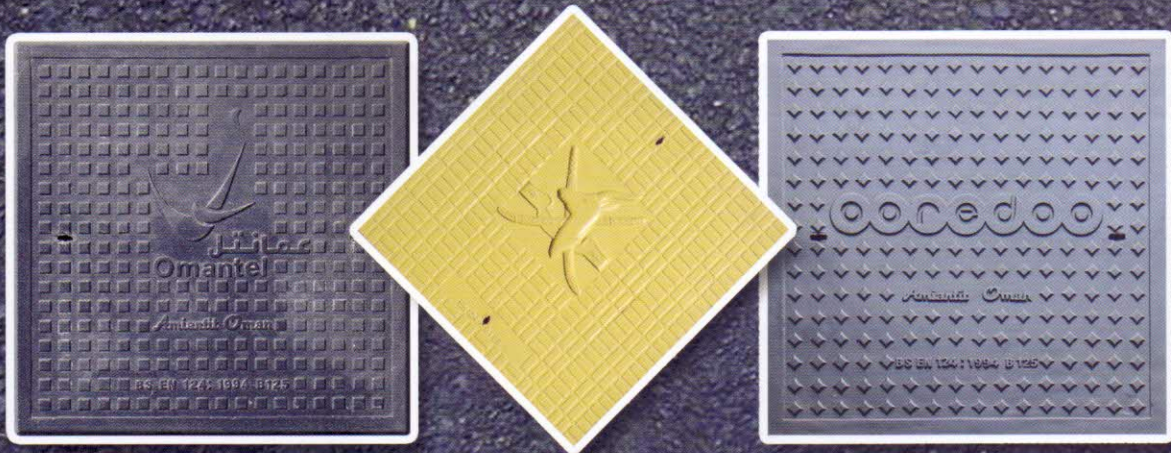


For Better Today & Tomorrow



Manufactured in the Sultanate of Oman

Amiantit Oman Company L.L.C



An ISO 9001:2008 Company

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Why FRP?

Fibre reinforced plastic (FRP) is the next generation polymer made of a polymer matrix reinforced with fibres. These polymers are considered to be the strongest one and most resistive to deforming forces. With the advancements, FRP has totally replaced traditional materials like RCC, CI and steel for manufacturing manhole covers, gratings, doors, window shades and security cabins, shuttering moulds, portable toilets, tanks, domes, transformer kiosks, logos & pergolas.

Advantages:

Reasons for choosing FRP Manhole Covers over other ordinary covers are :

- 100% waterproof, corrosion free material with zero scrap value
- Light in weight & easy to handle
- Available in different granite finishes
- Can withstand heavy loads of traffic

Applications:

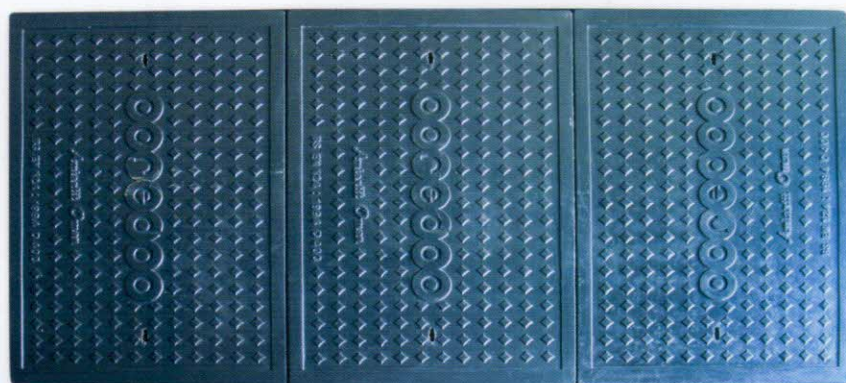
FRP Manhole Covers find wide application in :

- Inspection chambers for sewerage
- Underground Electrical Cabling
- Telecom Cabling
- Water, Gas and Petroleum Installations
- Beautification of Gardens and Landscapes

Following are the comparison charts between FRP and other materials:

	RCC	CI	FRP
Life Span	Low	Moderate	High
Strength/Weight Ratio	Very Low	Moderate	Very High
Cost	Low	Moderate	Comparable to CI
Scrap Value	Low	High	Nil (Zero Scrap Value)
Color Range	Concrete Grey	Black / Metallic	Range Available
Finishing	Not Applicable	Rough	Granite Finish
Logo Embossing	Not Available	Not Available	Possible
Custom Design	Not Available	Not Available	Possible
Locking System	None	None	Available
Handling	Very Difficult	Difficult	Easy
Thermal Expansion	Slight	High	Almost Nil
Corrosion Resistance	Low	Medium	High
Abrasion Resistance	None	None	Yes

Properties	FRP	Steel
Corrosion Resistance	Very High	Subjected to Oxidation & Corrosion
Weight	Light Weight	require lifting equipment to move and place
Conductivity	Highly insulating material	Conducts electricity, potential Shock hazard
Strength	High strength to weight ratio	Lower strength to weight ration
Stiffness	Will not permanently deform under load conditions	Any deformation will be permanent in nature
Impact Resistance	Glass mat distributes load evenly to prevent surface damage	Can permanently deform under impact
EMI / RFI Transparency	Transparent to EMI/RFI interferences	Can Interfere with EMI/RFI transmissions
Versatility	Pigments added to resin provide uniform coloring through volume	Color is applied only on surface via paint or coating
Field Fabrication	Can be fabricated on site using simple carpenter tools. Erection easy due to light weight	Needs specialized cutting and welding equipment and skilled labor Heavier material requires special lifting equipments to manage.
Cost	Lower life cycle cost due to low maintenance and installation cost	High life cycle costs



Effects of Sun, Water & Environment



- The unsaturated Polyester Resins (UPR) is UV stabilized which protects the product from harmful of UV radiation thereby extending its life.
- Water absorption is 0.06% which is very negligible.
- The product gives optimum performance in the temperature range from -1 DC to 70c which easily covers ambient weather conditions.
- The top coat of the cover provides excellent abrasion resistance.

Our entire assortment of raw materials for manufacturing FRP products is carefully procured from only reliable vendors after subjecting it to stringent quality test. All the materials used are of premium quality and ensure high efficiency of the product. One of the most important materials that play an important role in product application temperature is the unsaturated resin.

This kind of resin belongs to the thermo-setting resin family and the performance after its solidification is as follows:

- Compressive strength is 300-600Mpa
- Bending strength is 700-1400Mpa
- Poison ratio is 0.35

FRP/GRP Manhole Covers-Advantages

Amiantit brand of FRP covers are manufactured and tested using the latest technology. These products have the following features

Strength vs Weight : Amiantit products have very high strength and are light in weight both at the same time making them perfect to use and easy to transport and install.

Durability: FRP composite material is highly durable and weather proof. It is also resistant to all chemicals and gases found in sewer, making it ideal for use in making manhole covers.

Life: These products have high service life. They are non degradable and UV stabilized, hence does not degenerate rapidly with time.

Security: Amiantit covers are made of 100% FRP composite material which is a zero scrap value, hence it is virtually burglar proof.

Wide Product Range: These products are available in all standard sizes and loading capacities according to BSEN 124 standard. Customization in terms of size and finish is also possible in these products however the same is subject to techno commercial feasibility.

