

FRP LADDER

(FIBERGLASS-REINFORCED PLASTIC)

The FRP Ladder serves as a premium alternative to traditional metallic ladders and cages, excelling in areas like corrosion resistance and electrical transparency. This is particularly notable in applications where the ladder is fully submerged, as these fiberglass ladders have demonstrated longer lifespans and reduced maintenance compared to their aluminum and steel counterparts. Composed of high-grade fiberglass, the FRP Ladder is manufactured using a top-tier polyester resin system fortified with flame retardant and UV inhibitor additives. For those seeking additional corrosion resistance, an alternative vinylester resin system is available upon request.

Safety is emphasized with standard yellow side rails and cages, and the ladder rungs are made from pultruded fiberglass polyester tubes featuring a fluted, non-skid surface. Adhering to the AS 1657 - 2013 standards for FRP construction, the FRP Ladder also passes the ASTM E-84 test criteria for flame spread, scoring 25 or less. Furthermore, a UV inhibitor is added for enhanced protection against sunlight. The FRP Ladder comes pre-assembled from the shop and can be customized for field attachments using standoff clips and/or base bracket systems. It offers versatility in integration, fitting easily into existing structures or platforms, and can be tailored in various configurations to meet any specific requirements.

Specs:

Cable Laying Depth: **67mm**

Side Rail: **102mm**

Cable Laying Widths: **150-900mm**

Standard Length: **6 metres**

BENEFITS OF FRP:

Exceptional Chemical Resistance:

The resin systems offer remarkable resistance to a broad range of chemicals, including acids, salts, and alkalis.

Long-term Financial Benefits:

The long lifespan, minimal maintenance, and low installation costs make this a cost-effective choice over time.

Environmentally Friendly:

The reduced lifecycle cost and lower environmental footprint make this an appealing option in today's sustainability-focused world. Ongoing advances in resin formulation are expected to further improve its environmental profile.

Low Maintenance:

Due to the nature of FRP, the systems require minimal upkeep, reducing maintenance costs significantly.



BENEFITS CONTINUED:

Lightweight Yet Durable:

These FRP products are lightweight, having a specific gravity far lower than that of steel and slightly lower than aluminium, yet they offer high strength.

Electrical and RF Insulation:

The material is non-conductive and transparent to radio frequency, making it ideal for applications that need to avoid electrical and radio interference.

Design Versatility:

The material can be easily customized, offering significant flexibility for designers, engineers, and architects.

No Need for Protective Coating:

The materials are designed to be stable without requiring a protective coating.

Cost-Effective Material:

The material is made from an economically viable raw material base compared to metallic alternatives, and is structurally more sound than timber and plastic.

Simple On-Site Modification:

FRP can be easily modified or fabricated on-site using basic hand tools, without the need for hot work permits.

Corrosion, Rust, and Rot Proof:

A unique surface finishing ensures UV stability, thereby eliminating the need for additional, costly surface treatments.

Insect and Decay Resistant:

These FRP systems are impervious to rot and termite damage.

ATM Tanks FRP vs Alternative Materials

	FRP	Steel	Aluminum	Timber	Recycled Plastics	Composite Timber
Corrosion Resistance	•••••	••	••••	••	•••••	•••••
Strength	•••••	•••••	•••••	••	••	••
Weight	••	•••••	••	••••	••••	••••
Electrical	••	•••••	•••••	•••	••	••
Conductivity	•	••	•••••	••	••	••
Thermal Expansion	•	•••••	•••••	••	••••	••
RF Transparency	••	•••••	•••••	••	••	••
Fabrication	••	•••	•••	•••••	•••••	•••••
Life Cycle Cost	••	•••••	•••••	••	••	••
Slip Resistance	••••• ¹	••	••	••	••	••
Fire Rating	••••• ²	•••••	•••••	••	••••	••••

¹ Tested to comply with A5 4586,2013

² Tested to comply with E CA C10.1