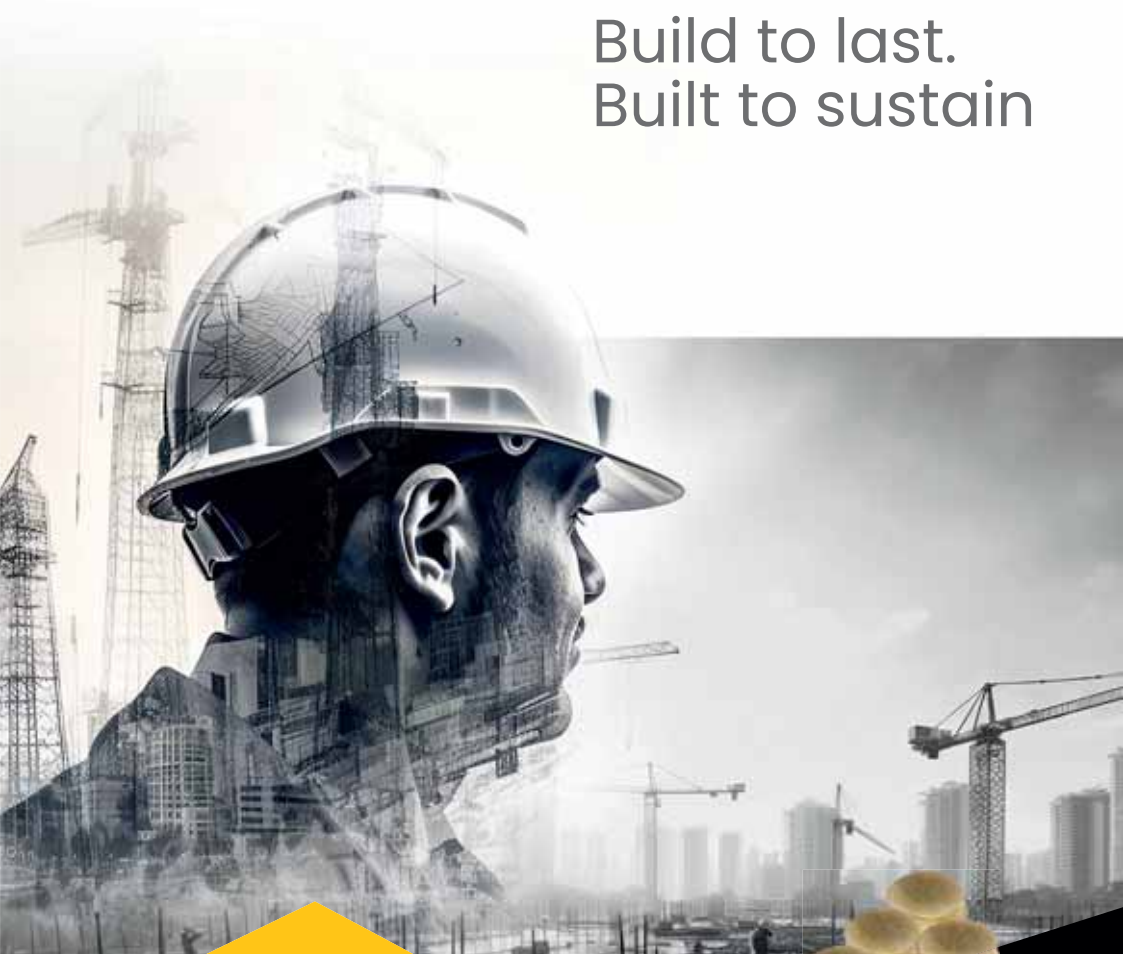


Build to last.
Built to sustain



NJVB
CORPORATION PVT. LTD.

Durability & Maintenance

- **Engineered for Strength That Stays**

With up to 3× the tensile strength of steel, GFRP doesn't just start strong - it stays strong throughout the life of the structure.

- **Twice the Lifespan of Steel**

While steel lasts 40–50 years (with maintenance), GFRP can push beyond 80-100 years - making it the smarter long-term choice.

- **Corrosion-Proof**

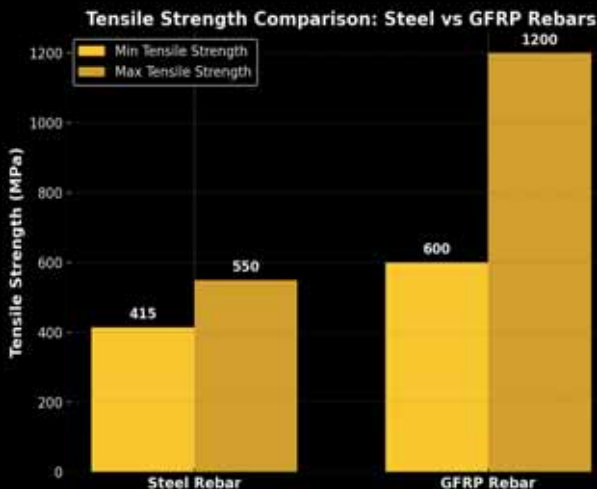
Unlike steel, GFRP rebars never rust - even in salty coastal air, chemical-rich zones, or underground water-prone areas.

- **Low Thermal Conductivity**

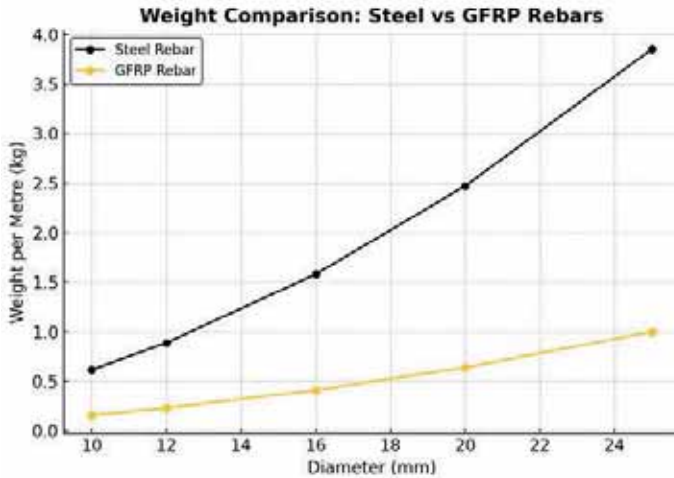
Doesn't transfer heat like metal. Ideal for extreme temperature zones and insulated structures.

- **Chemically Inert**

Resistant to acids, salts, chlorides, and alkalis - perfect for aggressive environments and long-term durability.



Lightweight



- **Lightweight & Easy to Handle**

Just one-fourth the weight of steel. Move, cut, and install it with ease - no heavy lifting equipment required.



- **Faster Construction, Less Labour Fatigue**

Workers can move and install GFRP rebars more quickly, reducing fatigue and boosting on-site productivity.



- **Easier for Complex Sites**

Perfect for difficult terrains, remote locations, or confined spaces where moving steel would be a challenge.

Cost Efficiency



- **Overall Cost Savings**

Projects using GFRP rebars typically see a significant reduction in total construction cost when factoring in transport, labour, and longterm maintenance.

- **No Need for Protective Coatings**

Unlike steel, GFRP rebars don't require epoxy coatings or corrosion inhibitors, reducing upfront material and treatment costs.spaces where moving steel would be a challenge.

Sustainable by Design



- **Ideal for Low-Carbon Projects**

Perfect for green-certified buildings, sustainable infrastructure, and government tenders prioritising eco-efficiency.

- **Eco-Friendly**

Produces ~75% less CO₂ compared to steel rebars, supporting green construction goals.

Steel Vs GFRP

	Steel Rebar	GFRP Rebar	Excellence of GFRP Rebar
Corrosion Resistance	Prone to rust and corrosion	100% corrosion resistant	Longer Lifespan, Especially in Harsh Environments
Tensile Strength	415 - 550 MPa	600 - 1200 MPa	3 Times Stronger for the Same Size
Bond Strength	10 - 13 MPa	14 - 25 MPa	Better Grip with Concrete
Life Time	40-50 Years	80-100 Years	Longer-lasting Structures
Thermal Conductivity & EM Interference	Conducts Heat & EMF	Non-conductive	Ideal for Structures Near Sensitive Equipment
Sustainability	High CO ₂ Emissions	~75% Less CO ₂	Eco-friendly and Supports Green Construction
Handling	Requires Cranes & Heavy Equipment	Can be Carried by Hand	Safer, Faster On-site Work

Applications & Approvals



Bridges & Flyovers

- Approved under IS 18256:2023 for all structural uses
- IRC:137:2022 covers design for road bridges
- MoRTH permits non-load applications (barriers, railings)



Retaining Walls

- Approved via IRC:137:2022 & IS 18256:2023 for retaining and breast walls



Highways & Roads

- Use in rigid pavements, culverts (IRC:137:2022)
- MoRTH: Recognised as a durable alternative



Tunnels & Underground

- Used in Delhi, Mumbai metro TBM shafts
- Suitable for buried tanks & concrete



Marine & Coastal Structures

- Ideal for jetties, wharfs, coastal durability (IS 18256 + IRC:137)



Parking Structures

- Ideal for ramps, slabs, corrosion-prone zones
- Design possible using ACI 440.11



Industrial Structures

- IS 15988:2013 allows FRP for RC retrofits



About Us

At NJVB, we believe that strong foundations don't just support structures - they shape a stronger, more sustainable future. Based in Pune and proudly led by two dynamic women directors, NJVB is a female-driven company redefining the construction landscape with a fresh, conscious perspective.

Our mission is to manufacture high-quality GFRP (Glass Fiber Reinforced Polymer) rebars that are eco-friendly, sustainable, and built for the future. Every bar we produce reflects our commitment to environmental responsibility - without compromising on strength, durability, or performance.

With a strong focus on innovation, quality, and green engineering, NJVB is dedicated to supporting developers, builders, and infrastructure projects that share our vision of building a better, corrosion-free world.



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www.njvbindia.com | sales@njvbindia.com

Contact: 91755 60024