



FRP

FIBRE-REINFORCED POLYMER BARS
ADHERING TO IRC-137 2022

DestinyBuild
Infratech Pvt. Ltd.



GFRP Corrosion-Free Reinforcement for Modern Construction

GFRP (Glass Fiber Reinforced Polymer) is a strong and lightweight alternative to steel reinforcement. It does not rust and provides long-lasting performance in construction projects.

SALIENT POINTS

- ✓ Highly Durable
- ✓ Corrossion Free
- ✓ Light Weight
- ✓ Pre Fabricated Shape And Size
- ✓ Economical Construction
- ✓ Low Carbon Footprint
- ✓ Fast Installation

FRP APPLICATIONS

- ✓ Reinforced Soil Walls
- ✓ Friction Slabs & Crash Barrier
- ✓ Deck & Approach Slab
- ✓ Drainage Structures
- ✓ Box Culverts
- ✓ Concrete Roads
- ✓ Fob Walkways

Construction • Infrastructure • Railways • Highways • Marine • Power • Water Management



Properties of FRP:

Properties	UOM	Steel	FRP
Tensile strength	Mpa	500	1110
Modulus of elasticity	GPa	200	56
Bond strength	MPa	10	13
Shear strength	MPa	380	180
Thermal conductivity	W/(m ^{°C})	46	0.35
Linear expansion coefficient	*10-6/°C	13-15	9-12
Density	kg/m3	7800	1900
Relative elongation	%	18	4
Compressive strength	Mpa	250	360

*These properties are indicative.

Comparative analysis of steel rebars and FRP

Steel		FRP	
Dia(mm)	Weight (g/m)	Dia(mm)	Weight (g/m)
06	222	04	28
08	395	06	60
10	62	08	110
12	890	10	160
16	1580	12	240
18	2000	14	330
22	2980	16	430
25	3848	18	540

Noise Barriers

Advanced Acoustic Solutions for Modern Transportation Networks

Noise Barriers are engineered sound attenuation systems designed to minimize traffic-generated noise and enhance the acoustic environment around highways, expressways, urban roads, flyovers, bridges, and transportation corridors. These systems provide an effective solution for protecting nearby residential, commercial, institutional, and environmentally sensitive areas from excessive noise pollution.

- High acoustic performance for effective noise reduction
- Robust and durable construction for long-term service life
- Available in Metallic, Acrylic, Polycarbonate, and Composite Panel configurations
- UV-resistant, corrosion-resistant, and weatherproof materials
- Modular design for quick and efficient installation
- Low maintenance requirements
- Customizable dimensions, colours, and aesthetic finishes
- Designed to comply with project-specific acoustic and structural requirements

Applications

- National Highways and Expressways
- Urban Roads and Flyovers
- Bridges and Elevated Corridors
- Residential and Commercial Developments
- Schools, Hospitals, and Institutional Areas

Creating quieter, safer, and more sustainable transportation environments through innovative noise control solutions.



Certification & Registrations



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