

## CONSTRUCTION TECHNOLOGY

**FRP REBAR****PROPERTIES**

- Does not react to salt, chemical products or the alkalinity of the concrete.
- Does not rust, even in the toughest conditions.
- Cut-able by standard earth removal equipment and Tunnel Boring Machines (TBMs).
- Regbar FRP reinforced structures exposed to de-icing salt, sea water or chemical products have significantly longer life-expectancy
- 4 times lighter compared to steel while offering up to 3 times the tensile strength of steel bar
- No metal is contained in it; thus, it will not interfere with strong magnetic fields or sensitive electronic instruments.
- Standardized product range with short delivery times, standard items are available from stock
- Available in sizes 10 mm - 26 mm



Regbar FRP Rebar is a concrete reinforcement that has higher strength than steel, is lighter, tested and approved, non-corrosive, usable in different areas. Regbar designs and manufactures innovative structural solutions based on high-tensile FRP (Fiber Reinforced Polymer) bars and profiles. Those solutions can be either made Glass-Fiber based (GFRP) or Carbon-Fiber based (CFRP). Regbar offers both GFRP and CFRP bars according to your needs.

Regbar FRP reinforcing bars are covered by various Design Guides and Design Codes, including:

CAN/CSA S806

ACI 440.1R

AASHTO LRFD

FIB Task Group 9.3 –  
Bulletin 40

CNR DT 203

**HEADQUARTERS**

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**PLANT**

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**RUSSIA BRANCH:**

Lesnaya Plaza 4, 4th, Lesnoy Pereulok  
No:24/8125047 Moscow / RUSSIA  
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It is ideal in hospitals for MRI machine pads, research facilities, aluminum smelters, industrial facilities, underground electrical enclosures, switchyards, toll roads, monorail tracks, etc.

Also it is widely used in TBM soft-eyes, diaphragm walls, drilled pile walls, formwork anchors, temporary structures, rock anchors, soil nails.



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**DIMENSIONS**

Product Code		GFRP10	GFRP12	GFRP16	GFRP20	GFRP26	GFRP32
Bar Size	Metric	10	12	16	20	26	32
	US	#3	#4	#5	#6	#8	#10
	Canada	-	10M	15M	20M	25M	25M
Min Tensile Strength	[MPa]	880	1000	940	940	960	960
	[ksi]	128	145	136	136	139	139
Nominal Tensile Modulus	[GPa]	42.5 ± 2.5					
	[ksi]	6159 ± 363					
Tensile Strain	[%]	2.07	2.35	2.21	2.21	2.26	1.68
Nominal Bond Strength	[MPa]	12.5					
	[psi]	1812					
Bond Dependent Coefficient	[-]	0.8					
Longitudinal Coefficient of Thermal Expansion	[E-6/C]	6.1					
	[E-6/F]	3.3					
Moisture Absorption	%	0.38	0.36	0.36	0.44	0.30	0.29
Glass Content	% vol	65					
	% weight	83					
Weight	[g/m]	135	232	380	606	925	2488
	[lb/ft]	0.091	0.156	0.255	0.407	0.622	1.672
Nominal Cross Sectional Area	[mm <sup>2</sup> ]	71.3	126.7	197.9	285.0	506.7	791.7
	[inch <sup>2</sup> ]	0.1104	0.1963	0.3068	0.4418	0.7854	1.2272

**NOTES**

- Dimensions shown in chart are typical.

Regbar Construction  
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<http://tiny.cc/regbarct>


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