



GRP Molded Grating



Management
System
ISO 9001:2008



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ID 9105060520

Introduction to Fibretek

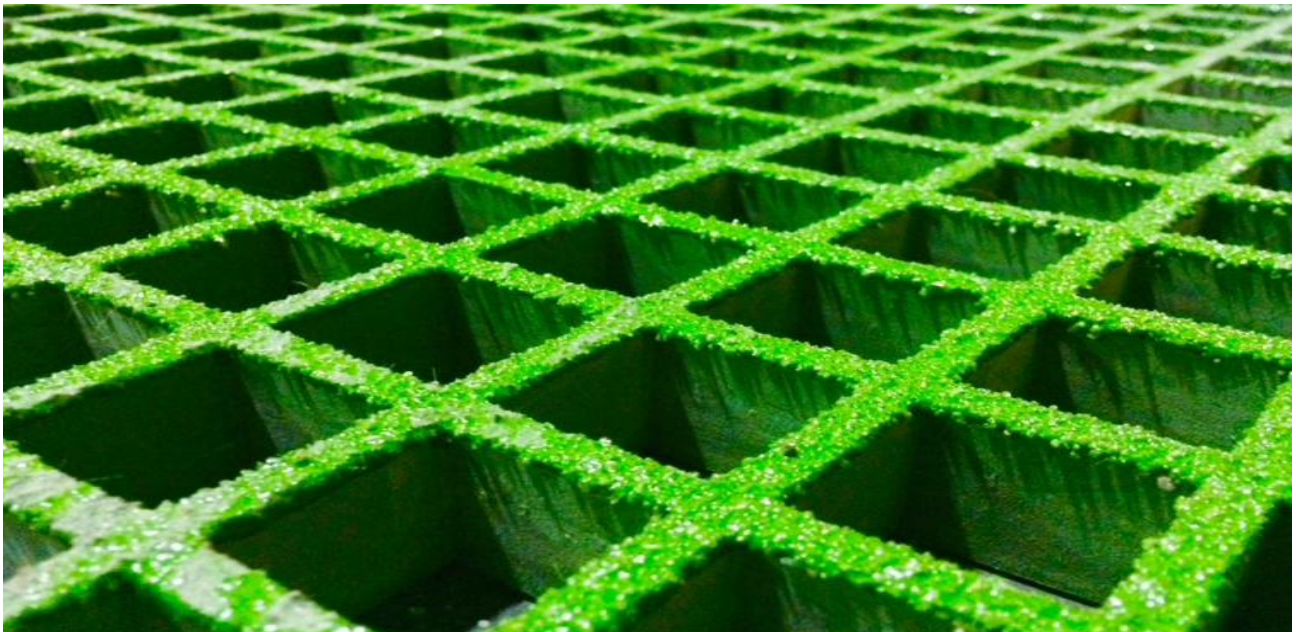
Situated in Bellville, Cape Town, Fibretek specialises in the manufacture of finished and non-finished pultruded and related products. In our effort to consistently offer quality service, value for money and customised designs and solutions we maintain an effective organisation in meeting the needs and expectations of our customers and partners through the use of technology and skills development.

Fibretek produces high quality, high fibre polymer products, such as FRP/GRP composites, and dimensionally stable structural profiles which are used to fabricate and manufacture finished products.

Our services also include fabrication, installation, consultation, site supervision and inspection.

Introduction to Fibretek Moulded Grating

Fibretek GRP grating is made by interweaving continuous fibreglass rovings which are impregnated with unsaturated polyester or vinyl ester resin. The well wetted fibre glass rovings ensure maximum mechanical strength in both bearer bar directions.



Characteristics of Fibretek Moulded Grating

Fibretek moulded grating provides a safe solution for plant designers, engineers and maintenance personnel in today's demanding industrial environment.

External and Internal laboratories have tested Fibretek Moulded Grating for:

- Chemical Resistance : EN 13121-2
- Impact Testing : ASTM 695
- Load Deflection Tests : for uniform, concentrated & line loads
- Fire Resistance : ASTM 635 (Flammability tests)

Advantages of Fibretek Moulded Grating

- Excellent Mechanical Properties
- Bi Directional Strength
- High Strength-Weight Ratio
- Good Impact Absorption
- Low Maintenance
- No Scrap Value
- Low Life-Cycle Cost
- UV Resistant
- Low Electrical Conductivity
- Low Thermal conductivity
- Rust Proof
- Easy Installation (No Welding)

Industries ideally suited for Fibretek Moulded Grating Application

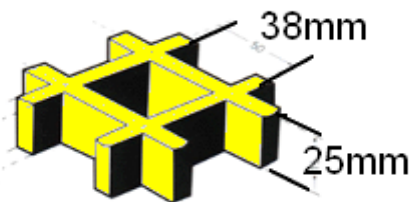
- Mining
- Automotive
- Power
- Industrials
- Petro Chemical
- Marine
- Thermal

Panel Resin Types and Colors on Offer:

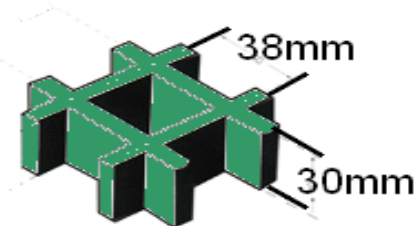
- ISO Polyester Resin in Grey (P654) and Green (RAL6001) Colors
- Vinyl Ester Resin in Golden Yellow Color, or orange

Fibretek Molded grating details:

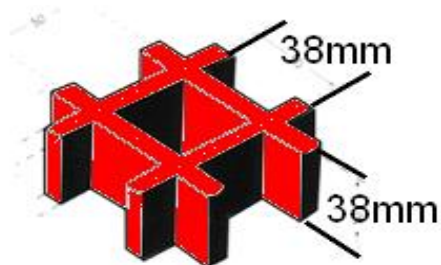
- 25x 38x38mm



- 30 x38x38mm

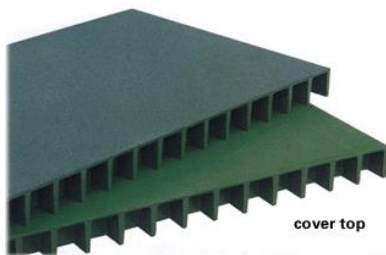


- 38 x38x38mm

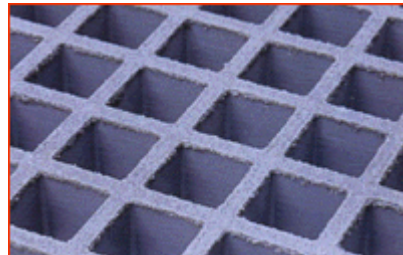


Three types of surface finishes are available on Fibretek gratings:

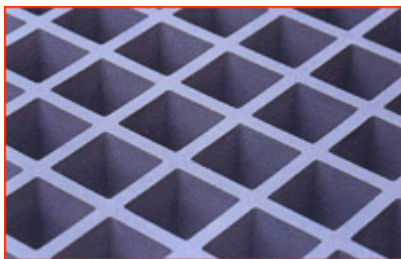
- Grit top,
- Solid top
- Plain sanding surface.



Solid Top



Grit top



Plain Sanding Surface

Resin Systems

Chemical resistance guide of Fibretek grating				
	ISO Polyester		VINYL ESTER	
Chemical Environment	%Concentration	Temp° C	%Concentration	Temp° C
Acetic acid	50	15	50	80
Acetone		NR	10	80
Aluminum sulphate	All	R	All	100
Ammonium chloride	All	100	All	100
Ammonium hydroxide	5	15	All	80
Ammonium carbonate	N/a	Nr	All	65
Ammonium bicarbonate	All	15	All	70
Ammonium nitrate	N/a	N/a	All	90
Benzene	NR	NR	100	NR
Benzene sulfuric acid	Nr	Nr	30	100
Benzoic acid	All	12	All	100
Calcium hydroxide	All	66	All	80
Calcium hypochlorite	All	12	All	80
Calcium sulfate	All	66	All	100
Calcium nitrate	All	66	All	100
Cane sugar liquor	Na	Na	All	80
Carbon tetrachloride	Na	Na	100	40
Chlorine dioxide	All	66	All	70

Chlorine water	All	Nr	All	80
Chromic acid	0-50	Nr	5	45
Citric acid	All	66	All	100
Copper cyanide	All	66	All	100
Copper fluoride	All	Nr	All	100
Ethanol	NA	NA	50	40
Ethylene glycol	All	66	All	100
Ferric chloride	All	66	All	100
Ferric sulfate	All	66	All	100
Glycerin	100	66	100	50
Hydrobromic acid	0-25	15	48	65
Hydrochloric acid	10	N/a	10	100
Hydrochloric acid	37	N/a	37	45
Hydrocyanic acid	10	15	10	80
Hydrogen peroxide	35	120	30	40
Hypophosphorus acid	Na	Na	50	50
Lactic acid	All	200	All	100
Lead acetate	All	160	All	100
Lead chloride	Na	Na	All	90
Lead nitrate	Na	Na	All	100
Lime slurry	Na	Na	All	80
Magnesium sulfate	All	66	All	100
Maleic acid	Na	Na	All	90
Mercurous chloride	All	220	All	100

Nickel sulfate	All	66	All	100
Nitric acid	5	66	35	40
Perchloric acid	Na	Na	10	65
Phosphoric acid	All	66	80	100
Potassium sulfate	All	170	All	100
Potassium nitrate	All	66	All	100
Silver nitrate	All	66	All	100
Sodium hypochlorite	15	15	0-15	50
Sodium potassium sulfate	Na	Na	All	100
Stannic chloride	All	66	All	100
Styrene	NA	NA	All	NR
Sulfuric acid	0-30	66	0-25	100
Sulfuric acid	26-50	Nr	26-50	80
Sulfuric acid	51-70	Nr	51-70	80
Sulfuric acid	71-75	Nr	71-75	50
Sulfuric acid	76-93	66	76-93	Nr
Sulfuric acid	Na	Na	Fumes	100
Tartaric acid	All	66	All	100
Trisodium phosphate	50	15	50	80
Urea	All	15	All	65
Vinegar	All	66	All	100
Water, distilled	All	66	All	80
Water, sea	All	66	All	100

All: All Concentrations

N/R: Not Recommended

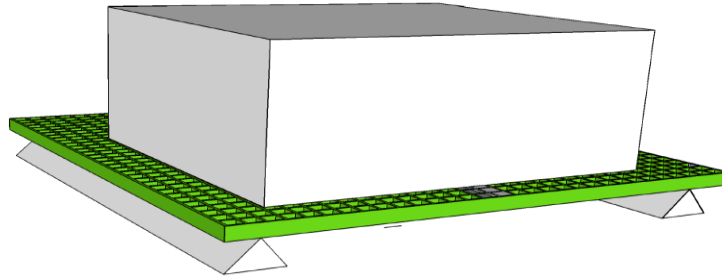
NA: Consult with Fibretek for more information.

NOTE: the corrosion resistance guide listed above is only of general information; The resin manufactures have provided data which indicates the levels of corrosion resistance for the specific types of resin only.

Testing of specific corrosion resistance is advisable where more specific data is required. Fibretek cannot be held liable for any misinterpretation of the above data.

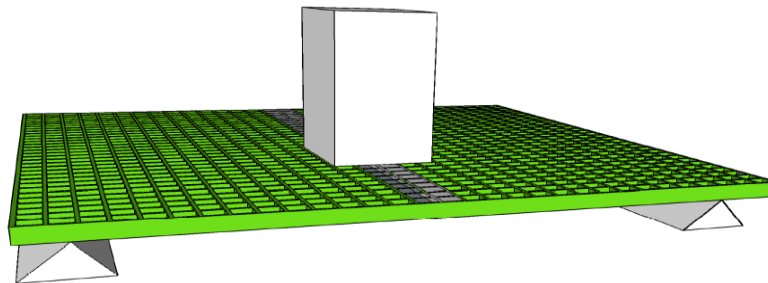
Loading tables for 38mm Molded Grating

uniform load

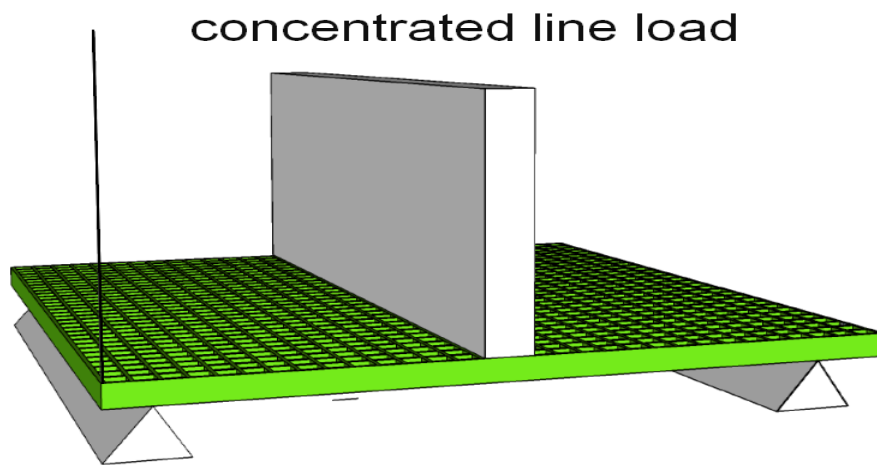


Span	38 X 38 X 38MM - uniform Load										
	100	200	300	400	500	600	700	800	900	1000	1200
	Deflection values in mm										
750	0.15	0.35	0.59	0.85	1.17	1.47	1.77	2.05	2.32	2.63	3.2
1000	1.08	2.05	3.17	4.25	5.3	6.36	7.35	8.39	9.49	10.54	12.63
1250	1.53	2.87	4.17	5.48	6.82	8.11	9.4	10.68	11.98	13.16	-
1500	2.01	4.1	6.15	8.11	10.2	12.32	14.53	-	-	-	-

point load

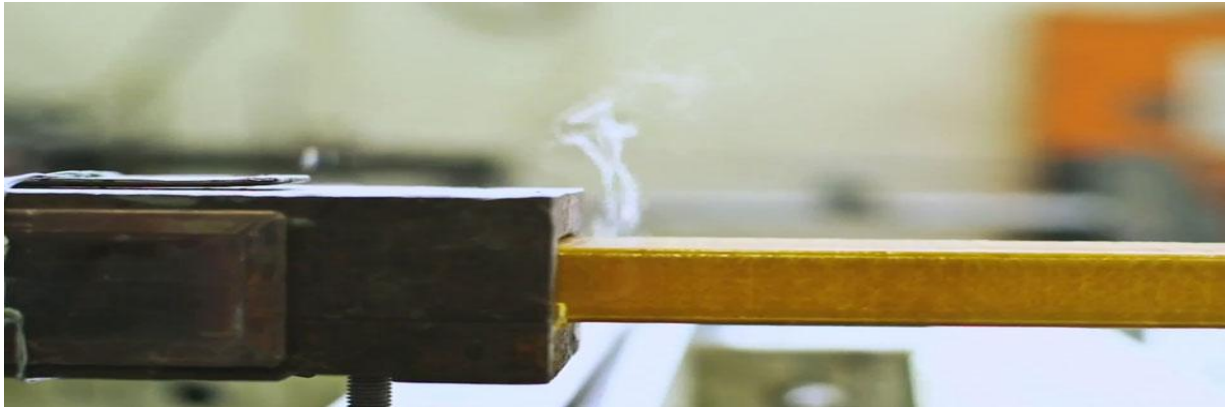


Span	38 X 38 X 38MM -Point load (300x300)										
	100	200	300	400	500	600	700	800	900	1000	1200
	Deflection values in mm										
500	0.24	0.48	0.71	0.93	1.17	1.38	1.62	1.83	2.03	2.24	2.7
750	0.74	1.44	2.17	2.81	3.54	4.2	4.85	5.53	6.19	6.86	8.25
1000	1.84	3.76	5.89	7.93	9.99	12	14.1	16.19	18.1	20.3	-
1250	3.63	7.43	10.87	14.57	18.45	22.53	26.4	29.6	-	-	-
1500	5.43	11.43	17.32	23.1	29.6	37.2	-	-	-	-	-



Span	38 X 38 X 38MM - Line Load							
	100	200	300	400	500	600	700	800
	Deflection values in mm							
500	0.29	0.57	0.86	1.1	1.39	1.67	1.91	2.19
750	1.05	1.68	2.35	3.09	3.86	4.62	5.41	6.18
1000	1.87	3.89	5.99	8.16	10.28	12.36	-	-
1250	3.95	7.86	11.99	15.95	19.93	-	-	-
1500	5.25	10.63	15.9	21.3	-	-	-	-

Other products



Pultruded Profiles

Profile	Dimension	Weight (kg/m)	Std Colour	UOM
Angle				
90°	100 x 60 x 8	2.4	Grey	M
90°	75 x 50 x 6	1.5	Grey	M
90°	75 x 50 x 3.5	0.9	Blue	M
90°	50 x 45 x 5	1	Grey	M
150°	75 x 75 x 5.5*	1.7	Grey	M
135°	75 x 75 x 5.5*	1.7	Grey	M
BOX				
	80 x 35 x 3	1.1	Grey	M
	76 x 76 x 6	2.9	Grey	M
	51 x 51 x 3	1.2	Yellow	M
	51 x 51 x 6	2.2	Yellow	M
	44 x 44 x 6	1.9	Black	M
	44 x 44 x 3.5	1.1	Grey	M
	25 x 25 x 3	0.6	Grey	M
TUBES ROUND				
	38 x 3	0.6	Yellow	M
	38 x 5	1.1	Grey	M
TUBES OTHER				
D-Shape Tube	32	0.7	Grey	M
CHANNEL	200 x 60 x 8	4.8	Grey	M

	102 x 45 x 5	1.9	Grey	M
	102 x 3.5 x 45 x 5	1.6	Tang	M
	84 x 3.5 x 30 x 5	1.2	Yellow	M
	80 x 30 x 3	0.9	Yellow	M
	75 x 3.5 x 35 x 5.5	1.3	Yellow	M
	54 x 30 x 5	1.1	Grey	M
	48 x 3.5 x 30 x 5	0.8	Grey	M
	43 x 28 x 3	0.6	Grey	M
CHANNEL OTHER				
Step	75	1.3	Grey	M
E-Section	75 x 35 x 5	1.6	Grey	M
Unequal Blue	108 x 45 x 70 x 4	1.8	Blue	M
FLAT SHEET				
	550 x 3	3.3	Grey	M
	550 x 5	5.5	Grey	M
	560 x 10*	11	Grey	M
SOLID RODS				
	4	0.1	Nat	M
	5	0.1	Nat	M
	8	0.2	Nat	M
	10	0.2	Nat	M
	12.7	0.3	Nat	M
	16	0.5	Nat	M
	17.5	0.6	Nat	M
	19	0.6	Nat	M
	22*	0.9	Nat	M
	32*	1.7	Nat	M
	38*	2.4	Nat	M
Jib Batten	14 x 5*	0.2	Nat	M
Hobie Batten	25*	0.4	Nat	M
Dog bone		0.2	Nat	M

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Fibretex believes this attached information is true and accurate however there is no guarantee of specific performance without in depth test being done.