



PLURIMO.

Pultrusion & Composite Pvt Ltd



OPEN TO OPPORTUNITIES

WELCOMING THE ERA OF FIBRE-REINFORCED PLASTIC



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Plurimo Pultrusion and Composites Private Limited (PPCPL) established on March 2020 engages in designing, engineering, production, assembly and installation of superior quality FRP composite products and profiles.

The primary focus is on Innovation and Development of an alternate to metal. With the advancement of technology and technical know-how, we at Plurimo are keen to take on any opportunities and challenges.

ABOUT FRP

Fiberglass, also known as spun glass, glass-reinforced plastic (GRP), glass-fiber reinforced plastic (GFRP) or Glasfaserverstärkter Kunststoff (GFK) is a reinforced plastic material containing glass fibers in a resin matrix. The fiberglass type is manufactured based on its applications in composites and insulation.

Fiberglass is light, durable and strong. It is impact resistant, corrosion resistant and has a moderate high strength to weight ratio. It is very flexible and can be made into various shapes which adds to its value. This high temperature insulation material makes for a great thermal barrier, proving its value and versatility. These positives surrounding fiberglass are also found in the cooling tower industry.

Fiberglass is majorly driven by its corrosion-resistant property, which helps them to withstand high temperatures and adverse conditions, due to which manufacturers prefer opting for fiberglass as an essential manufacturing component.

The increasing trend of substituting heavier metal components by lighter-weight fiberglass is expected to create an immense growth opportunity, stirring up the demand in the fiberglass markets. PPCPL aims at manufacturing products using Fibre glass as a substitute of Metal.

Vision

“To explore the Unexplored Opportunities and revolutionize the future with FRP application”



Mission

“ Become the most prominent source of structural foundation as an alternative to metal by 2025”

DIRECTOR'S MESSAGE

Establishing & running an innovation driven company, our only goal is to bring a transformation in the sector.

We believe in exploring the untapped opportunities and give a new dimension towards an eco- friendly environment



FRP/GRP Structural Profiles

FRP/GRP Structural profiles are with the constant cross-section structure by a continuous pultrusion process using fiberglass reinforcements with thermosetting resin matrixes. Pre-selected reinforcement materials, such as fiberglass roving, mat, woven fabrics or stitched fabric, are drawn through a resin bath in which all materials are thoroughly impregnated with a liquid thermosetting resin. Fiberglass Structures profiles by Pultrusion are available in FRP Angle, Square Tube, Round tube, I-Beam, Wide flange beams, Y-angle, C-Channel, Solid Rod, Decking Plate, etc.

The Fibreglass Pultrusion process decide that any constant cross-section profiles can be pultruded. Further, the selection of Resin system(Polyster resin, ISO resin, Vinyl ester resin), type and form of fiberglass reinforcements (fiberglass E-glass roving, continuous mat, surface veil,etc), the placement of reinforcements within the composite profiles as well as colors are allowed to be customized.

Profiles



C Channel



Box Pipe



Kick Plate



Flat Section



Polyster Rod



L-Angle



I-Beam



Round Pipe



Deck Panel

Features

High strength • Light weight • Anti-corrosion • Electrical and thermal insulation
Flame retardant • Electro-magnetic transparency • Low coefficient of thermal expansion
Low temperature capabilities • Anti-age • Free maintenance • Free to design new moulds.

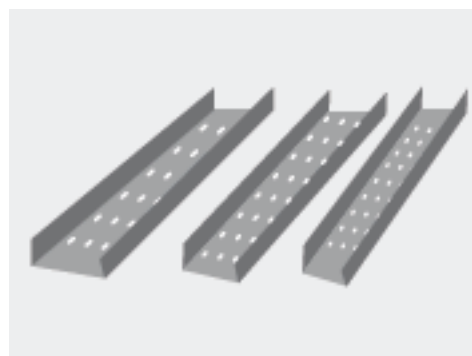
FRP/GRP Cable Trays

Plurimo provides customers with a wide range of FRP cable trays. The pultrusion process is used to create the cable trays, guaranteeing a very high and steady level of quality. Plurimo FRP cable trays are of the highest quality, extremely affordable, and resistant to all types of chemical assault. The world's most corrosive and structurally demanding settings can use FRP cable trays. This includes water treatment facilities, chemical plants, offshore platforms, and a wide range of other sectors.

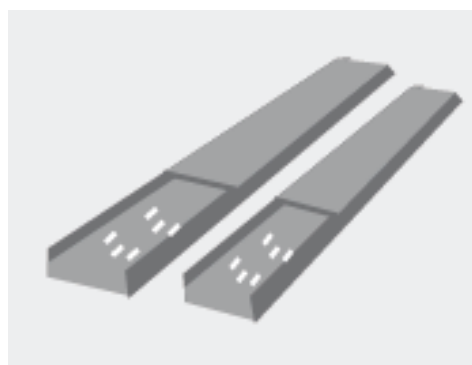
FRP Pultruded Type Cable Tray

PTCT Sizes	PTCT Cover	Load Carrying Capacity
50 x 25 x 3	56 x 15 x 3	5Kg/Mtr
50 x 30 x 3		
75 x 25 x 5	81 x 15 x 3	7.5Kg/Mtr
75 x 50 x 3		
75 x 50 x 4		
100 x 30 x 4	106 x 28 x 3	10Kg/Mtr
100 x 30 x 5		
100 x 30 x 6		
100 x 50 x 3		
100 x 50 x 4		
100 x 50 x 5		
100 x 75 x 3		
150 x 50 x 3	156 x 28 x 3	20Kg/Mtr
150 x 50 x 4		
150 x 50 x 5		
206 x 30 x 4	306 x 28 x 4	30Kg/Mtr
200 x 50 x 4		
200 x 50 x 5		
300 x 50 x 4	306 x 28 x 4	45Kg/Mtr
300 x 50 x 5		
450 x 100 x 30F x 4	450 x 3	60Kg/Mtr
600 x 100 x 30F x 4	600 x 3	75Kg/Mtr

Without Cover



With Cover



FRP Ladder Type Cable Tray

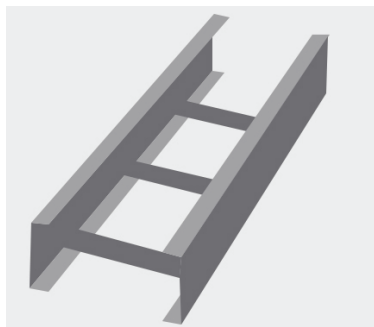
Two longitudinal side rails connected by rungs at regular intervals

Channel Type FRP Cable Trays : Structures with a solid or perforated bottom with integrated side rails

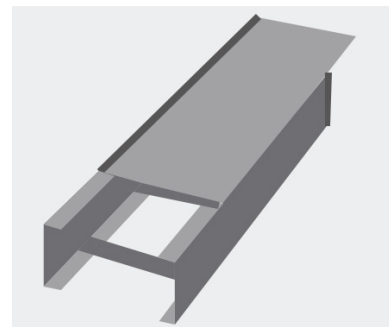
Through Type FRP Cable Trays : Structures with a solid or perforated bottom with integrated or separate longitudinal side rails

PTCT Sizes	
150 x 75 x 50 x 4	30
150 x 100 x 30 x 6	
300 x 75 x 50 x 4	60
300 x 100 x 30 x 6	
400 x 75 x 50 x 4	70
400 x 100 x 30 x 6	
450 x 75 x 50 x 4	75
450 x 100 x 30 x 6	
600 x 100 x 30 x 6	90
750 x 100 x 30 x 6	110
1000 x 100 x 30 x 6	130
1200 x 100 x 30 x 6	150

Without Cover



With Cover



Cable Tray Accessories

- 90 Degree Vertical Bend Inside / Outside
- 90 Degree Horizontal Bend
- Horizontal Tee
- Horizontal Cross
- Reducers
- 45 Degree Horizontal Bend
- Horizontal Tee Equal / Unequal

Specification of FRP Cable Tray

Description	FRP Perforated Cable Tray	FRP Ladder Type Cable Tray
Resin	Polyester - Isophthalic - Vinylester	Polyester - Isophthalic - Vinylester
Glass	ECR Boron Free Grade	ECR Boron Free Grade
Length	3 - 6 Meters	3 Meters
Width	50 - 600 mm	150 - 12000 mm
Rung Construction	NA	FRP Square Tube
Rung Spacing	NA	300 mm
Coupler Plates	GRP/FRP with SS Bolts	GRP/ FRP with SS Bolts
Angle Of Bends	90° - 45°	90° - 45°
Radius Of Bends	300, 450, 600 mm	300, 450 , 600mm
Fire Retardant	As Per IS 6746	As Per IS 6746

Benefits of FRP Cable Tray

CORROSION RESISTANT

It provides resistance to practically all chemicals in the harshest situations.

LIGHTWEIGHT

The density of aluminum is four times that of steel.

IMPACT RESISTANCE

Returns to the original position without deflection or distortion.

NON-CONDUCTIVE

It does not conduct electricity.

DIMENSIONAL STABILITY

Pultruded items have a lower coefficient of thermal expansion than aluminum and steel.

MAINTENANCE-FREE

There is no need for rework such as painting or cleaning.

LIFE CYCLE

Long durability guarantees the lowest life cycle cost.

EASY TO INSTALL

There is no welding required, and it is simple to cut and drill.

UV RESISTANT

Built-in UV resistance protects against direct sunlight exposure.

LOW INSTALLATION COST

Due to its modest weight, it is simply installed by anybody."

FRP/GRP Rebar

FRP (Fiberglass Reinforced Polymer) Rebar is a spiral wrapped structural reinforcing rod made from a combination of fiberglass roving and resin. FRP Rebar has been developed as a non-corrosive alternative to steel in concrete reinforcement and is suitable for any structural or architectural application where a material that is corrosion resistant, lightweight or non-conductive is required.

Benefits of FRP Rebar

- Lightweight/High Strength
- High Impact Strength
- Great Flexural Strength
- Non-Corrosive
- Unsusceptible to Chemical Attack
- Electrically Non-Conductive
- Low Water Absorption



Advantages of FRP Rebar

COST

Cost is a consistently important factor for any business. For construction, you always require the best material at a low cost. There are many materials available in the market, but FRP Rebar is a low-cost material that provides the best quality for construction.

STRENGTH

This rebar is two times stronger than steel reinforcing bars. The quality of FRP Rebar is far better than other materials.

WEIGHT

The weight of construction materials matters. It is $\frac{1}{4}$ of steel rebar, providing more quality than steel rebar.

WATER PROOF

This rebar is compatible with water, so you can use this rebar for construction near water or on water, dams, building near water, docks, etc.

LONG LIFE SPAN

This rebar provides the over 100s years life span of your buildings or construction.

TEMPERATURE

This rebar can handle high-temperature stress. Such places like power stations, tunnels, mining, etc., where the temperature is always high there, you can use GFRP Rebar. It melts at very high temperatures.

MECHANICAL STRENGTH

GFRP Rebar has a specific resistance more excellent than steel rebars.

NON-MAGNETIC

It is non-magnetic rebar, and it is suitable for hospitals, MRI rooms, laboratories & other uses.

THERMAL CONDUCTIVITY

Low thermal conductivity makes it highly useful in the building industry.

WOUND

You can cut or manufacture this rebar per custom width and length or your requirements.



Usage And Applications

Bridges • Roads • Highways • Swimming Pool • Septic Tanks

FRP/Basalt Rebar Vs Steel Rebar Comparison

SPECIFICATIONS	METAL CLASS A-III	FIBERGLASS
Material	Steel	Steklorovint bound by polymer based epoxy resin
Strength at stretching, MPa	390	1300
Relative extension, %	25	2,2
Coefficient thermal conductivity, W / (mO C)	46	0,35
Elastic modulus	200000	55000
Linear coefficient extensions, ax 10-5 / OC	13-15	9-Dec
Density, t / m	7,8	1,9
Corrosion resistance to aggressive environments	Corrosive	Non-corrosive
Thermal conductivity	Heat conductive	Non-conductive
Electrical conductivity	Electrically conductive	Non-conductive - is a dielectric
Released profiles	Jun-80	Apr-20
Length	Rods 6-12 m long	According to the buyer's request
Durability	According to building codes	Predicted durability not less than 80 years



FRP FENCING



FRP fencing is a complete solution to safety in both residential areas and heavy industries. It is used for protection and isolation and it is applied to many areas that require rapid installation. It has many advantages: easy installation, excellent anti-corrosion performance and cost effective features. The FRP fencing has many different types:

FRP fencing railing, FRP picket fence, FRP molded grating fencing and FRP pultruded grating fencing. Below are some common FRP fences. Special shapes can be customized.

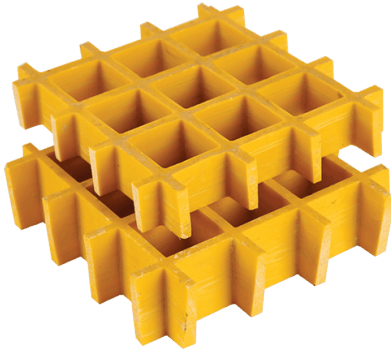


BOUNDRY FENCING



TRANSFORMER FENCING

FRP/GRP MOULDED GRATINGS



Plurimo is one of the India's leading producers of moulded grating. Renowned for their high strength, corrosion resistance in the harshest environments, long life and safety. Moulded Gratings meet the highest international standards. Produced from carefully selected resin systems, our gratings is designed to deliver many years of reliable service, outperforming the traditional materials they replace.

Plurimo FRP/GRP Gratings are lightweight, easy to fabricate and install. Their acceptance in many major industries has made them the first choice over steel, not only for their performance but cost competitiveness. Comparable with steel at the installed cost stage, their low maintenance and long life means a significantly lower life cycle cost than that of steel.

GRP Moulded Gratings are available with Polyester, vinyl ester or phenolic resin. All kinds of resin are self-extinguishing and UV-stabilized.

Applications

- » Walkways
- » Platforms
- » Trench covers
- » Staircase
- » Floorings
- » Foot Bridges
- » Step Treads
- » Swimming pool overflow
- » Fencing
- » Elevated car parking
- » Earth pit covers
- » Etc...

Industry

- » Chemical
- » Marine
- » Oil & Gas
- » Power
- » Food & Beverage
- » Desalination
- » Cements
- » Constructions
- » Pharmaceuticals
- » Pulp & Paper
- » Recreation
- » Water & Waste Treatment
- » Railways
- » Shipping
- » Transportation
- » Architectural
- » Telecommunications
- & Many more

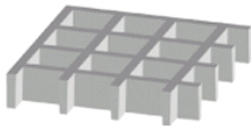
Size

FRP Moulded Grating are made into various mesh patterns and surface suitable for demanding applications.

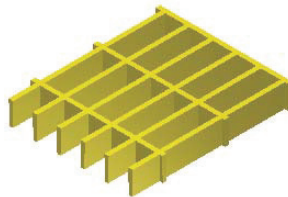
Product Code	Height (MM)	Mesh Size (MM)	Rib Thickness (MM)	Sheet Size (MM)
SM 20 x (38 x 38)	20	38 x 38	7-5	3600 x 1220
SM 25 x (38 x 38)	25	38 x 38	7-5	3600 x 1220
SM 30 x (38 x 38)	30	38 x 38	7-5	3600 x 1220
SM 38 x (38 x 38)	38	38 x 38	7-5	3600 x 1220

Comparison With Conventional Materials

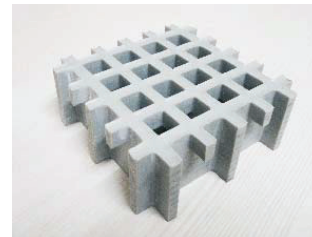
Parameters	Plurimo FRP Gratings	Hot Dipped GI	SS
Life Span	High	Moderate	High
Strength To Weight Ration	High	Low	Low
Life Cycle Cost	Low	High	High
Corrision Resistivity	Very High	Moderate	High
Chemical Resistivity	Nil	Moderate	High
Electrical Conductivity	High	High	High
EMI / RFI Transparency	High	Nil	Nil
Installation Cost	Low	Moderate	Moderate
Handaling	Very Easy	Difficult	Difficult
Anti Skid	Available	NA	NA
Color Range	Available	NA	NA



SM-Square Mesh



RM- Rectangle Mesh















MM-Mini Mesh

CONSTRUCTION

GRP Moulded Gratings are produced by wet moulding and hot curing in a heated mould. The reinforcement consists of continuous fibreglass rovings in alternating layers, so the loads are distributed evenly in all directions. Regularly Moulded GRP Gratings have a polyester resin matrix. Glass content is approximately 35%. Standard colours are green, yellow or grey, other colours are available according to RAL.

Industries We Cater

-  Oil and Gas
-  Architectural
-  Chemicals
-  Infrastructures
-  Pharmaceuticals
-  Cooling Tower
-  Electrical and Utility
-  Ladder and Handrailing
-  Marine Industry
-  Domestic Use
-  Cable tray System
-  Electrical

Certifications



ICV
Certificate of Registration
 This Certificate certifies that the Quality Management System of
PLURIMO PULTRUSION AND COMPOSITE PRIVATE LIMITED
 Survey No 81162, Ashika-3, Opp. Arvind Mega Park, Chacharvad, Ahmedabad, Gujarat-382210, India.

has been audited by ICV and found to be in compliance with the requirements of the standard
ISO 9001:2015
 This certificate is valid for the following scope

Manufacturing of Glass Fibers Products and Articles Thereof.

Certificate No.	:IN/9671337/3699
Certificate Issue Date	:08/02/2021
Int Surveillance Due	:08/01/2022
2nd Surveillance Due	:08/01/2025
Date of Expiry	:07/02/2024

ICV
 ICV ASSESSMENTS PVT. LTD.
 25, First Floor, Pashu Complex, Shiva Market, Patlipara New Delhi - 110054
 991-1141948120, info@icvassements.com, www.icvassements.com



Features & Advantages of the Product



Anti-Corrosive



Structurally Strong



Easy to Install



Light Weight



Non Conductive



Lab Tested



Chemical Resistant



Non Magnetic



Resistant to Chipping and Cracking



U. V. Resistant



Fire Resistant



Long Life



Hydrophobic



Durable



Easy to maintain



Dimensional Stability – The coefficient of thermal expansion of pultruded products are marginally very less than aluminium and steel



Anti static



Non Toxic

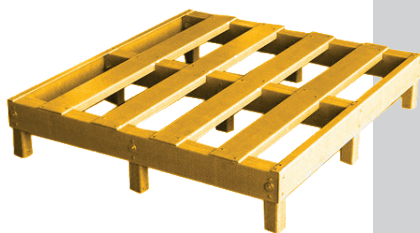


Some Interesting Creations

FRP LADDERS



FRP PALLETS



FRP RACKS



FRP WALL PARTITION





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