- **Light weight:** Panels can be easily installed on site without mechanical hoists.
- **Minimal wastage:** Locker Group FRP's square pattern design offers the best utilisation of custom made panels.
- **Ideal for site work:** Locker Group FRP is easily cut using standard cutting tools to suit complicated site installation work. Locker Group FRP sealing kits are also available to seal cut edges after fabrication.

## FRP Load Table

Product	Load Bar Size mm	Loadbar Spacing mm	Mass kg/m <sup>2</sup>	4kPa 5mm Defl Span	SPAN mm				
					450	600	750	900	1200
ISO 25	6 x 25	38	12.1	750	U	12	6	2.5	2
VE25					D	2	2.9	3.5	4.7
ISO 38	6 x 38	38	18.6	1050	U	20	15	10	7.5
VE38					D	1.4	2.1	3.4	4.8

Spans in the darker shading (to the left of the heavy line) have a deflection of less than 5mm for a 4kPa uniformly distributed load.

# FRP Grating

## Locker FRP Grating - Chemical Resistance Table

CHEMICAL ENVIRONMENT	% Concentration	°C TEMP	Vinyl Ester	Isophthalic
Aceyic Acid	25	MAX	C	C
Acetic Acid	50	MAX	C	C
Aluminum Hydroxide	ALL	MAX	C	C
Ammonium Chloride	ALL	48.8	C	C
Ammonium Bicarbonate	15	48.8	C	C
Ammonium Bicarbonate	50	48.8	C	C
Ammonium Hydroxide	20	26.6	S	N
Ammonium Sulfate	ALL	488	C	C
Benzene	100	65.5	I	I
Benzoic Acid (SAT)	SAT	MAX	C	C
Borax (SAT)	SAT	MAX	C	C
Calcium Carbonate	ALL	MAX	C	C
Calcium Nitrate	ALL	MAX	C	C
Carbon Tetrachloride	100	26.6	I	N
Chlorine, Dry Gas *	ALL	MAX	C	C
Chlorine Water (SAT)	SAT	48.8	C	I
Chromic Acid	50	65.5	I	N
Citric Acid	ALL	MAX	C	C
Copper Chloride	ALL	MAX	C	C
Copper Cyanide	ALL	60	C	S
Copper Nitrate	ALL	MAX	C	C
Ethanol	10	488	C	S
Ethanol	50	488	C	I
Ethylene Glycol	ALL	65.5	C	C
Ferric Chloride	100	MAX	C	C
Ferrous Chloride	ALL	MAX	C	C
Formaldehyde 0-50%	50	48.8	S	I
Gasoline	ALL	48.8	C	C
Glucose	ALL	48.8	C	C
Glycerin	100	MAX	C	C
Hydrobromic Acid	50	MAX	S	S
Hydrochloric Acid	10	MAX	C	S
Hydrochloric Acid	37	MAX	I	S
Hydrogen Peroxide	30	26.6	C	N

CHEMICAL ENVIRONMENT	% Concentration	°C TEMP	Vinyl Ester	Isophthalic
Lactic Acid	100	MAX	C	C
Lithium Chloride (SAT)	SAT	MAX	N	N
Magnesium Chloride	ALL	MAX	C	C
Magnesium Nitrate	ALL	MAX	C	C
Magnesium Sulfate	ALL	MAX	C	C
Mercuric Chloride	ALL	MAX	C	C
Mercurous Chloride	ALL	MAX	C	C
Nickel Chloride	ALL	MAX	C	C
Nickel Sulfate	ALL	MAX	C	C
Nitric Acid	20	48.8	S	S
Oxalic Acid	ALL	65.5	C	C
Perchloric Acid	30	32.2	S	I
Phosphoric Acid	80	MAX	C	C
Potassium Chloride	ALL	MAX	C	C
Potassium Dichromate	ALL	MAX	C	C
Potassium Nitrate	ALL	MAX	C	C
Potassium Sulfate	ALL	MAX	C	C
Propylene Glycol	ALL	MAX	C	C
Sodium Acetate	ALL	MAX	C	C
Sodium Bisulfate	ALL	26.6	S	S
Sodium Bromide	ALL	26.6	C	C
Sodium Cyanide	ALL	26.6	C	I
Sodium Hydroxide	10	MAX	C	I
Sodium Hydroxide	50	MAX	S	N
Sodium Nitrate	ALL	MAX	C	C
Sodium Sulfate	ALL	MAX	C	C
Sulfuric Acid	10	MAX	C	S
Sulfuric Acid	25	MAX	C	S
Sulfuric Acid	75	37.7	C	I
Tartaric Acid	ALL	MAX	C	C
Vinegar	ALL	MAX	C	C
Water, Distilled	ALL	MAX	C	C
Zinc Nitrite	100	MAX	C	C
Zinc Sulfate	100	MAX	C	C

C = Continuous exposure of the grating to the Chemical Environment listed at the temperature listed

S = Frequent exposure of the grating to splashes and spills the Chemical Environment listed with that environment at the temperature listed

I = Infrequent Exposure of the grating to splashes and spills from the Chemical Environment listed with that environment at the temperature listed and the spill immediately cleaned up or washed from the grating .

N = Not recommended for the concentrations and temperatures listed

T =Test

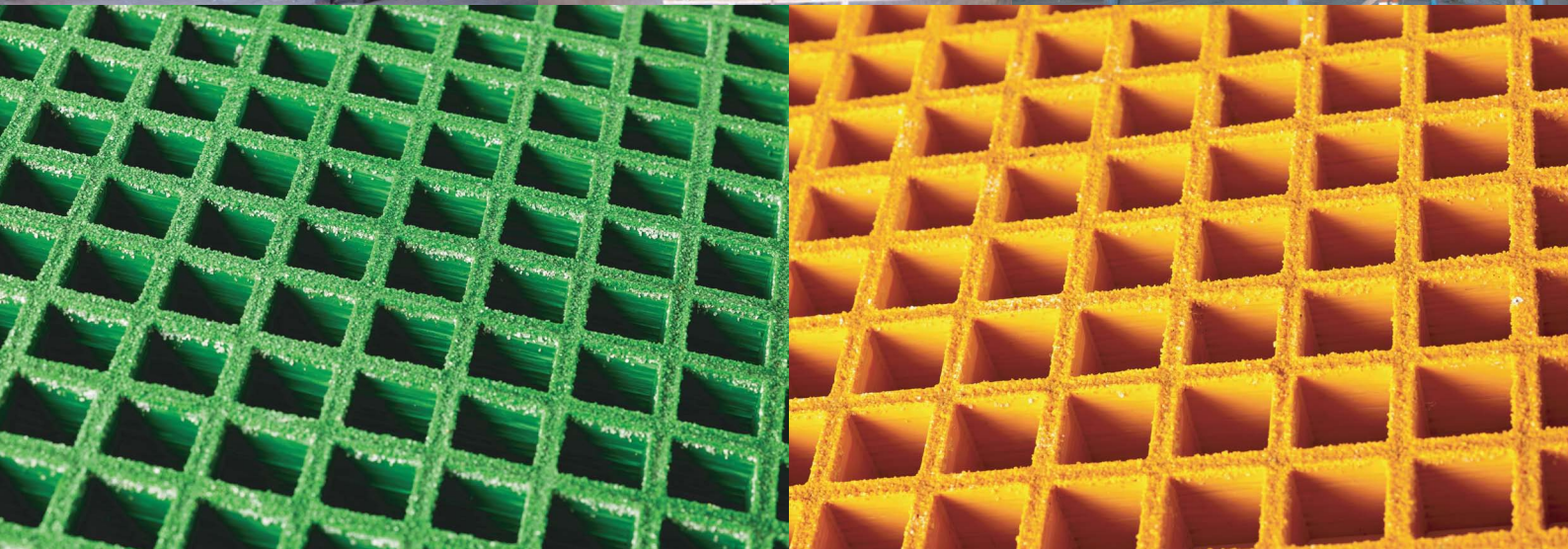
MAX = indicates temperature of 85°C for molded Vinyl Ester . 71°C for moulded Isophthalic grating.

ALL = All concentrations

SAT = Saturated solution



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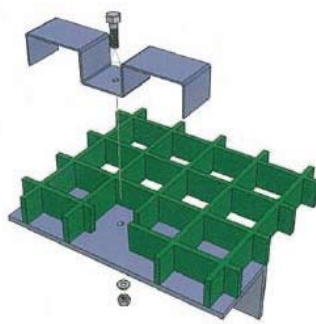


## FRP Fixing Clips

Locker Group has a range of fixing clips available.



Type FRP S/S Clip



Type M38 S/S Clip



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