



REINFORCING  
INFRASTRUCTURE,  
REDEFINING  
SAFETY

# GLASS FIBER REINFORCED POLYMER

**G** FRP Rebars represent a breakthrough innovation in the construction industry, providing a superior alternative to conventional steel reinforcement. Made from high-strength glass or carbon fibers embedded in a durable polymer matrix, these advanced composite materials offer unmatched durability, corrosion resistance, and lightweight performance. By replacing steel rebars, GFRP rebars significantly enhance the lifespan of concrete structures while minimizing maintenance and repair expenses.



# BENEFITS OF GFRP REBARS OVER TMT BARS

- **Higher Strength:** GFRP Rebars offer up to 1.5 times higher tensile strength compared to conventional TMT rebars.
- **Lightweight:** With a density just one-fourth that of steel, GFRP rebars are easy to handle and transport.
- **Corrosion Resistant:** Unlike TMT rebars that oxidize in moist environments, GFRP rebars do not corrode, making them ideal for marine structures, bridge decks, and saline or acidic environments.
- **Cost-Effective:** On an equivalent strength basis, GFRP rebars can reduce overall costs by nearly 30%.
- **Reduced Logistics Cost:** Their lightweight nature minimizes transportation, labour, and handling expenses.
- **Customizable Length:** GFRP rebars are available in continuous coils and customized lengths, eliminating wastage associated with fixed-length TMT bars.
- **Extended Lifespan:** Structures reinforced with GFRP rebars enjoy significantly longer service life.
- **Electrically Neutral:** Being non-conductive, GFRP rebars are suitable for MRI rooms, airports, and high-voltage installations.
- **Minimal Thermal Expansion:** Low thermal expansion ensures dimensional stability even under extreme temperature variations.
- **Reduced Concrete Cover:** Additional protective concrete layers are not required, as GFRP rebars are inherently resistant to moisture and corrosion.



**PALH** GFRP  
REBARS

# APPLICATIONS OF GFRP REBARS

GFRP Rebars are versatile and suitable for a wide range of structural and non-structural concrete applications due to their high strength, corrosion resistance, and durability. They can be effectively used in the following:

- Approach Slabs and Bridge Decks, including overlays, walkways of foot over bridges, and slab culverts.
- Bridge-cum-Bandhara Structures, including deck slabs and barriers between piers.
- Concrete Roads, such as Jointed Plain Concrete Pavements (JPCP), Continuously Reinforced Concrete Pavements (CRCP), and Short-Panel Concrete Pavements (both cast-in-situ and precast).
- Retaining Walls, Noise Barriers, and Mechanically Stabilised Earth (MSE) Wall Panels and Copings.
- Box Culverts, Drains, and Drainage Structures.
- Crash Barriers, Bridge Parapets, Pedestrian Parapets, and Railings.
- Bulkheads, Bulkhead Copings, and Plain Concrete Components.
- Foundations, Columns, and Footings in bridges, buildings, and infrastructure works.
- Precast Panels, non-structural walls, compound walls, and friction slabs.
- Ground Slabs and RCC Foundations of houses and industrial buildings.
- Concrete Coverings, Parking Lots, Platforms, and Warehouse Floor Slabs.
- Septic Tanks, Water Tanks, Swimming Pools, Reservoirs, and ETP Tanks, owing to their corrosion-resistant nature.
- Earthquake-Prone Areas, due to superior fatigue strength and ability to withstand cyclic loads.

## OUR MANUFACTURING PLANT'S OVERVIEW

- Currently we have seven lines (4 Straight & 3 Bend) of pultrusion machine and our production capacity per day is 25,000 RMT.
- We manufacture rebars of size 6mm, 8mm, 10mm, 12mm, 14mm, 16mm & 20mm while having the capacity up to 32mm.



**FOR ENQUIRES FURTHER DETAILS CONTACT :**

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