



COMPANY INTRODUCTION

Nanjing WayTong Building Materials Company Limited was established in 2011 concentrating on the business of fiberglass reinforced gratings and structural window profiles. We are mainly engaged in the manufacture of [molded GRP/FRP gratings](#) and a wide range of [pultruded FRP structures](#) like [window/door frames](#), [irrigation canals](#), [interlock panels](#), [fences](#), [platforms](#), and [complete standard FRP profiles](#). We also are more than happy to supply customized services for special requirements on other fiberglass products.



The products we supply are qualified for inspections on CE, SGS, and CNAS, they have been applied well in projects like urban drainage systems, petrochemical industries, solar & power stations, ocean platforms, mining industries, and many other fields. In home market, regular customers we are serving include State Grid in Inner Mongolia, Yangtze petrochemical group, China Construction Engineering Corp Hubei Branch, China Railway in Wuhan... and in abroad markets, we have successfully exported our gratings and profiles to over 20 countries.

WayTong has totally no more than 100 workers (37 and 52 in the plants), not a big scale company though, we have been rated as one of the Contract & Reputation Abiding enterprises in our city for years. Our boss and chief engineer are both of over 15 years' experience in FRP industry, with our endless pursues we have confidence in keeping faith and good quality in all the cooperation with our customers.

Welcome to WayTong, we provide complete services to ensure that what you buy from us is of good workmanship and meet your demands perfectly. Whether you need FRP grating, fiberglass window or other FRP related products, look no further than WayTong for all your requirements, we may give you valuable advices and assist even for the those FRP products that we do not have.

[MOLDED FRP GRATING](#)

FRP Molded grating is manufactured in an open, heated mold system. Continuous roving is laid in the mold in alternating layers and completely wet out with resins. This continuous process produces an integral plate which provides good performance of excellent corrosion resistance and bi-directional strength.

WayTong offers its molded grating in a choice of different resins and molds available for a wide range of panel sizes, thickness and mesh patterns, assuring to meet requirements of each customer's applications.

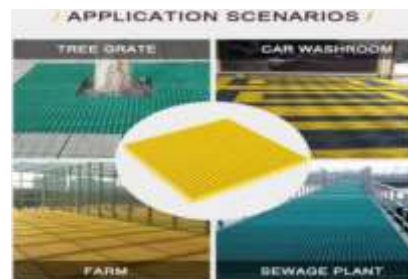
Customers need to consider the environment including corrosion level, temperature, climate, etc. in which the grating is going to be applied, so that the right resin system can be chosen for the grating. It is also necessary to pay attention to the load requirement at different span to decide the mesh hole size and the thickness. Sometimes, to provide high antiskid property a gritted surface grating must be selected.

Industrial Applications

- Chemical plant and metal finishing
- Construction engineering, traffic and transportation
- Petrochemical engineering, ocean survey, water engineering
- Food and beverage plants
- Power and electricity
- Textile printing and dyeing and electronic industry

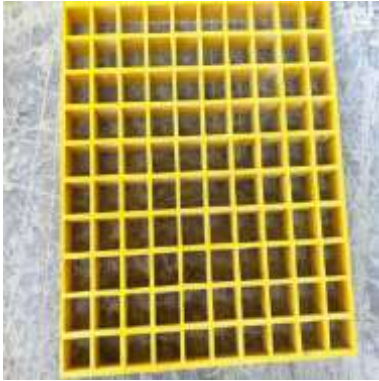
Advantages

- Anti-corrosion and anti-aging
- Light but strong impact strength
- Long service life and maintenance free
- Non-conduction or non-magnetic
- Easy installation and rich colors

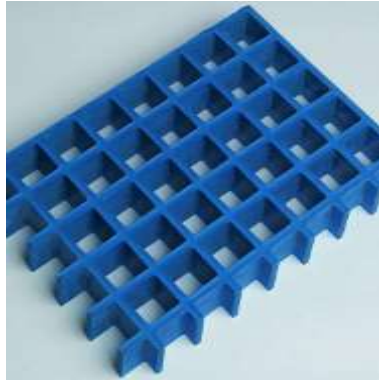


Grating Outer Frame

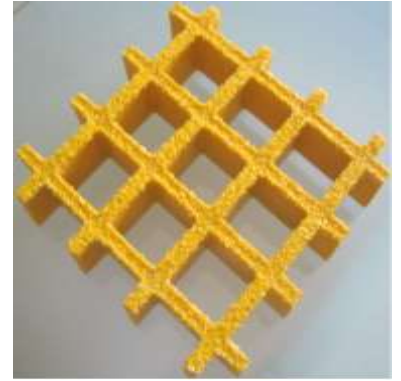
The gratings can't always be made with 4 sides framed, sometimes they are cut into 1-4 sides unframed in order to meet customer's request for the length and width.



4 Sides Closed



2 Sides Opened



4 Sides Opened

Grating Surface

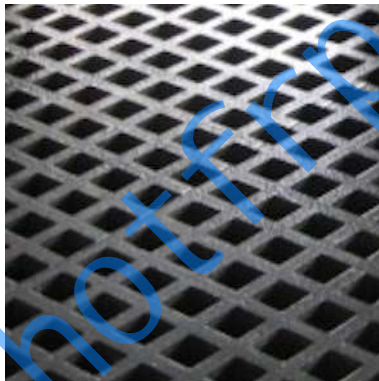
The gratings originally have a concave surface with slight slip resistance when the panel naturally cured. A standard grit surface is made through a secondary operation by adding silicon sand on the top to provide even higher and durable slip resistance.

Open Mesh Type



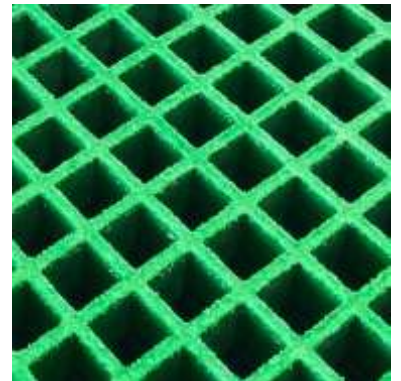
Concave Surface

Original concave grating, slight antiskid



Smooth Surface

Polished grating, smooth



Gritted Surface

Gritted sanding surface grating, super antiskid

Checker Plate Covered Type



Smooth Cover

Smooth cover grating, flat, smooth



Patterned Cover

Patterned cover grating, antiskid, beautiful



Gritted Cover

Gritted cover grating, extremely antiskid, durable

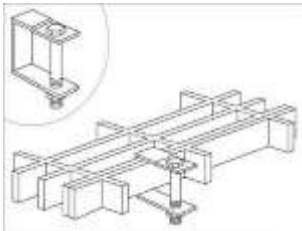
Mesh(mm)	Standard Panel Size (mm)	Thickness (mm)	Kg/Sq.m
38X38 (1.5"X1.5")	1530X3969 (5'X13')	38.1 (1.5")	18.2
	1226X3666 (4'X12')	30	14.3
	1226X3055 (4'X10')	25.4 (1")	11.8
	920X3055 (3'X10')		
40X40	1007X4007	40	18.9
	1007X3007	30	14
	1007X2007	25	11.5
50.8X50.8 (2"X2")	1226X3666 (4'X12')	25.4 (1")	12.44
	1226X3055 (4'X10')		
20X20	1007X4007	30	17
	1007X3007		
	1007X2007		
19X19 (0.75"X0.75")	1226X3666 (4'X12')	25.4 (1")	12.44
	1226X3055 (4'X10')		
25.4X101.6 (1"X4")	920X3055 (3'X10')	25.4 (1")	12.8
25.4X152.4 (1"X6")	1150X3050	38.1 (1.5")	

Grating Load Table

Items	Line Load Deflection							Uniform Load Deflection							
	Kg/m							Break Point	Kg/m						Break Point
Span (mm)	75	150	300	450	600	750	Point	240	480	980	1450	2450	3650	4880	
38*38*25 38x38x25mm-Mesh Size:38x38mm, Thickness 25mm, Open Rate 68%, Weight 12.3Kg/m2.															
450	0.559	1.146	2.159	3.075	4.115	4.749	3910	0.660	1.092	1.930	2.769	4.470	6.579	----	
600	0.864	1.702	3.505	5.156	6.706	8.179	2924	1.118	2.108	4.140	6.172	10.21	15.26	----	
750	----	----	----	----	----	----	----	2.667	5.387	10.82	16.28	----	----	----	
900	2.896	5.918	12.12	18.44	----	----	1948	5.537	11.18	21.72	----	----	----	----	
1200	5.715	111.6	----	----	----	----	1461	----	----	----	----	----	----	----	
38*38*30 38x38x30mm-Mesh Size:38x38mm, Thickness 30mm, Open Rate 68%, Weight 14.6Kg/m2.															
Span (mm)	Kg/m						Break Point	Kg/m						Break Point	
	75	150	300	450	750	1500		350	500	750	1000	1500	2500		
300	<.25	<.25	0.254	0.508	0.762	1.524	9923.4	<.25	<.25	<.25	<.25	0.254	0.508	32500	
450	0.254	0.508	1.016	1.524	2.540	----	4827.6	0.254	0.508	0.762	1.016	1.524	2.286	21661	
600	0.508	1.270	2.286	3.556	5.842	----	4112.4	1.060	1.524	2.286	2.794	4.318	7.366	12980	
750	1.270	2.540	4.826	7.366	12.45	----	3173.7	2.540	3.810	5.842	7.620	11.68	----	8296	

900	1.778	3.810	7.620	11.43	----	----	2637.3	4.572	7.112	10.66	----	----	----	5758
38*38*38														
38x38x38mm-Mesh Size:38x38mm, Thickness 38mm, Open Rate 68%, Weight 19.5Kg/m2.														
Deflection Span (mm)	Kg/m						Break Point	Kg/m						
	75	150	300	450	600	750		240	480	980	1450	2450	3650	4880
300	0.279	0.356	0.483	0.610	0.762	0.889	17116	0.254	0.305	0.381	0.457	0.635	0.838	----
600	0.365	0.660	1.245	1.850	2.464	3.073	8718	0.432	0.813	1.549	2.311	3.835	5.740	----
900	0.864	1.803	3.683	5.563	7.417	9.296	5817	1.702	3.454	6.959	10.46	17.47	----	----
1200	2.261	4.749	9.677	14.63	19.58	----	3755	5.969	12.16	24.51	----	----	----	----
50*50*50														
50x50x50mm-Mesh Size:50x50mm, Thickness 50mm, Open Rate 78%, Weight 23.5Kg/m2.														
Deflection Span (mm)	Kg/m						Break Point	Kg/m						
	75	150	300	450	600	750		240	480	980	1450	2450	3650	4880
300	0.279	0.305	0.406	0.483	0.635	1.041	21727	0.254	0.279	0.330	0.381	0.483	0.737	----
600	0.356	0.508	0.813	1.128	1.753	3.327	11713	0.381	0.584	0.965	1.372	2.134	4.115	----
900	0.508	1.118	2.235	3.200	5.156	10.05	7780	1.194	2.108	3.937	5.766	9.449	18.59	----
1200	0.914	1.930	3.937	5.918	9.957	----	5834	2.413	4.928	9.957	14.96	----	----	----

Grating Fittings



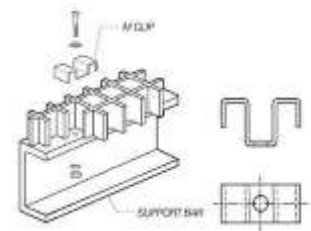
Type C, End Panel Clip

To connect two adjacent gratings



Type L, Hold Down Clip

To secure gratings to the supporter or ground with one bearing bar



Type M, Saddle Clip

To secure gratings to the supporter or ground with two bearing bars

FRP Grating Applications



Stair Step



Walkway



Flooring



Catwalk

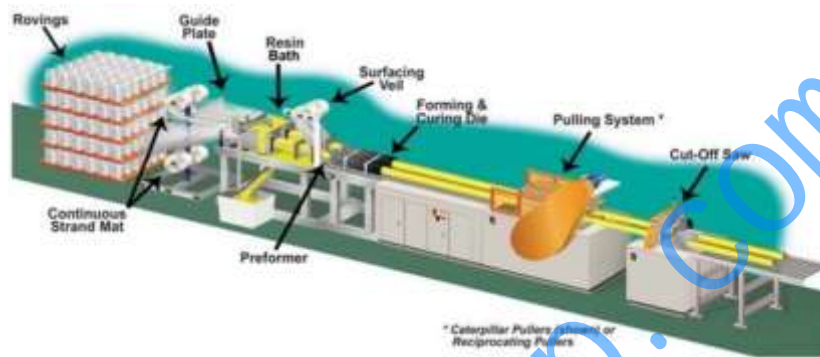


Sewage Treatment



Public Greening

PULTRUDED FRP PROFILES




FRP profiles are made by the pultrusion process in which the glass reinforcement fibre is impregnated with thermosetting resin and pulled through a heated die to produce a fully cured, high strength finished profile. They have the features of corrosion resistant, light weight & high strength, lower maintenance, dimensional stable, and environment friendly. FRP standard profiles include tubes, rods, channels, beams, angle, plates. Complex profiles like window & door frames, interlock planks, etc., can also be produced through pultrusion technology.


Standard Profile

<p>Square Tube</p>	<p>Round tube</p>	<p>I-beam</p>	<p>Angle Beam</p>
<p>U Channel</p>	<p>Solid Rod</p>	<p>Rebar</p>	<p>Epoxy Rod</p>

Material Comparison						Frame Style			
Item	FRP	PVC	Aluminum Alloy	Steel	Wood				
Tensile strength (mpa)	350	50	140	290	6				
Tensile modulus(mpa×104)	4	1.6	6	20	0.8				
Density (g/cm3)	1.8	1.2	2.7	7.8	0.4				
Thermal conductivity (w/n•0C)	1.3	2	220	85	0.8				
Coefficient of linear expansion (1/°C)	0.7×10-4	62×10-4	22×10-6	10×10-4	10×10-4				
Heat resistance (°C)	130	70	200	300					
Appearance	Colorful								
Service life (year)	50	15	25	10	10				
Corrosion resistance (A is the best)	A	B	C	D	E				




Fixed



Casement




Awning




Double / single-hung



Sliding



Horizontal bi-fold



Vertical bi-fold



Louver

Handrail System

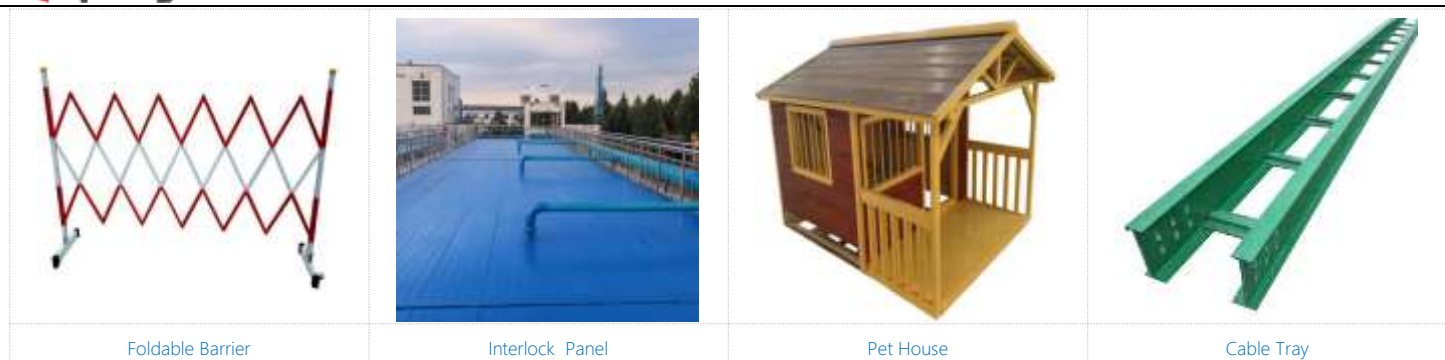
Handrail is used in walkways and platforms for safe, maintenance free worker access. Mostly common handrails are square tube and round tube.

FRP rail system is specially designed to replace steel handrail system in some applications where corrosion resistance is required. It is corrosion resistant, virtually maintenance free, and easy to install. This special design allows handrail to be shipped in parts and the total assembly can take place on the site so that the cost of shipment can be greatly reduced. Handrail can be made not only in gray, safety yellow but also in other colors as required by customers.



Related Products

 <p>Arch Shape Cover</p>	 <p>Windows Frame</p>	 <p>Irrigation Canal</p>	 <p>Sign Post</p>
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Foldable Barrier

Interlock Panel

Pet House

Cable Tray

Resin Types

Resin Code	Description	Resin Base	Corrosion Resistance	Flame Spread Rating ASTM E84	Max. Oper. Temp
MP-5	Low Smoke, Superior Fire Resistance	Phenolic Resin	Very Good	Class 1, 05 or Less	180°C (356°F)
VE-25	Chemical Proof, Extra Fire Retardant	Vinyl Ester	Excellent	Class 1, 25 or Less	-60°C~120°C
VE-10	Chemical Proof, Extra Fire Retardant	Vinyl Ester	Excellent	Class 1, 10 or Less	-60°C~120°C
ISO-25	Industrial Grade, Fire Retardant	Isophthalic	Very Good	Class 1, 25 or Less	-60°C~105°C
ISO-30	Food Grade, Fire Retardant	Isophthalic	Very Good	Class 1, 30 or Less	-60°C~105°C
OR-25	Architectual Grade, Fire Retardant	Orthophthalic	Good	Class 1, 25 or Less	-60°C~70°C

Resin Corrosion Resistance

Chemical Type	Type V – Vinyl Ester		Type I - Isophthalic		Type O – Orthophthalic	
	Concentration %	Temperature F/°C	Concentration %	Temperature F/°C	Concentration %	Temperature F/°C
Acetic Acid	50	180/82	50	125/52	5	77/25
Aluminum 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 Sulfate	ALL	210/99	ALL	170/77	ALL	-
Benzene	100	92/40	ALL	N/R	ALL	N/R
Benzoic Acid	SAT	210/99	SAT	150/66	ALL	77/25
Borax	SAT	210/99	SAT	170/77	SAT	113/45
Calcium Carbide	ALL	180/82	ALL	170/77	ALL	-
Calcium Nitrate	ALL	210/99	ALL	180/82	ALL	-
Carbon Tetrachloride	100	92/40	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
Calcium Chloride	ALL	210/99	ALL	170/77	ALL	104/40
Copper Cyanide	ALL	210/99	ALL	170/77	ALL	77/25
Copper Nitrate	ALL	210/99	ALL	170/77	ALL	-

Ethanol	10	155/82	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	37	140/60	50	75/24	25	86/30
Gasoline	100	180/82	100	75/24	100	95/35
Glucose	100	210/99	100	170/77	ALL	-
Glycerine	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
Hydrofluoric Acid	10	149/65	-	-	-	-
Hydrogen Peroxide	30	150/65	5	100/38	5	NR
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 Sulfate	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
Methacrylic Acid	99	95/35	-	-	-	-
Methanol	10	183/84	N/R	N/R	N/R	N/R
Nickel Chloride	ALL	210/99	ALL	170/77	ALL	104/40
Nickel Sulfate	ALL	210/99	ALL	170/77	ALL	104/40
Nitric Acid	20	130/54	20	70/21	20	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 Sulfate	ALL	210/99	ALL	170/77	ALL	104/40
Propylene Glycol	ALL	210/99	ALL	170/77	ALL	104/40
Sea Water	ALL	210/99	ALL	158/70	ALL	113/45

Fiberglass

Code Name	Type	Occasion Applicable
E	alkali-free E-glass roving	High strength and high corrosion required