Excellence.
Passion.
Perseverance.

EPP®
EPP Composites Pvt. Ltd.
Since 1986



indiabar™
Constructing Tomorrow, Reinforcing Today

At the forefront of durable rebar worldwide

indiabar™ is a glass-fibre reinforced polymer (FRP) rebar. It is the proven solution to corrosion, replacing steel rebar for concrete reinforcement.

Price Competitive

- Installed cost is competitive with galvanized steel.
- Excellent whole-of-life cost savings compared to steel.

Zero Concrete Spalling

- Eliminates the risk of corrosion and concrete spalling.

FRP Design Codes and Guides

- International codes and standards for FRP rebar allow engineers to easily upgrade from steel rebar

Advantages

Corrosion Free
- Exceptional resistance to water and salinity
- Does not rust or leach

Low Thermal Conductivity
- Maintains good thermal insulation values

Non-electromagnetic
- Non-conductive and electro-magnetically neutral

No Thermal Cycling Impact
- Thermal expansion coefficient closer to concrete than steel.

Highly Chemical Resistant
- Exceptionally resistant to a range of chemicals

High Tensile Strength
- Twice the strength of steel

Non-magnetic
- No interference with sensitive enquipment

Low Environmental Impact
- Consumes approximately 70% the embodied energy of steel

Lightweight
- ¼ the weight of steel allows faster installation reduced injury risks & lower transportation costs

Easy to cut and install
- Cut on-site using standard cutting tools
- Bends delivered preformed

Whole of Life Savings
- Design life cycle is 100 years
- Zero maintenance cost

Highly Durable
- Over 100 years retention of strength and modulus in high pH environments

GFRP Bars Available In Following Sizes

Sr. No.	Size (mm)	Wt / Mtr (Kg.)
01	04	0.03
02	06	0.06
03	08	0.11
04	10	0.16
05	12	0.28
06	14	0.32
07	16	0.37

Sr. No.	Size (mm)	Wt / Mtr (Kg.)
08	18	0.53
09	20	0.66
10	22	0.8
11	25	1.03
12	30	1.48
13	32	1.69
14	36	2.14



indiabar™ specializes in the manufacture of FRP Rebars, a high performance, pultruded glass-fibre reinforced polymer (FRP) rebar used for concrete reinforcement in challenging environment

indiabar™ a technology from Pultrusion Composites, is recognized globally for delivering the best price-performance ratio leader in durable concrete reinforcement, supported by global approvals and references.

With strategic manufacturing sites, we deliver worldwide, offering competitive prices and reliable delivery.

Technical data – indiabar™ FRP Rebar

Mechanical & Physical properties	FRP Rebar	Steel
Tensile Strength (Mpa) (As per ASTM D7205)	>1200	450
Loss of Tensile Strength at -40C	0% Drop	Brittle - Premature failure
Ultimate strain %	1.5-2%	15%
Transverse Shear Strength (Mpa)	>185	300
Elastic Modules (Mpa) (As per ASTM D7205)	>60,000	190,000 to 200,000
Bond Strength to Concrete (Mpa)	>20	>12
CURE RATIO %	100	N/A
Glass Transition Temperature, C°	125	N/A
Density(Kg/m3)	2100	7800

* According to ASTM D7205, the “tensile strength” is defined as the average tensile strength of a defined production unit minus three-times the standard deviation.

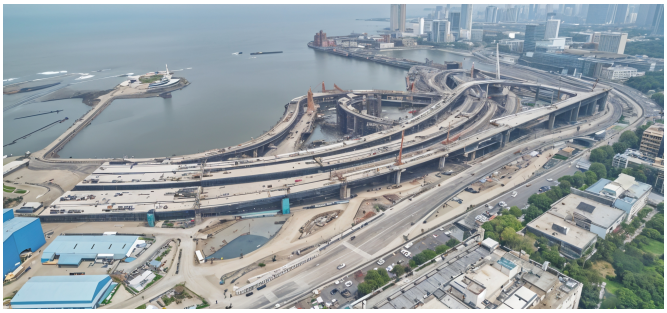
** According to ASTM D7205, “minimum elasticity module” is defined as the average module of a defined production unit.

We reserve the right to improve the product and process, which could lead to advantages or changes in particular physical-mechanical properties. To obtain the latest updates of this technical data sheet, designers, civil engineers and surveyors are requested to contact **EPP Composites team.**

Designed for challenging applications

indiabar™ FRP Rebars are specially made for tough environments where reinforcement bars need to handle constant heavy use and resist corrosion. These FRP rebars are perfect for places with high mechanical stress and corrosive conditions. They offer excellent performance in such situations. For example:

Corrosion Resistance



Structures built near the sea or in coastal areas face severe corrosion:

Harbor installations, docks, underwater tunnels, desalination plants, breakwaters, embankments, quay walls, wind turbines, roads, buildings, and concrete road bases exposed to sea spray.

Alkali-resistance & durability



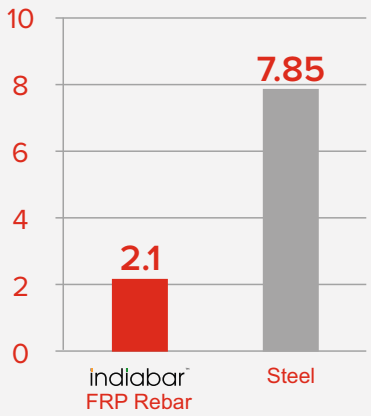
All concrete structures and transportation routes exposed to freezing temperatures and thawing saltwater:

Bridge decks, roads, airfields, concrete coverings, flood protection walls, canals, harbor basins, lock walls, and dam projects.”

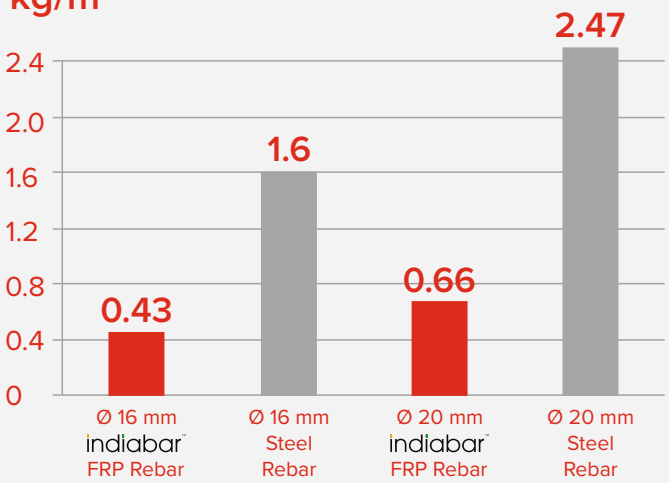
Advantages of indiabar™ FRP Rebar non-metallic reinforcement

indiabar™ FRP Rebar possess a range of properties that are much better than those of steel such as resilience – lightness – mechanical strengths – durability…

Density
g/cm³

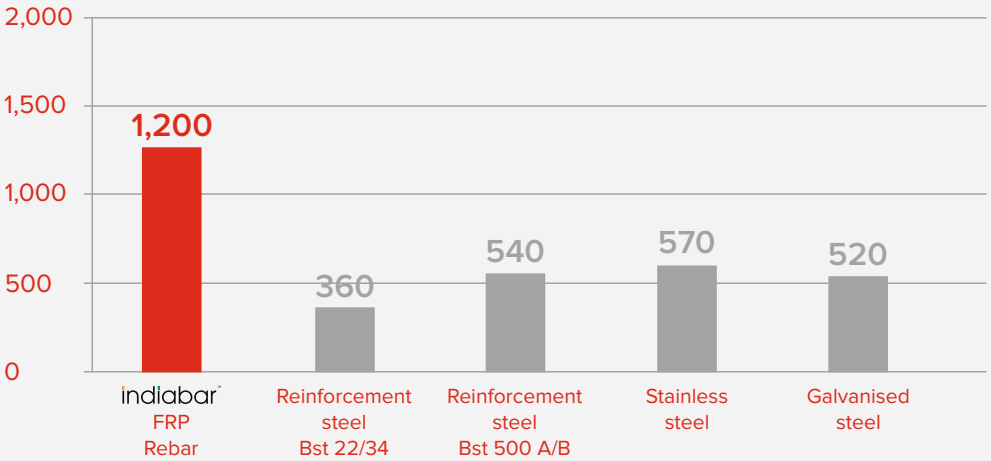


Weight
kg/m



indiabar™ FRP Rebars only have around 27 % of the weight of steel reinforcement bars. This permits lighter structures with maximum stability and less deadweight as well as much easier handling on building sites.

Tensile strength
Npa



indiabar™ FRP Rebars have a tensile strength three to four times greater than conventional reinforcement bars made of unalloyed steel and stainless steel. Tested according to CSA S806/ASTM D7205.

EPP/F/FRP Rebar Flyer/06/2024/Rev.00

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Catalogue