

# Moulded Grating

## New Age Alternative to traditional materials

- Corrosion resistant
- High strength to weight ratio
- Slip resistant
- Electrically & thermally non-conductive
- Low maintenance
- Impact resistant
- Fire retardant
- Low install cost
- Long service life



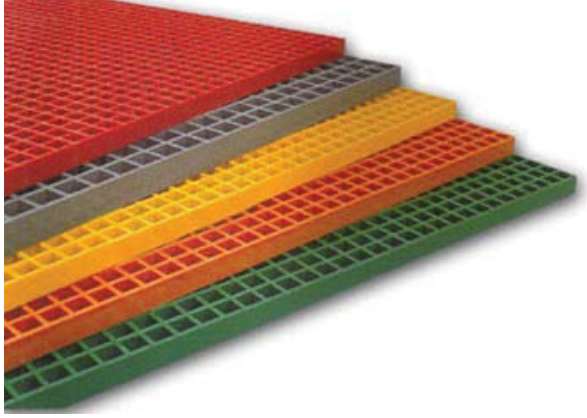
FRP Moulded grating combines unsurpassed corrosion resistance with high bi-directional strength and long service life, to be the first choice alternative to traditional materials such as galvanised steel, aluminium and stainless steel.

Moulded FRP grating is manufactured using premium grade fibreglass rovings combined with a choice of many different thermosetting resin systems to suit just about any application. All of the resins systems are supplied with a UV inhibitor as standard.

Depending on your specific requirements, FRP moulded grating can be supplied in various thicknesses from 12mm to 100mm and multiple mesh configurations. So whether you just need a slip resistant surface to walk on once a year or an access-way trafficable by heavy vehicles, there is an FRP grating to suit.

Manufactured with either a concave surface or applied quartz grit for slip resistance, FRP moulded grating complies with AS/NZS 4586:2004 "slip resistance of pedestrian surface materials" and achieves an R13 classification.

**FRP Moulded Grating is available in many thicknesses, colours and resin systems.**



Thickness mm	Mesh mm	Weight m2	Panel Sizes							
			615 x 3660	615 x 2895	915 x 3050	1000 x 4080	1220 x 2440	1220 x 3660	1247 x 3687	1525 x 3050
13	38 x 38	8.6					x	x		
	50 x 50	8.2							x	
15	38 x 38	9.8	x	x					x	
25	38 x 38	11.9			x	x	x	x		x
38	38 x 38	18.2			x	x	x	x	x	x
50	50 x 50	22.2						x	x	x

\* Other panel and mesh configurations also available. Please ask for details.

## Resin Systems

FRP Engineering offers 4 resin options as standard for Moulded Floor Grating.

**Ortho – (OR)** - A medium duty resin that offers excellent performance in areas where moisture is prevalent. Our most economical system that is useful for architectural and light industrial applications.



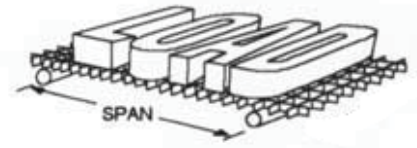
**Isophthalic Fire Retardant – (ISOFR)** - The most popular resin system for marine and industrial applications. ISOFR provides long lasting performance in areas where corrosion is traditionally an issue. The inclusion of Fire Retardant additives gives the grating a low flame spread score.

**Vinyl Ester Fire Retardant – (VEFR)** – The premium resin for all applications. VEFR is designed to offer a long service life in the harshest of environments where acids and caustics are present. Moulded grating constructed from this resin is used in, among others, Heavy industry, chemical plants, and fertiliser operations. The inclusion of Fire Retardant additives gives the grating a low flame spread score.

**Phenolic – (P)** – A highly specialised resin designed to be used in areas where fire resistance and smoke suppression are critical. Typically, this type of grating is used in offshore and confined space applications to assist in providing safe access and egress in emergency situations. This grating has very low flame spread index and very low smoke emissions.

## Industries Serviced

■ Offshore & Marine ■ Petro-chemical ■ Refining ■ Communications  
 Water/Wastewater ■ Transportation ■ Pulp & Paper ■ Mining ■ Metal  
 Plating ■ Food & Beverage ■ Textile ■ Recreational Water Parks &  
 Pools ■ Electrical & Power Generation ■ Zoos and Aquariums ■  
 Military ■ Medical ■ Shipping



## Uniform Load

Clear Span mm	Thickness mm	Mesh mm x mm	Uniform Load = kN/M <sup>2</sup> (Deflection in mm)							Max. Load (kN/M <sup>2</sup> )	Ultimate (kN/M <sup>2</sup> )
			2.5	3	5	10	25	50	100		
300	25	38 x 38	< 0.20	< 0.20	< 0.20	0.25	1.02	2.03	4.06	75.65	324.14
	38	38 x 38	0.1	0.1	0.1	0.2	0.5	1	2	103.07	824.55
	50	50 x 50	< 0.10	< 0.10	< 0.10	< 0.10	0.1	0.51	1.02	119.70	460.60
400	25	38 x 38	0.25	0.25	0.25	0.51	1.27	2.79	–	47.56	209.23
	38	38 x 38	0.1	0.2	0.3	0.5	1.4	2.7	5.33	65.51	524.06
	50	50 x 50	0.25	0.25	0.25	0.42	1.02	1.69	3.22	75.33	358.13
500	25	38 x 38	0.85	1.02	1.7	3.47	–	–	–	42.93	194.23
	38	38 x 38	0.3	0.4	0.6	1.2	3	–	–	45.94	367.53
	50	50 x 50	0.2	0.3	0.4	0.8	2.1	4.2	8.5	45.33	281.37
600	25	38 x 38	1.52	2.03	3.05	6.35	–	–	–	18.67	85.22
	38	38 x 38	0.6	0.7	1.2	2.3	5.8	10.67	–	33.60	268.77
	50	50 x 50	0.3	0.4	0.7	1.3	3.3	5.08	–	39.37	314.98
700	25	38 x 38	2.88	3.72	5.59	8.55	–	–	–	14.20	64.80
	38	38 x 38	1	1.2	2.1	4.1	10.3	–	–	26.00	208.02
	50	50 x 50	0.6	0.7	1.2	2.3	5.8	–	–	29.51	236.04
900	25	38 x 38	7.87	10.16	–	–	–	–	–	8.78	40.62
	38	38 x 38	2.6	3.1	5.2	10.5	–	–	–	16.93	135.46
	50	50 x 50	1.5	1.8	3	6	11.18	–	–	18.31	146.46
1000	25	38 x 38	12.45	–	–	–	–	–	–	6.94	32.80
	38	38 x 38	3.9	4.7	7.8	15.7	–	–	–	14.05	112.37
	50	50 x 50	2.2	2.7	4.4	8.9	–	–	–	14.96	119.67
1200	38	38 x 38	7.9	9.5	15.8	–	–	–	–	9.93	79.44
	50	50 x 50	4.5	5.4	9	17.9	–	–	–	10.43	83.40

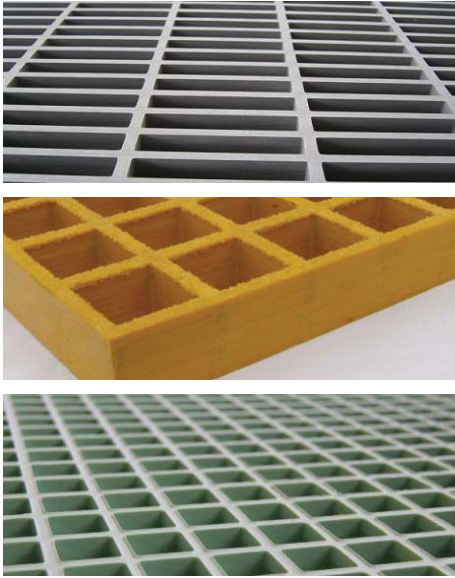
## Point Load

Clear Span mm	Thickness mm	Mesh mm x mm	Point Load = KG (Deflection in mm)					
			50	100	150	250	500	1000
450	25	38 x 38	0.3	0.8	1.0	1.8	3.6	6.9
	38	38 x 38	<0.1	0.3	0.5	0.8	1.5	3.3
	50	50 x 50	<0.1	0.3	0.5	0.8	1.3	2.5
600	25	38 x 38	0.8	1.3	2.0	3.3	6.6	–
	38	38 x 38	0.3	0.5	0.8	1.5	3.0	5.8
	50	50 x 50	<0.1	0.3	0.5	1.0	1.8	3.6
750	25	38 x 38	1.3	2.5	3.8	6.6	–	–
	38	38 x 38	0.5	1.0	1.5	2.5	5.1	–
	50	50 x 50	0.3	0.5	0.8	1.5	3.0	5.8
900	25	38 x 38	1.8	3.6	5.1	8.6	–	–
	38	38 x 38	0.8	1.5	2.3	3.8	7.6	–
	50	50 x 50	0.3	0.8	1.0	1.8	3.8	7.4
1000	25	38 x 38	3.0	5.8	8.9	–	–	–
	38	38 x 38	1.0	2.3	3.3	5.6	11.2	–
	50	50 x 50	0.5	1.3	2.0	3.0	6.4	12.7
1200	38	38 x 38	1.5	3.0	4.6	7.4	–	–
	50	50 x 50	0.8	1.5	2.3	3.8	–	–



Available in  
"High Load Capacity"

The load data provided is for general information only as actual environment and operational conditions are beyond our control. For these reasons, FRP Engineering are not able to guarantee the actual performance under operational conditions will correspond to the load tables provided.



## Surface Finishes

FRP Engineering offers 3 surface treatments for Moulded Grating.

**Smooth** – This surface is best used in architectural applications to provide a flat and regular surface appearance. The grating is sanded to a flat surface and then coated with resin.

**Gritted** – The grating is coated with a layer of quartz grit to provide an exception-ally safe and hard wearing walking surface. In tests, this grating provides the highest scores for friction making it our most popular choice.

**Concave** – This surface is used in applications where slip resistance is required but washdown requirements make a gritted surface impractical. The top surface is left following production as concave finish.

## Grating Fasteners

Supplied in marine grade 316 stainless steel as standard for the longest possible service life. Other materials of construction are available upon request



## Complimentary Products

Stair treads

Handrails

Platforms & Structures

Louvres

Cladding

Machinery guards

Ladders & Cages

Cable Ladders I Trays

Safety Gates

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## Contact Us

Please contact us for more information about our products and services:

### FRP Engineering

28 Baile Road Canning Vale  
Western Australia 6155

T +61 (0)8 **9455 4343**

F +61 (0)8 **9455 4373**

[enquiries@frpengineering.net](mailto:enquiries@frpengineering.net)