

## Technical Document

# envirabar

Modulus of Elasticity > 50Gpa - 150Gpa

Shear Strength (MPa) > 250 (MPa)

Nominal Diameter	Nominal area (mm <sup>2</sup> )	Ultimate Tensile Load (kN)
6mm	30	35
8mm	50	55
10mm	70	75
12mm	125	123
16mm	200	255
20mm	290	260
22mm	390	335
25mm	505	430
30mm	795	630

Shear Strength (MPa)  $\geq$  250 (MPa)

Nominal Diameter:	Guaranteed Tensile Strength (MPa)		Weight (g/m)
	Minimum	Estimated	
6mm	1500		66
8mm	1500		105
10mm	1500		150
12mm	1500		266
16mm	1500		417
20mm	1000		605
22mm	1000		813
25mm	1000		1348
30mm	1000		1665

## GFRP Tech Comparison between Steel Rebar vs EnviraBar

Structure	Steel bar	EnviraBar
Density (g/cm <sup>3</sup> )	450 to 500	1500 (Starting)
Modulus of Elasticity (GPa)	>200	>50 – 150
Thermal conductivity (W/mK)	46	0
Adhesion Strength	10 – 14	15 +
Corrosion Resistant	No	Yes
Magnetism	Positive	Negative
Electrical conductivity	High	None
Bending Schedules	Possible	Specialised bending (Specific to client requirements)
Welding	Yes	No

### Design Specific and Manufacture to order

envira**mesh**

### EnviraMesh Products

GF Ref .100	grade 1	150x150 Grid	Specialised	4mm Green + Black Thread
GF Ref .100	grade 2	200x200 Grid	Standard	4mm
GF Ref .193	grade 1	150x150 Grid	Specialised	5mm Red + Blue Thread
GF Ref .193	grade 2	200x200 Grid	Standard	5mm
GF Ref . 245	grade 1	150x150 Grid	Specialised	7mm Yellow + Blue Thread
GF Ref . 245	grade 2	200x200 Grid	Standard	7mm
GF Ref .395	grade 1	150x150 Grid	Specialised	8mm Black + White Thread
GF Ref .395	grade 2	200x200 Grid	Standard	8mm

### Custom Mesh Designed & Manufactured on Order Design Specific and Manufacture to order



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