



Watertight Fiberglass Manholes

Experience...

LFM has been building quality fiberglass reinforced manholes, manhole liners, wetwells and wetwell liners since 1982. We utilize the latest in chop and filament winding equipment, therefore providing our customers with the highest quality fiberglass products on the market today. Our plant is located on 35 acres in Giddings, Texas.

Quality Built Right In...

LFM incorporates a comprehensive in-plant testing and quality control program. This insures complete and consistent workmanship in all of our fiberglass products. Each manhole that we build is inspected and tested before it is released for shipping. Our testing procedures include wall thickness reports, raw material analysis, and continuous chemical analysis reports. Individual testing reports are recorded and maintained at our office and are available upon request.

Economical...

Fiberglass manholes by LFM are an excellent economical value. Our fiberglass manholes are light-weight, greatly reducing delivery and installation costs. Due to the anti-corrosive nature of LFM's fiberglass manholes, repair and replacement costs due to corrosion are reduced as well.



Professional Delivery...

LFM maintains its own fleet of delivery trucks, helping to lower delivery costs considerably. Our fiberglass manholes are light-weight and can be shipped via common carrier freight lines anywhere in the continental U.S.

Protects the Environment...

We build fiberglass manholes that are corrosion resistant to sewer and waste water gases. This reduces the possibility of untreated waste water leaking into the environment. With our quality fiberglass manholes, the risk of environmental contamination is minimized.

Strong & Lasting Construction

Fiberglass manholes by LFM are designed and manufactured to meet or exceed all ASTM D3753 standard specifications. In addition to complying with all ASTM standards, our fiberglass manholes carry an H-20 load rating. Our products are engineered to provide you with long and trouble-free service.

Quality Assurance...

LFM stands behind our products. Our fiberglass manholes carry a limited one year warranty. For further information, refer to the warranty section of our brochure.



L. F. Manufacturing, Inc.
Hwy. 290 East @ CR 236
Giddings, Texas 78942

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Fax: 979-542-0911
www.lfm-frp.com

Available Diameters...

LFM builds fiberglass manholes to your specified dimensions with the following diameters available from 36 inches through 14 feet. Depths are available by the half foot from 2' through 40'. We manufacture several different wall thicknesses for different load, depth and diameter specifications. Contact your LFM sales representative to find which dimensions best suit your needs.

Connections...

Fiberglass manholes by LFM can be built with pipe connectors and adaptors already in place. We offer a wide range of pipe stubouts on our manholes from 4" diameter all the way to 48" diameter for larger applications. We also offer Kor-N-Seal™ boots, as well as connectors from other manufacturers, from 4" through 24" diameters. LFM's watertight manholes include a solid FRP anti-flotation bottom and a fully enclosed bench and invert area.

Installation Instructions...

1. Prepare excavation in a normal manner. Be sure excavation has been properly shored for safety. The fiberglass manhole should be placed on six inches of crushed stone or stabilized sand compacted to 95% Standard Proctor Density. In areas where a water table exists, set the fiberglass manhole on six inches of wet concrete and pour the required amount of concrete on top of the anti-flotation flange to prevent floating.
2. Normal installations require six inches of brick or grade rings be installed on top of the fiberglass manhole. In traffic areas you should use a minimum of twelve and not more than eighteen inches of brick or grade rings. Grade rings or brick transfer the load to the outside walls of the manhole. Install standard ring and cover.
3. Backfill with sand or crushed stone, free from large stones or debris, a minimum of one foot from the fiberglass manhole wall using a maximum of one-foot lifts. Backfill should be compacted so as to prevent any voids along the wall of the manhole. Always refer to project engineer requirements.

Summary of Test Results

Tests Performed	Average Results
Stiffness	5% Deflection @ 2.45 lbs. / in. ² 10% Deflection @ 2.28 lbs. / in. ²
Material Composition	54.25 wt. % Resin
Compressive Strength	Transverse: 22,700 psi Longitudinal: 10,500 psi
Flexural Strength	Transverse: 56,000 psi Longitudinal: 11,700 psi
Modulus	Transverse: 2,084,000 psi Longitudinal: 1,114,000 psi
Load Rating	24,000 lbs. - 0.157" Deflection 40,000 lbs. - No Damage
Barcol Hardness	Cylinder: 43.1 Reducer: 41.0
Wall Thickness	Cylinder: 0.308
Soundness	No Leaks Detected at 5 psi Air Pressure



"The Fiberglass Specialists"

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Technical Support & Sales:

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- or -

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