COMPOSITE MATERIALS

شركة قضبان بديلة للصناعة

AL TERNATIVE REBAR PLANT

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PRODUCTS CATALOG

INFRASTRUCTURAL PRODUCTS

FIBERGLASS STRUCTURAL MANHOLES

Fiberglass Structural manholes are durable access structures designed to provide entry to underground utility systems, such as sewer lines, drainage systems, or electrical conduits. They are essential for the maintenance, inspection, and repair of these systems.

General Specifications

Diameters (mm)	: 2500, 2400,2000, 1800, 1600, 1550, 1500, 1200, 1000
Thickness	: 12 – 30 MM
Height	: As per requirement
Manway opening	: 24 Inches
Surface.	: Smooth Finish inside, little rough outside
Color	: Natural Color of Resin
Accessories	: Heavy duty FRP ladder
Standards	: ASTM D3753

Load details

- Sewer systems
- Storm water drainage
- Utility Networks
- Water supply systems
- HS 20
- Industrial Facilities
- Transportation infrastructure
- Wastewater Treatment plant
- Residential Complexes Energy sector

Regulatory Authority: **ARAMCO, SABIC, NWC, SWC, Municipalities**

FIBERGLASS MANHOLE LINERS

Fiberglass Manhole liner is a protective layer installed inside existing manholes to restore, reinforce, or protect the structure. These liners are used to address issues such as corrosion, leakage, structural damage, and infiltration of groundwater.

General Specifications

Material	Fiberglass Reinforced Polyester
Diameters (mm)	1200 – 3700 mm.
Height	1000 mm to 6500 mm (Customized)
Thickness	Minimum 6 mm and maximum as per requirements
Surface	Smooth Finish inside, Little rough outside
Color	Natural color of Resin

Applications

- Sewer Systems
- Industrial Facilities
- Stormwater Drainage
- Coastal Areas

FIBERGLASS INSPECTION CHAMBERS

Inspection chamber is a small underground structure that provides access to sewer systems, drainage pipes, and other underground utilities for inspection, maintenance, and cleaning. the inspection chamber allows workers to check the condition of the pipes, clear blockages, and make repairs without having to excavate large sections of the ground.

General Specifications

Diameters (mm)	: 600 – 1000 MM Inner diameter
Height	: As per customer requirement
Thickness	: 6-18 mm
Surface	: Smooth Finish inside, Little rough outside
Color	: The natural color of Resin
Standards	: ASTM D3517

Applications

- Residential Drainage
- Commercial and Industrial Buildings
- Stormwater Systems
- Utility Networks
- Road and Highway Drainage

Regulatory Authority: **ARAMCO, SABIC, NWC, SWC, Municipalities**

FIBERGLASS RAIN GRATE WITH FRAME

Rain grates are drainage covers made from FRP material consisting of a polymer matrix reinforced with glass fibers. These grates are designed to allow water to drain away from surfaces such as roads, walkways, and parking areas, while preventing debris from entering the drainage system.

General Specifications

Colors	: Grey, Black, and customized app
MOC (Material of construction):	: Glass Fiber +
Ambient Temperature	: -10 ° C to 80 °
Shape	: Square
Clear Opening	: 600 x 600 mm
Overall Size	: 846 x 820 mm
Loading Class	: BS EN 124-5:2015
Top Surface	: Anti Slip / Chek

Applications

- Transportation and Traff
- Urban Drainage Systems
- Parking Lots and Garages
- Coastal and Marine Areas

FIBERGLASS SMC MANHOLE COVERS

Fiberglass manhole covers are lightweight, durable alternatives to traditional metal or concrete covers. FRP manhole covers are ideal for use in environments where exposure to moisture, chemicals, or electrical installations is common. They are easy to handle, install, and maintain, making them a cost-effective solution for municipal infrastructure, industrial facilities, and coastal areas.

"Their resistance to theft and environmental degradation further enhances their appeal."

General Specifications

Colors	|	Grey, Black and customized applications
MOC (Material of construction):	|	Glass Fiber + Polyester Resin
Ambient Temperature	|	-10 ° C to 80 °
Shape	|	Round
Loading	|	BS EN 124-
Clear Opening	|	600 mm
Overall size	|	778 mm
Top Surface	|	Anti Slip / Checked

Product Range

Model	Loading Capacity
D 400	40 Ton
C 250	25 Ton
B125	25 Ton

Applications

- Urban and Municipal Infrastructure
- Industrial Sites
- Transportation and Traffic Areas
- Residential Areas
- Telecommunications

Type of opening

- Hinge type
- Lifting type

FIBERGLASS STORAGE TANKS

Fiberglass tanks are designed for storing water and other liquids in a variety of applications, including residential, commercial, and industrial settings. FRP water tanks are known for their durability, corrosion resistance, and lightweight properties, making them a popular choice in many industries.

General Specifications

Material	Fiberglass Reinforced Polyester
Diameters (mm)	Upton 4000 mm and 150,000
Thickness	per design.
Manway opening	600 mm
Surface.	Smooth Finish inside, little rough outside
Color	Natural Color of Resin & customized
Applicable standard	As per customer requirements

Applications

- Residential & Industrial Water Storage
- Fuel Storage
- Chemical Storage
- Agricultural Use
- Municipal Water Supply
- Marine and Coastal Applications
- Septic and sewer applications
- Fire Protection Systems

Types

- Above Ground
- Under Ground

FRP FILTER VESSEL / ODOUR CONTROL UNIT VESSEL

Applications

Fiberglass vessel filter combines the benefits of GRP material with the functionality of a carbon filter, providing a robust and effective solution for water filtration needs. These filters are widely used in various applications, including water treatment for drinking water, industrial processes, and wastewater treatment.

Applications

- Municipal Water Treatment
- Industrial Water Treatment
- Aquariums and Aquatic Systems
- Wastewater Treatment
- Desalination Plants

Key Benefits

- Long-Term Cost Savings
- Environmental Benefits
- Versatility

FIBERGLASS SAND TRAP

Sand trap is a device used to capture and remove sand, sediment, and other debris from water or other fluids before they enter a drainage or sewer system. Sand traps are commonly used in areas where runoff or wastewater contains a significant amount of particulate matter, such as in car washes, construction sites, or industrial facilities.

General Specifications

Diameters (mm)	605 mm internal Top, 520 mm internal bottom
Depth	180–250 mm
Dead weight	5–6.5 kg
Thickness	8 mm
Surface	Smooth Finish inside, Gel coat finish outside
Color	White Gel coat
Handles	4 cut outs of size 100 x 19 mm
Draining Holes	16 Holes of Dia 16 mm in two rows
Maximum Capacity	18 kg

Applications

- Car wash facilities
- Construction sites
- Industrial facilities
- Strom water management
- Wastewater treatment plants
- Mining operations
- Road drainage system
- Residential & commercial Complexes

FIBERGLASS WATER METER BOX

Fiberglass water meter box is a protective enclosure designed to house and safeguard water meters. These boxes are made from fiberglass and resin, which offers superior strength, durability, and resistance to environmental factors compared to traditional materials like metal.

General Specifications

Dimension	410 mm (L) x 298 mm (W) x 144 mm (D)
Thickness	6 mm
Door opening	180 Degree
Surface	Smooth Finish inside & outside
Color	RAL 9010 Standard
Accessories	Stainless Steel lock, key and hinges
Opening for meter reading	Glass and readable
Ingress protection	IP 4

Applications

- Residential Installations
- Municipal Water Systems
- Municipal Water Systems
- Coastal and Marine Environments

ARAMCO, SABIC, NWC, SWC, Municipalities

FIBERGLASS LADDERS

Fiberglass ladders are a type of ladder constructed from a composite material made of fiberglass and a resin matrix. This combination provides the ladders with unique properties that make them highly suitable for industrial, commercial, and even residential applications, particularly in environments where traditional metal or wooden ladders may not perform well.

General Specifications

Material	Fiberglass Reinforced Polyester
Length (mm)	500-12000 mm / customized
Width	300-700 mm / customized
Rail Edge	50 mm (Edge side) & 30 mm (Front Width)Smooth
Surface	Customizable
Color	

Applications

- Industrial Settings
- Utilities and Telecommunications
- Water and Wastewater Treatment
- Petrochemical & Refinery
- Marine and Offshore
- Construction and Maintenance

FIBERGLASS REBARS

GFRP rebars are a type of reinforcement bar made from a composite material consisting of fiberglass fibers and a resin matrix. These rebars are used as an alternative to traditional steel reinforcement in concrete structures, offering several advantages, particularly in environments where corrosion is a significant concern.

Applications

- Bridge decks and Barrier walls
- Roads, Parking Garages and concrete slabs
- Power generation and MRI
- Tunneling and Temporary Reinforcement
- Dams, Seawalls and Marine applications

	Units	#3-60	#4-60	#5-60	#6-60	#7-60	#8-60
Diameter	mm	10	13	15	20	22	25
	inch	3/8	1/2	5/8	3/4	7/8	1

FRP MOLDS FOR CONCRETE

Fiberglass molds are advanced tools designed to shape and support concrete during curing, enabling the creation of various structures such as panels, beams, columns, and intricate architectural designs. As a pioneering manufacturer, we are revolutionizing the construction industry with innovative FRP products that enhance efficiency, quality, and design possibilities in concrete production

Key Features & Benefits

- Smooth Surface Finish
- Reusable and Long-Lasting
- Customizable
- Non-Stick Properties Heat
- and UV Resistance

Applications

- Precast Concrete Elements
- Architectural Features
- Infrastructure Projects
- Retaining Walls and Barriers
- Custom Projects

FRP PIPE FITTINGS

FRP /GRP pipe fittings are components used to connect, change the direction of, or modify the flow within a piping system made of FRP.

Color	Natural Color of Resin / Customized.
Thickness	6 mm Minimum; Maximum asper Customer Requirement.
Dimensions	Customized
Surface	Smooth Finish Inside, Little Rough Outside.

Applications

- Chemical Processing Plants Water
- and Wastewater TreatmentOil and
- Gas Industry
- Desalination Plants
- Power Generation

Key Features & Benefits

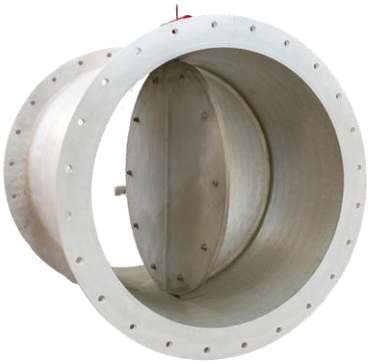
- 90 Degree Elbows
- Equal Tees
- Short pipe with
- FlangeTee with
- Flange Reducers
- Y's
- Headers

FRP ADAPTORS / DAMPERS / FLOWMETER

FRP /GRP Adaptors are designed to provide reliable and durable connections between different types or sizes of pipes, fittings, or equipment in various industrial applications.

Applications

- Water and Wastewater Treatment
- Chemical Processing
- Oil & Gas
- Desalination Plants
- Construction
- Power Generation



OIL & GREASE SEPARATORS / INTERCEPTORS

Oil and Grease Separators are crucial for managing and removing oil, grease, and other hydrocarbons from wastewater and drainage systems. Designed to enhance environmental protection and ensure compliance with regulatory standards. They efficiently separate and capture oil and grease before the wastewater is discharged into the sewer system or treatment facility.

Applications

- Restaurants and Food Service Facilities
- Automotive Service Stations
- Industrial Facilities
- Commercial Buildings
- Car Washes
- Parks and Recreational Facilities
- Healthcare Facilities
- Wastewater Treatment Plants

Storage Capacity:

up to 200 liters

FRP PORTABLE TOILETS

A portable toilet made from FRP (Fiberglass Reinforced Plastic) is a lightweight, durable, and corrosion-resistant sanitation unit that can be easily transported and used in various locations.

Types of FRP Toilets:

1. With Water and septic tank
2. Without water tank & Septic tank

Applications

- Construction Sites
- Events and Festivals
- Parks and Recreational Areas
- Emergency Situations
- Public Works Projects
- Outdoor Activities
- Military and Remote Operations

FRP MARKER POST

Marker Posts are designed for reliable and durable use in outdoor environments to mark boundaries, utility lines, or specific locations.

Applications

- Road and Highway SafetyPipeline Identification Utility and Telecom
- Surveying and Land Boundaries
- Environmental and Forestry
- Construction Sites

ROOF CURB SHEETS

Roof Curb Sheets are essential components used to create durable and weather-tight curbsfor roof penetrations. These sheets provide a robust solution for sealing and supporting rooftop installations. They are designed to integrate seamlessly with roofing systems, ensuring effective drainage, preventing leaks, and enhancing the longevity of the roof.

Applications

- Commercial Buildings
- Residential Roofing
- Manufacturing Facilities
- Retail Spaces

Type of Roof Curb Sheets

1. Ventilation
2. Insulation

PLASTIC SPACERS FOR PIPE DUCTING

Plastic Spacers for Pipe Ducting are designed to securely position and support pipes within ducting systems, ensuring proper alignment, and spacing during installation. They are easy to install and provide reliable support, preventing pipe movement and reducing wear and tear. Ideal for a variety of piping applications, including HVAC, plumbing, and electrical conduit systems, our plastic spacers enhance the longevity and performance of ducting installations.

General Specifications

Parts	Base spacer, Intermediate spacer
Dimensions	2 Inches, 4 Inches
Connection method	Applicable for both Parallel and vertical

Key Features & Benefits

- Durable and Lightweight
- Corrosion and Chemical Resistance
- Easy Installation
- Cost-Effective
- Versatility
- Minimizes Vibration and Noise

Key Features & Benefits

- HVAC Systems Plumbing
- Electrical Conduit Systems
- Industrial Piping
- Telecommunication Ducts

PLASTIC CONCRETE SPACERS

PVC Concrete Spacers are manufactured using advanced injection molding technology and provide precise and durable support for reinforcement bars (rebar) in concrete structures. These spacers ensure accurate positioning of rebar, maintaining the required concrete cover to protect against corrosion and enhance structural integrity. These spacers are lightweight, easy to install, non-corrosive, and resistant to chemicals and moisture, making them ideal for a wide range of construction applications, from slabs and beams to columns and foundations.

Key Features & Benefits

- Ensures Proper Concrete Cover
- High Durability
- Lightweight and Easy to Install
- Non-Corrosive
- Versatility
- Cost-

Total height	62.42 mm
Total width	36 mm

Key Features & Benefits

- Reinforced Concrete Structures
- Precast Concrete Elements
- Civil Engineering Projects

INDUSTRIAL PRODUCTS

FIBERGLASS PULTRUDED GRATINGS

Fiberglass pultruded gratings are structural panels made from a glass fibers and resin. They are manufactured through a pultrusion process, where continuous glass fibers are impregnated with a polymer resin and pulled through a heated die to form the desired shape.

PRODUCT RANGE

TG 30 SERIES

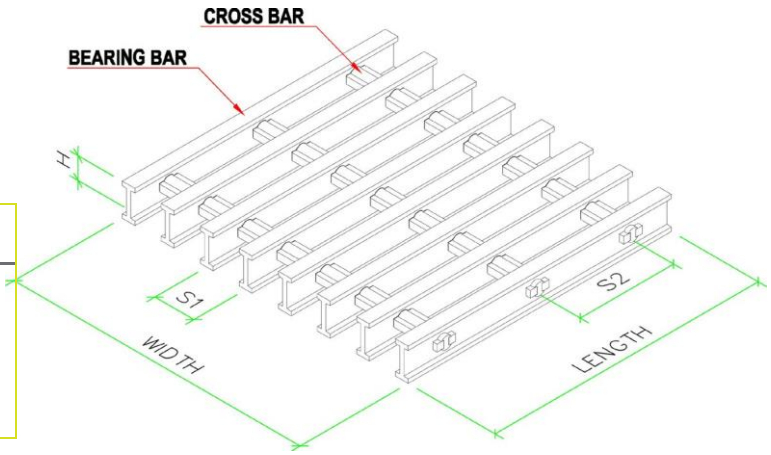
Model	H(mm)	S1 (mm)	S2 (mm)
TG-30-1	30	38	38
TG-30-2	30	31	31
TG-30-3	30	25	25

TG 38 SERIES

Model	H(mm)	S1 (mm)	S2 (mm)
TG-38-1	38	46	110/150
TG-38-2	38	40	110/150
TG-38-3	38	34	110/150

TG 50 SERIES

Model	H(mm)	S1 (mm)	S2 (mm)
TG-50-1	50	56	110/150
TG-50-2	50	50	110/150
TG-50-3	50	46	110/150



General Specification

Types of Resin	: GRP/ GRV
Color (RAL Based)	: Customized
Surface finish	: Top- Slip-resistant textures enhance safety. Bottom- Smooth or patterned depends on application
Load bearing capacity	: Depends on span length usually starts from 6 Ton per square. meter up to requirements

Applications

- Industrial Flooring
- Walkways and Platforms
- Stair Treads
- Drainage Systems
- Marine and Offshore Structures
- Chemical Processing plants Water and Wastewater Treatment
- Transportation Infrastructure

FIBERGLASS MOLDED GRATINGS

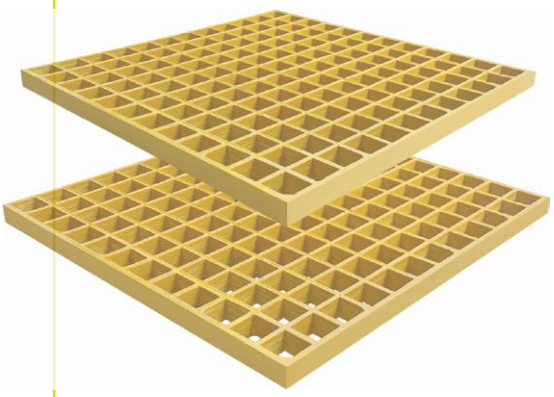
Fiberglass Molded Gratings manufactured using the heat ejection process offer exceptional durability and performance. This method involves applying heat to mold fiberglass resin, which then cures to form strong, lightweight gratings. The heat ejection process ensures precise molding and enhances the mechanical properties of the grating, making it ideal for applications requiring high strength, chemical resistance, and minimal maintenance.

General Specification

Specifications	: 38 x 38 x 38 mm
Types of Resin	: GRP/ GRV
Colour (RAL Based)	: Customized
Surface finish	: Top- Slip-resistant textures enhance safety. Bottom- Smooth or patterned depends on application requirements.
Load bearing capacity	: Depends on span length usually starts from 6 Ton per square meter up to requirements.

Applications

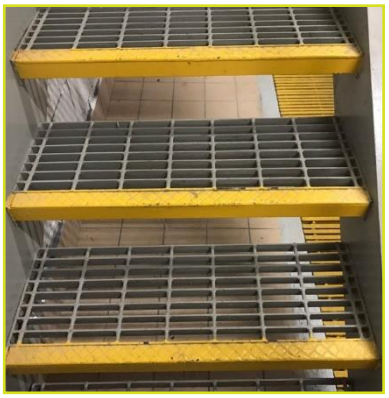
- Industrial Flooring
- Walkways and PlatformsStair
- Treads
- Drainage Systems
- Marine and Offshore Structures
- Chemical Processing plants
- Water and Wastewater Treatment
- Transportation Infrastructure

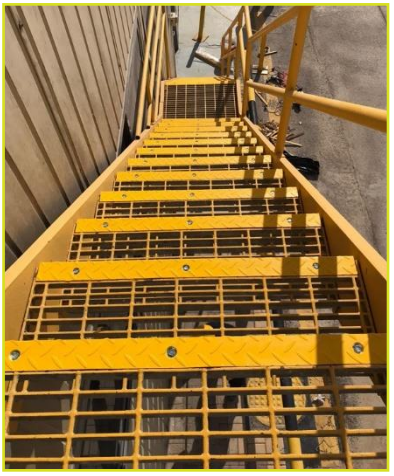


ANTI-SLIP STAIR THREAD NOSING

Anti-Slip Stair Nosing is a safety product designed to prevent slips and falls on stairs. The anti-slip stair nosing is typically installed on the edge of each step, providing a textured surface that increases grip and visibility. This is especially important in areas that may be wet, oily, or otherwise hazardous.

Color (RAL Based): Customized Safety standards : OSHA / NEBOSH





Product Range

Stair Nosing Size	40 X 40 MM 55 X 55 MM & Customized
Thickness	04-06 mm & Customized
Length	1000 – 2000 mm & Customized
Weight	1.3 Kg to 1.5 kr / meter
Surface Finish	Gritted surface for enhanced slip resistance Anti-slip Chamfered Edging structure

Properties	
Pendulum Test	+65 test results in Extremely low Risk value
Slip classification	BS 4592 CoF (Coefficient of Friction) <0.4 to 0.6

Applications

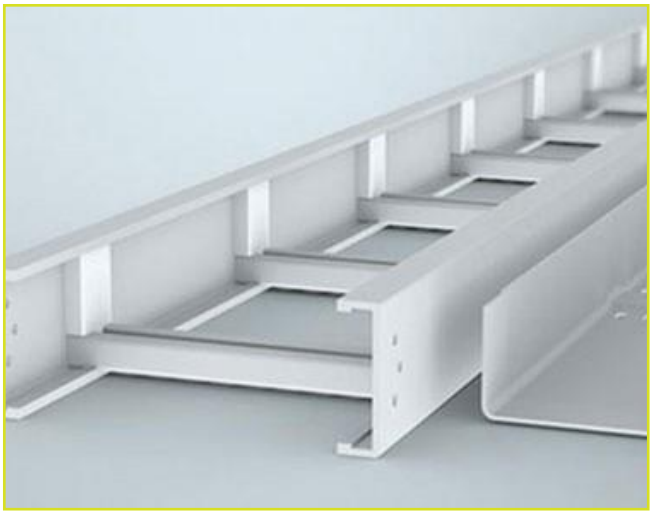
- Oil & Gas Industries
- Industrial Plants
- Public Buildings
- Transport infrastructure
- Outdoor stairways
- Marine environments

GRP/FRP CABLE TRAY

Fiberglass Cable Trays are support systems designed for managing and routing electrical cables and wiring in various industrial, commercial, and infrastructure settings. Made from glass fiber-reinforced plastic (GRP or FRP), these cable trays offer several benefits that make them a popular choice in demanding environments.

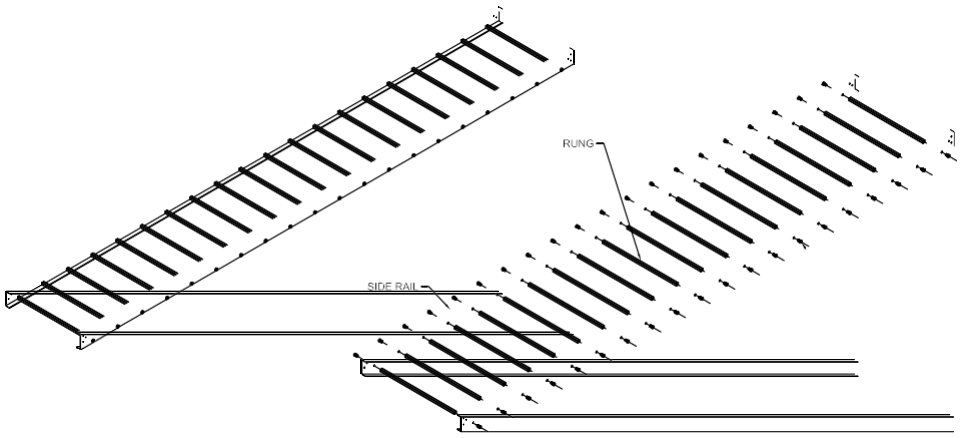
Product Range

Side Rail	Height	157 mm
	Thickness	6 mm
Rung	Rung profile	25 x 25 mm
	Length	Customized



General Specification

Color	: (RAL Based): Customized based on application
Accessories	: 1. L Angle 2. Elbow angle
Standards	: NEMA FG-01
Surface Finish	: Smooth outside, Little Rough inside



Applications

- Oil & Gas Industry
- Petrochemical Plants
- Power Generation
- Water and Wastewater Treatment Plants
- Mining and Metals
- Marine and Coastal Installations

GRP/FRP ENCLOSURES

GRP Enclosures is made from a durable composite material consisting of glass fibers embedded in a resin matrix. The protective enclosure is designed to securely house fire extinguishers, instruments, and Electrical applications.

Product Range

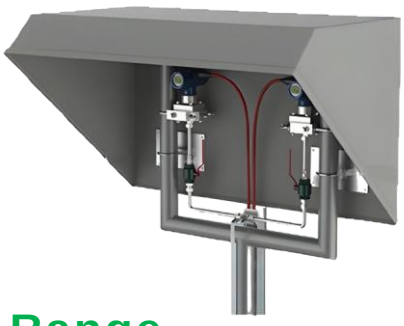
Dimensions	Customized
Thickness	5 mm
Surface Finish	Smooth outside, Little Rough inside
Ingress protection	IP 55

Applications

- Oil & Gas Industries
- Industrial facilities
- Utilities and infrastructure
- Marine environments
- Construction sites
- Commercial buildings
- public spaces
- LV Electrical Panels
- Control Panels

GRP/FRP INSTRUMENT SUNSHADES

GRP/FRP Instrument Sunshades are designed to protect sensitive instruments & equipment from direct sunlight, heat, and harsh environmental conditions.



Applications

- Oil & Gas Industry
- Petrochemical Plants
- Power Generation
- Water and Wastewater Treatment Plants
- Mining and Metals
- Marine and Coastal Installations

Product Range

Dimensions	Customized
Thickness	5 mm
Surface Finish	Smooth outside, Little Rough inside
Color	Customized based on the application

ELECTRICAL PRODUCTS

METER BOX

SINGLE CONSUMER METER FRP BOX- 160 AMPS

Dimensions	965 (H) X 270 mm (W) x 205 mm (D)
Thickness	3-4 mm thickness
Degree of protection	IP 54
Mechanical protection	IK09
Color	Grey
Terminal current capacity	Up to 160A
No of meters	One

DOUBLE CONSUMER METER FRP BOX

Dimensions	965 (H) X 560 mm (W) x 205 mm (D)
Thickness	3-4 mm thickness
Degree of protection	IP 54
Mechanical protection	IK09
color	Grey
Terminal current capacity	Upton 160A
No of meters	Two

QUADRUPLE CONSUMER METER FRP BOX

Dimensions	965 (H) X 965 mm (W) x 205 mm (D)
Thickness	3-4 mm thickness
Degree of protection	IP 54
Mechanical protection	IK09
cooler	Grey
Terminal current capacity	Upton 160A
No of meters	Four

CURRENT TRANSFORMER METER

CT 200 A METER BOX

Dimensions	965 (H) X 560 mm (W) x 205 mm (D)
Thickness	3-4 mm thickness
Degree of protection	IP 54
Mechanical protection	IK09
Colour	Grey
Terminal current capacity	200A

CT 300 - 400A METER BOX

Dimensions	965 (H) X 560 mm (W) x 205 mm (D)
Thickness	3-4 mm thickness
Degree of protection	IP 54
Mechanical protection	IK09
Colour	Grey
Terminal current capacity	300A - 400 A

CT 500-630A METER BOX

Dimensions	965 (H) X 785 mm (W) x 205 mm (D)
Thickness	3-4 mm thickness
Degree of protection	IP 54
Mechanical protection	IK09
Colour	Grey
Terminal current capacity	500 - 630A

FEEDER PILLARS

LOW VOLTAGE SERVICE BOX 800 AMPS

Dimensions	1710 (H) X 800 mm (W) x 315 mm (D)
Thickness	3-4 mm thickness
Degree of protection	IP 54
Mechanical protection	IK09
Colour	Grey
Terminal current capacity	Upto 400A

LOW VOLTAGE SERVICE BOX 800 AMPS

Dimensions	1710 (H) X 800 mm (W) x 315 mm (D)
Thickness	3-4 mm thickness
Degree of protection	IP 54
Mechanical protection	IK09
Colour	Grey
Terminal current capacity	Upto 800A

COMPOSITE MATERIALS

شركة قضبان بديلة للصناعة

AL TERNATIVE REBAR PLANT

مصنع قضبان بديلة لمنتجات الألياف الزجاجية

ALTERNATIVE REBAR PLANT FOR FIBER GLASS PRODUCTS

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