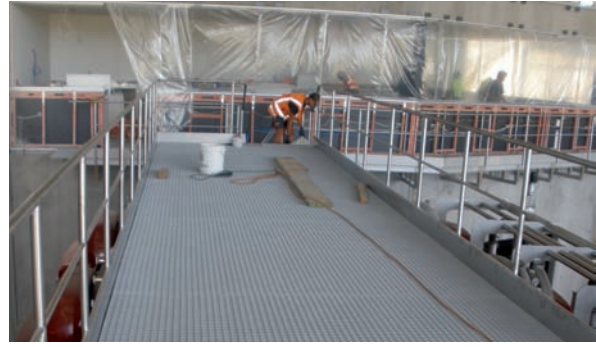
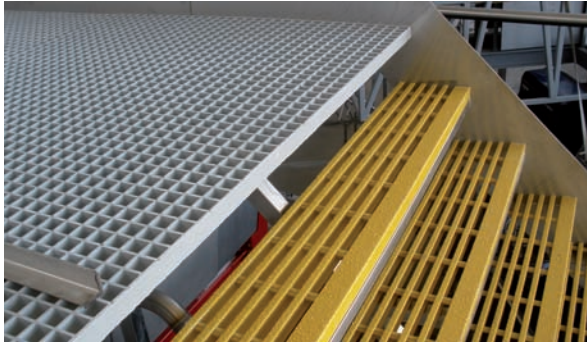


# STEEL GRATING F.R.P. GRATING



Steel Grating. 3 Mountview Place, Christchurch, New Zealand. Email: [steelgrating@xtra.co.nz](mailto:steelgrating@xtra.co.nz) Web: [www.steelgrating.co.nz](http://www.steelgrating.co.nz)



## STEEL GRATING F.R.P. GRATING

Steel Grating Limited supplies F.R.P grating and hand rails to suit all types of applications.

F.R.P grating and hand rails have many advantages over mild and galvanised steel grates. These include:

- Lightweight design
- Low conductivity
- Food safety ratings
- Fire ratings and many more

Steel Grating Limited mainly supplies F.R.P grating in isophthalic polyester. Many other types are available.

Steel Grating Limited hold the following stock sheets:

- 1220 x 3660 x 32 mm in yellow concave top
- 1220 x 3660 x 38mm in grey concave top
- 1220 x 3660 x 38mm in green grit top

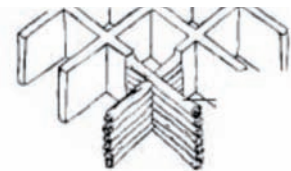
We can also supply F.R.P to any custom size and colour

- F.R.P. standard sheets sizes 1220 x 3660
- Standard thickness are 32mm x 38mm
- Other thickness are made to order
- Standard stock colours are yellow, grey, green
- Other colours are available but are made to order
- Resin for stock sheets isophthalic polyester
- Other resins are available but are made to order
- Mesh size (openings) 38mm x 38mm square to centres

Pultruded grating: please contact Steel Grating for more information on this product.

## STEEL GRATING CORROSION AND CHEMICAL RESISTANCE

Steel Grating Limited's molded grating is manufactured in an open, heated mold. Continuous E-glass fibres are placed in the mold in alternating layers, and are completely wetted out with resin. This continuous process produces an integral, one piece construction which provides excellent corrosion resistance as well as bi-directional strength. Many types of mesh and panel sizes can be obtained as per different mold design.



Corrosion can be a major problem for metal grating, stair treads and other products in industries such as chemical plants, food and beverage factories, water and waste facilities and power facilities. Steel Grating Limited's molded grating has been particularly designed to provide safe, long lasting, economical and worry-free solutions in environments where chemicals and other corrosive elements attack and destroy metal.

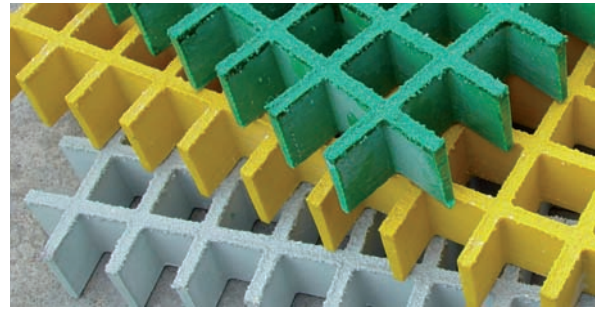
## STEEL GRATING SLIP RESISTANCE

Slips and falls are the major enemy in many different industries- leading to injuries within the workplace. Steel Grating Limited's slip resistant molded gratings have consistently reduced slips and falls in industrial facilities. Our grating, stair treads, covers and plates feature a long-lasting, slip-resistant surface. Even after years of abuse, our molding grating provides significantly higher slip resistance than metal, wood or concrete floors.



Steel Grating Limited molded grating has a meniscus (concave) top surface for slip resistance. This is created after it is extracted from the mold. Should a grit surface be specified, the grit will either be bonded to the top of the completed panel grating as a secondary operation or embedded into the top of the grating before heating.

- Steel Grating Limited has three types of surface systems to offer maximum slip resistance for most applications:
- A concave top surface formed naturally during the molding process
- An embedded grit surface
- A post-cure grit surface
- Diamond top or gritted colour tops are available on request.



Chemical	Type 'Vinyl'		Type 'Iso'		Type 'Ortho'	
	% Conc.	Max. Oper.Temp. F/C	%Conc	Max.Oper.Temp. F/C	%Conc.	Max.Oper.Temp. F/C
Acetic Acid	50	180/82	50	125/52	25	N/R
Aluminium Hydroxide	100	180/82	100	160/71	ALL	
Ammonium Chloride	ALL	210/99	ALL	170/77	ALL	
Ammonium Bicarbonate	50	160/70	15	125/52	ALL	
Ammonium Hydroxide	28	100/38	28	N/R	ALL	N/R
Ammonium Sulphate	ALL	210/99	ALL	170/77	ALL	
Benezene	ALL	210/99	ALL	N/R	ALL	N/R
Benzoic Acid	SAT	N/R	SAT	150/66	ALL	77/25
Borax	SAT	210/99	SAT	170/77	ALL	
Calcium Carbonate	ALL	180/82	ALL	170/77	ALL	
Calcium Nitrate	ALL	210/99	ALL	180/82	ALL	
Carbon tetrachloride	100	150/65	100	N/R	100	N/R
Chlorine, Dry Gas		210/99		140/60		N/R
Chlorine Water	SAT	200/93	SAT	80/27	SAT	N/R
Chromic Acid	10	150/65	5	70/21	5	N/R
Citric Acid	ALL	210/99	ALL	170/77	ALL	77/25
Copper Chloride	ALL	210/99	ALL	170/78	ALL	104/40
Copper Cyanide	ALL	210/99	ALL	170/79	ALL	77/25
Copper Nitrate	ALL	210/99	ALL	170/80	ALL	
Ethanol	50	100/38	50	75/24	10	77/25
Ethylene Glycol	100	200/93	100	90/32	100	104/40
Ferric Chloride	ALL	210/99	ALL	170/77	ALL	104/40
Ferrous Chloride	ALL	210/99	ALL	170/77	ALL	86/30
Formaldehyde	ALL	150/65	50	75/24	25	
Gasoline	100	180/82	100	80/27	100	77/25
Glucose	100	210/99	100	170/77	ALL	
Glycerin	100	210/99	100	150/66	100	
Hydrobromic Acid	50	150/65	50	120/49	18	
Hydrochloric Acid	37	150/65	37	75/24	10	86/30
Hydrogen Peroxide	30	150/65	5	100/38	5	N/R
Lactic Acid	ALL	210/99	ALL	170/77	ALL	77/25
Lithium Chloride	SAT	210/99	SAT	150/66	ALL	
Magnesium Chloride	ALL	210/99	ALL	170/77	ALL	104/40

Magnesium Nitrate	ALL	210/99	ALL	140/60	ALL	86/30
Magnesium sulphate	ALL	210/99	ALL	170/77	ALL	104/40
Mercuric Chloride	100	210/99	100	150/66	100	104/40
Mercurous Chloride	ALL	210/99	ALL	140/60	ALL	104/40
Nickel Chloride	ALL	210/99	ALL	170/77	ALL	104/40
Nickel Sulphate	ALL	210/99	ALL	170/77	ALL	104/40
Nitric Acid	70	120/49	20	70/21	2	N/R
Oxalic Acid	ALL	210/99	ALL	75/24	ALL	N/R
Perchloric Acid	30	100/38	10	N/R	10	N/R
Phosphoric Acid	100	210/99	100	120/49	80	N/R
Potassium Chloride	ALL	210/99	ALL	170/77	ALL	104/40
Potassium Dichromate	ALL	210/99	ALL	170/77	ALL	77/25
Potassium Nitrate	ALL	210/99	ALL	170/77	ALL	104/40
Potassium Sulphate	ALL	210/99	ALL	170/77	ALL	104/40
Propylene Glycol	ALL	210/99	ALL	170/77	ALL	104/40
Sodium Acetate	ALL	210/99	ALL	160/71	ALL	104/40
Sodium Bisulfate	ALL	210/99	ALL	170/77	ALL	
Sodium Bromide	ALL	210/99	ALL	170/77	5	
Sodium Cyanide	ALL	210/99	ALL	170/77	5	N/R
Sodium Hydroxide	25	180/82	N/R	N/R	1	N/R
Sodium Nitrate	ALL	210/99	ALL	170/77	ALL	104/40
Sodium Sulfate	ALL	210/99	ALL	170/77	ALL	104/40
Stannic Chloride	ALL	210/99	ALL	160/71	ALL	104/40
Sulfuric Acid	75	100/38	25	75/24	10	
Tartaric Acid	ALL	210/99	ALL	170/77	ALL	
Vinegar	100	210/99	100	170/77	ALL	
Water, Distilled	100	180/82	100	170/77	ALL	86/30
Zinc Nitrate	ALL	210/99	ALL	170/77	ALL	104/40

Product	Load Bar Size	Mass (kg/m <sup>2</sup> )	U=kPa	Simple Span (mm)					4kPa 5mm defl Span
				450	600	750	900	1200	
				Deflection mm					
FRP326	32 x 6	12.1	2.5	0.18	0.65	1.78	3.91	10.10	900mm
			3.0	0.22	0.75	2.25	4.81	12.12	
			4.0	0.30	1.05	3.09	6.17		
			5.0	0.38	1.45	3.59	7.67		
			7.5	0.62	1.95	5.28	11.27		
			10.0	0.75	2.60	9.96			
FRP386	38 x 6	18.6	2.5	0.1	0.27	0.98	1.68	4.7	1050mm
			3.0	0.12	0.32	1.4	2.03	5.64	
			4.0	0.17	0.43	1.71	2.7	7.52	
			5.0	0.21	0.53	2.02	3.38	9.4	
			7.5	0.31	0.8	2.81	5.06	14.1	
			10.0	0.41	1.06	3.59	6.75	18.8	
			15.0	0.63	1.6	5.16	10.13		

