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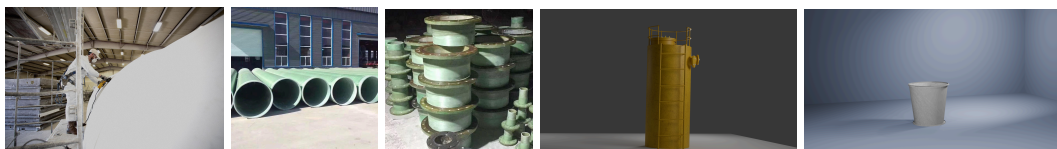
## ABOUT FIBERXPERTS:

Fiber-reinforced plastic (FRP) and glass-reinforced plastic (GRP) have completely changed the way products are made today. These materials are strong, lightweight, and resistant to corrosion, making them ideal for many industries. At **FiberXperts** We are proud to be one of Chittagong's leading suppliers of high-quality FRP and GRP solutions.

We specialize in creating customized products designed to meet the unique needs of each customer. Our team is committed to delivering excellent craftsmanship, using the latest technologies and innovative techniques to ensure the best results. At FiberXperts, quality, reliability, and customer satisfaction are at the heart of everything we do.

Whether you need durable industrial parts, custom-made structures, or long-lasting solutions for your projects, FiberXperts is here to bring your ideas to life with strength and precision. We look forward to working with you and building lasting partnerships based on trust and excellence.

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## WHY FRP & GRP ARE THE BEST ALTERNATIVES TO TRADITIONAL METAL:

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To convince your client to choose FRP (Fibre Reinforced Plastic) or GRP (Glass Reinforced Plastic) over traditional metals like iron or stainless steel (SS), you should present clear technical, economic, and performance-based advantages. Here's a structured list of reasons you can use, tailored for client presentation:

### 1. Corrosion Resistance

- **FRP/GRP:** Naturally resistant to corrosion, rust, and chemical attack—ideal for marine, industrial, or chemical environments.
- **Iron/SS:** Iron rusts easily, and although stainless steel is corrosion-resistant, it can still corrode in aggressive or chloride-rich environments.

Benefit: **Longer lifespan** with minimal maintenance.

### 2. Lightweight Yet Strong

- **FRP/GRP:** Up to 70% lighter than metals while maintaining excellent mechanical strength.
- **Iron/SS:** Heavy, making transport and installation more labor-intensive and costly.

Benefit: Easier installation, lower transportation costs, and less structural support needed.

### 3. Low Maintenance

- **FRP/GRP:** Requires little to no maintenance—no painting, no anti-rust coatings, no regular polishing.
- **Iron/SS:** Needs frequent maintenance, especially in corrosive environments.

Benefit: Significant cost savings over product lifetime.

### 4. Customization & Design Flexibility

- **FRP/GRP:** Can be easily molded into complex shapes and sizes, textured surfaces, or colored finishes.
- **Iron/SS:** Difficult and expensive to fabricate into custom forms.

Benefit: Greater design freedom for both functional and aesthetic requirements.

### 5. Non-Conductive & Fire Retardant (Optional)

- **FRP/GRP:** Naturally non-conductive and can be manufactured to be fire retardant, making them safe for electrical or fire-prone areas.
- **Iron/SS:** Conductive and requires insulation for safety.

Benefit: **Inherent safety** features reduce additional protection requirements.

## 6. Cost-Effective in Long Term

- **Initial Cost:** FRP/GRP might be **comparable or slightly higher upfront**, but:
- **Lifecycle Cost:** **Much lower over time** due to minimal maintenance, longer life, and reduced replacement needs.

Benefit: **Better return on investment (ROI).**

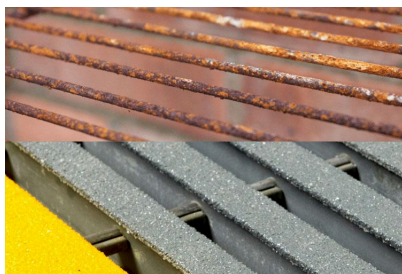
## 7. Environmentally Friendly

- **FRP/GRP:** Durable with long life = **less waste**. Also, modern FRPs can be made using **recyclable or bio-based resins**.
- **Iron/SS:** Heavy carbon footprint in production and recycling processes.

Benefit: **Sustainability and green credentials** for your project.

### Summary Comparison Table:

Feature	FRP/GRP	Iron	Stainless Steel
Corrosion Resistance	✓ Excellent	✗ Poor	✓ Good (but limited)
Weight	✓ Very Light	✗ Heavy	✗ Heavy
Maintenance Needs	✓ Very Low	✗ High	⚠ Moderate
Design Flexibility	✓ High	⚠ Moderate	⚠ Moderate
Electrical Conductivity	✓ Non-conductive	✗ Conductive	✗ Conductive
Fire Resistance (optional)	✓ Customizable	⚠ Depends on alloy	⚠ Depends on grade
Long-Term Cost	✓ Low	✗ High	⚠ Moderate to High



	FRP	Steel	Aluminum	Timber/Wood
Corrosion Resistance	High	Low	Medium	Low
Strength	High	High	High	Low
Weight	Low	High	Low	Medium
Electrical Conductivity	Low	High	High	Moderate

## OUR PRODUCT & SERVICE PORTFOLIO:-

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### FRP TANK

FRP tanks are storage tanks made of fiber-reinforced plastic. The term “FRP” stands for “Fiber Reinforced Plastic” and usually contains a resin matrix reinforced with reinforcing fibers such as glass fiber or carbon fiber. This combination gives the tanks high durability and chemical resistance. FRP tanks have many advantages. First of all, they are lightweight and easily portable, making them easy to transport and install. Additionally, their resistance to chemicals makes them last longer than metal tanks. However, FRP tanks are generally resistant to corrosion, making them preferred in a variety of industrial applications. FRP tanks can be used to store liquid chemicals, petroleum products, wastewater, chemical solvents, and many other substances. This versatility makes them widely used in industrial plants, water treatment plants, chemical industry and many more fields. However, maintenance and installation of FRP tanks require certain expertise. If not installed correctly, problems such as cracks or leaks may occur. Additionally, it is important to store chemical ingredients correctly and clean the tank, otherwise material performance degradation or decay may occur. FRP tanks are an ideal option to meet industrial storage needs due to their durability, chemical resistance and flexibility in various application areas. However, it is important to ensure correct installation, maintenance and use.

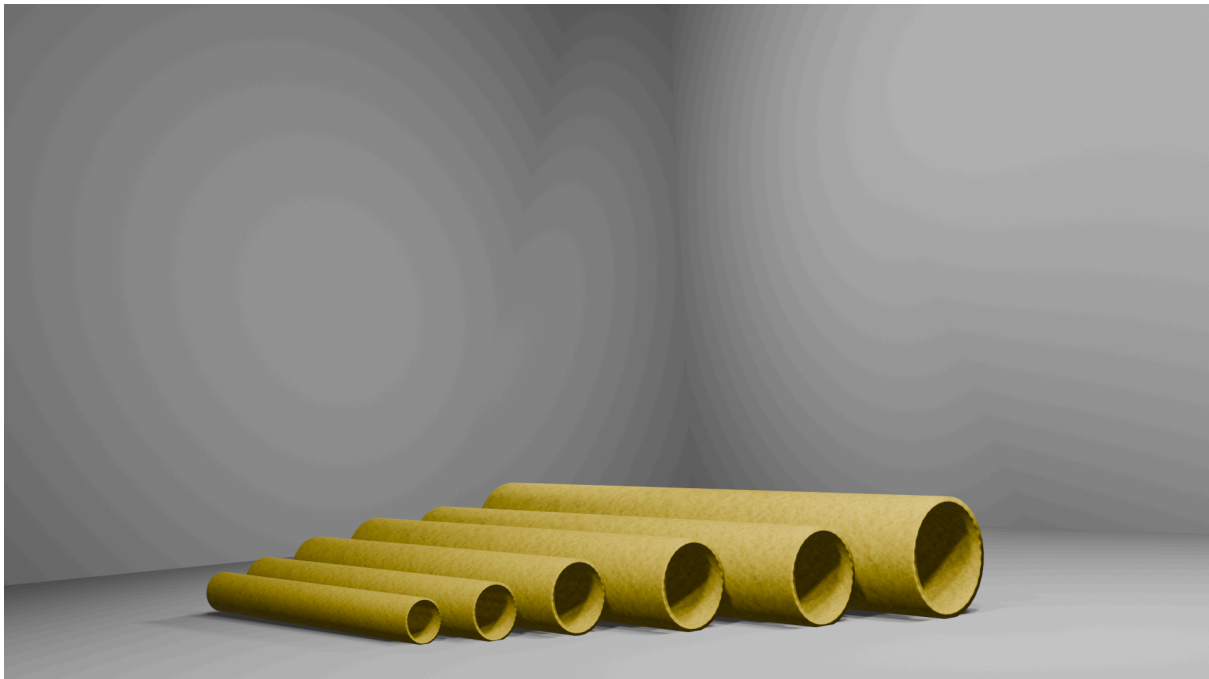




## FRP PIPE :

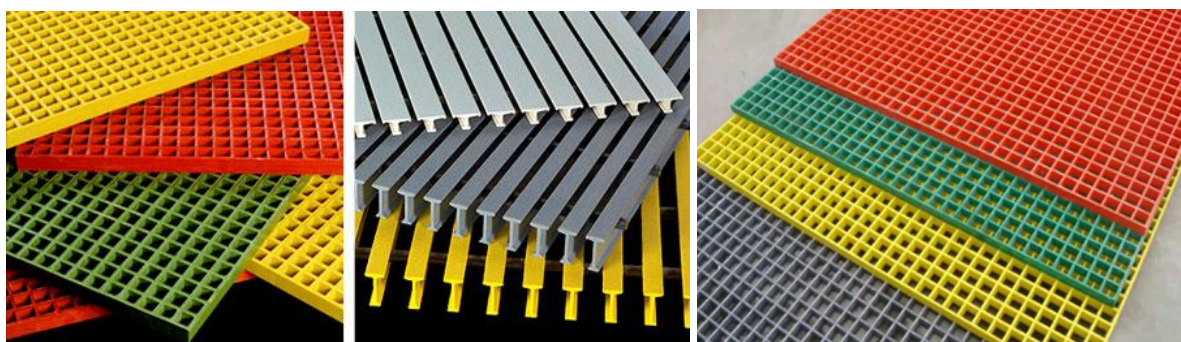
### Why Choose FRP Pipes Over Traditional Options?

FRP (Fiber-Reinforced Plastic) pipes are becoming the top choice in many industries, especially for water, oil, fuel, chemical, and wastewater transport. One of the biggest advantages of FRP pipes is their high resistance to rust and corrosion, which makes them ideal for long-term use in harsh environments. Unlike metal pipes that can rust or break down over time, FRP pipes stay strong and reliable for up to 50 years or more. This means less maintenance, fewer replacements, and big savings in the long run. FRP pipes are also much lighter, making them easier to handle and install—saving both time and labor costs. With growing demand and proven performance, FRP pipes offer a smarter, longer-lasting, and more cost-effective solution for all your piping needs.



## FRP GRATINGS :

FRP (Fiber-Reinforced Plastic) gratings are widely used in industrial walkways, platforms, staircases, and many other areas where safety and strength are important. These grids are lightweight yet extremely strong, making them easy to install while handling heavy loads. Unlike metal, FRP does not rust or corrode, even in wet, chemical, or marine environments, which means less maintenance and a longer life. They also provide excellent slip resistance, reducing the risk of accidents in busy work areas. Whether in factories, power plants, chemical zones, or offshore platforms, FRP gratings are a reliable, safe, and cost-effective solution that improves both performance and workplace safety.



## FRP STRAINER:

FRP (Fiber-Reinforced Plastic) strainers are widely used in industries where corrosion resistance and durability are essential. These strainers are commonly installed in chemical processing plants, water and wastewater treatment facilities, desalination plants, power generation stations, and marine environments. In these settings, FRP strainers are used to filter out debris and solid particles from liquids before they enter pumps, pipelines, or other sensitive equipment. Because FRP is non-metallic, these strainers are especially useful in corrosive conditions, such as when handling acids, alkalis, saline water, or industrial waste. FRP strainers are also preferred in cooling water systems, oil refineries, fertilizer plants, and textile factories, where reliability, low maintenance, and long service life are critical. Their customizable design and high strength-to-weight ratio make them a practical and cost-effective choice for industries looking to improve system efficiency and protect valuable equipment.



## **FRP vessels :**

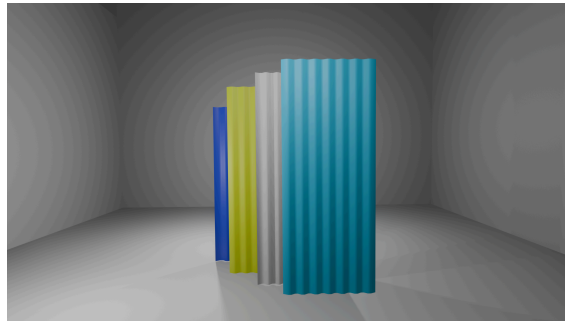
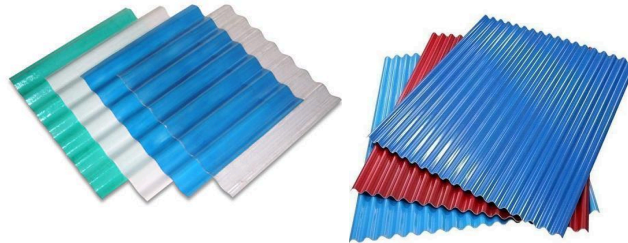
FRP (Fiber-Reinforced Plastic) vessels are used because of their exceptional resistance to corrosion, chemical attack, and harsh environmental conditions. Unlike traditional metal tanks, FRP vessels do not rust or degrade when exposed to chemicals, making them ideal for storing or processing corrosive substances such as acids, alkalis, solvents, or wastewater. These vessels are widely used in chemical industries, water and wastewater treatment plants, food and beverage processing, pharmaceuticals, power generation units, and even marine and offshore operations. Their lightweight design, combined with high mechanical strength, makes them easy to transport and install while still withstanding high pressure and temperature variations. In addition, FRP vessels offer a longer service life with minimal maintenance, resulting in lower operating costs and improved system reliability. The importance of FRP vessels lies in their safety, durability, and adaptability, making them a smart investment for industries looking to ensure safe storage and processing without the long-term issues associated with metal or concrete tanks.



## **FRP SHEETS**

At FiberXpert, we offer high-quality FRP (Fiber-Reinforced Plastic) sheets that are both flexible and lightweight, making them perfect for a wide range of applications. These thin yet durable plastic panels are reinforced with fiberglass, providing excellent strength and water resistance. Our FRP sheets are ideal for use on walls and ceilings, especially in wet or humid environments such as commercial kitchens, washrooms, hospitals, cold storage rooms, and cleanrooms. They can be easily installed over various solid surfaces like wood, concrete blocks, drywall, and more. With options for mechanical jointing, adhesive bonding, and custom surface finishes, these sheets offer both functionality and aesthetic appeal. Their

resistance to moisture, mold, and impact makes them a long-lasting, low-maintenance solution for industries that demand hygiene, strength, and reliability.



## **FRP BLOWERS:**

FRP (Fiberglass Reinforced Plastic) blowers are widely used in industries due to their excellent resistance to corrosion, lightweight structure, and high durability. These blowers are especially suitable for handling corrosive gases, chemical fumes, and moist air, which are commonly found in chemical plants, wastewater treatment facilities, and pharmaceutical industries. Unlike metal blowers, FRP blowers do not rust or degrade when exposed to harsh chemicals, making them ideal for environments where corrosion is a major concern. Additionally, their relatively low maintenance requirements and energy-efficient performance make them a cost-effective choice for long-term industrial applications.





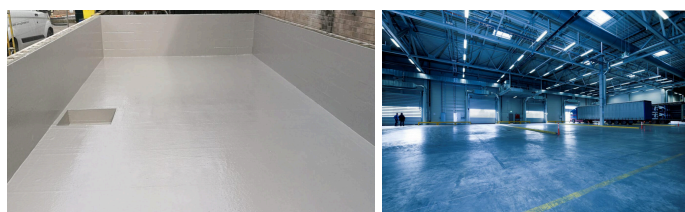
## FRP CHLORINE FUME HOOD:

FRP (Fiberglass Reinforced Plastic) chlorine fume hoods are used in industries primarily to safely handle and exhaust toxic chlorine gas and fumes generated during chemical processes. Chlorine is highly reactive and corrosive, and prolonged exposure can damage conventional materials and pose serious health hazards. FRP chlorine fume hoods offer excellent chemical resistance, especially against corrosive gases like chlorine, making them ideal for use in chemical manufacturing, water treatment plants, and laboratories. These hoods ensure a controlled environment by effectively capturing and venting hazardous fumes, thus protecting workers and maintaining air quality, while their durability and low maintenance needs make them a cost-effective solution for long-term industrial use.



## FRP COATING FLOOR

FRP (Fiberglass Reinforced Plastic) floor coating is used in industries to provide a strong, durable, and highly chemical-resistant surface that can withstand harsh operating conditions. It is especially important in environments where floors are exposed to corrosive chemicals, heavy machinery, spills, and constant foot or vehicle traffic. FRP coatings create a seamless, non-porous layer that prevents chemical seepage and protects the underlying concrete from damage, thereby extending the life of the flooring. This type of coating also offers slip resistance, improving workplace safety. Industries such as chemical processing, pharmaceuticals, food and beverage, and wastewater treatment rely on FRP-coated floors to maintain hygiene, structural integrity, and a safe working environment.





### **FRP ACID TRANSFER VEHICLE TANK:**

FRP (Fiberglass Reinforced Plastic) acid transfer vehicle tanks are used in industries for the safe and efficient transportation of corrosive acids such as sulfuric acid, hydrochloric acid, and nitric acid. These tanks are preferred because FRP offers outstanding resistance to chemical corrosion, unlike metal tanks which can degrade over time when exposed to strong acids. FRP tanks are lightweight yet structurally strong, allowing for increased payload capacity while reducing fuel consumption. They are also non-reactive, ensuring that the acids transported remain uncontaminated. Additionally, FRP tanks have a long service life, require minimal maintenance, and are designed to withstand a wide range of temperatures, making them ideal for harsh industrial and outdoor environments.



## FRP REPAIR SERVICE & MAINTENANCE:

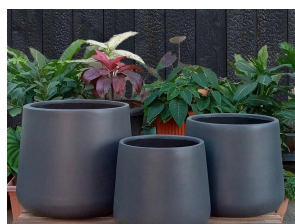
Fiberxperts provides comprehensive repair services for all types of FRP (Fiber Reinforced Plastic) products, ensuring extended usability and optimal performance of industrial equipment. Their expert repair solutions cover a wide range of applications, including tanks, pipelines, ducting systems, fume hoods, flooring, and acid transfer vehicles. With advanced techniques and skilled technicians, Fiberxpert effectively restores damaged or worn-out FRP components to their original strength and functionality. This service helps industries minimize downtime, reduce replacement costs, and maintain safety standards, making Fiberxpert a reliable partner in maintaining critical infrastructure made from composite materials.



## RELATED PRODUCT OF FIBERXPERTS:



**FRP Flower top**



**FRP Flower top**



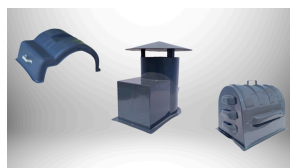
**FRP Pipe Elbow**



**FRP Flanges & Fittings**



**FRP Doors**



**FRP Motor cover**



**FRP Industrial Bucket**



## CONCLUSION:

In conclusion, the application of FRP (Fiberglass Reinforced Plastic) products—such as blowers, chlorine fume hoods, floor coatings, and acid transfer vehicle tanks—plays a vital role in enhancing safety, efficiency, and durability across various industrial sectors. These materials offer excellent resistance to corrosion, low maintenance needs, and long-term cost benefits, making them ideal for harsh industrial environments. FIBERXPERTS is proud to not only supply high-quality FRP and GRP solutions but also provide expert repair and maintenance services for all types of FRP/GRP products. Our commitment to excellence, innovation, and customer satisfaction positions FIBERXPERTS as a trusted partner for reliable and sustainable composite solutions in the industry.

## CONTACT

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