

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.

Economical...

Our fiberglass manholes are light-weight, greatly reducing delivery and installation costs. Due to the anticorrosive nature of LFM's fiberglass manholes, repair and replacement costs due to corrosion are reduced as well.

Standard Fiberglass Manholes

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.

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 H20 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.

LFM Standard Manhole Depths

HANDLING & INSTALLATION INSTRUCTIONS FOR STANDARD OPEN BOTTOM FIBERGLASS MANHOLES

General Handling Instructions...

The following precautions should be followed to prevent damage from occurring to fiberglass manholes.

Proper rigging procedures should be observed at all times. Fiberglass manholes should not be allowed to swing out of control. Use guidelines to control swinging.

Always use lifting lugs (if provided) to lift fiberglass manholes. If lifting lugs are not provided, use woven fabric slings 3 inches or wider. Use a 4" x 4" x 32" timber inserted into the manway opening to lift fiberglass manholes.

Always lift, never slide or roll fiberglass manholes.

Do not allow fiberglass manholes to drop or fall when moving or during installation.

Under no condition should cables or chains be put around fiberglass manholes.

Do not allow hooks, chains, or cables to swing against fiberglass manholes when moving or during installation.

During installation, be sure there are no sharp or protruding objects near the installation site that may strike the fiberglass manhole. Impacting a sharp object can cause failure of the manhole.

When storing fiberglass manholes, place on wooden shipping cradles (if provided) or on a firm, level surface, which is free of stones and other small, hard objects. When stored outdoors, fiberglass manholes should be secured to prevent movement due to wind or other acts of nature.

Installation Instructions...

1. Excavation: Prepare excavation in a normal manner. Be sure to excavation has been properly shored for safety.

2. **Manhole Cut-Outs:** Mark manhole for pipe cut-outs. 90 degree marks are stenciled on the bottom of the manhole at the factory in order to locate the cut-out positions.

3. **Concrete Base:** Pour concrete base in place in the trench. Make sure the concrete extends at least one foot from the outside wall of the manhole and a minimum of six inches above incoming lines. On the inside, the concrete will form a fully enclosed bench and invert area. Make sure the concrete is at least four inches above the incoming lines inside the manhole.

4. **Set Manhole:** To lift the manhole, insert a 4" x 4" x 32" timber into the opening at the top of the manhole. Attach a rope or a fabric sling (3" or wider) to the timber and lift with a backhoe or other lifting device. Set the manhole into the wet concrete and insert it to the required depth.

5. **Backfill:** Backfill with sand or stabilized soil of moderate compaction, free from large stones or other debris. The backfill should be added in one foot lifts beginning at the manhole and working outward to avoid uneven lateral pressure.

6. **Bring to Grade:** Use brick or pre-cast concrete grade rings mortared in place to bring the manhole to grade level. It is critical to the strength and load capacity of the manhole that the grade rings outer edge extends past the perimeter of the manhole by at least 1". (See drawing A-MH3109 on next page.)

HANDLING & INSTALLATION INSTRUCTIONS FOR STANDARD OPEN BOTTOM FIBERGLASS MANHOLES

Prior to Shipping...

LFM thoroughly inspects all fiberglass manholes before and after loading at our plant. When shipping via common carrier, our products are packaged in accordance with the carrier's rules and regulations. Larger shipments of fiberglass manholes can be shipped on LFM's own fleet of delivery trucks.

Inspection...

It is important that fiberglass manholes are inspected by a responsible person or inspector prior to unloading. Fiberglass manholes are susceptible to both internal and external damage as a result of severe shock, which may be encountered during transit. A thorough inspection at this time will preclude any question about the condition of the manholes at the time of delivery. Below is a list of items that should be inspected at the time of delivery:

Areas where banding or skids come in contact with the fiberglass manholes should be checked both internally and externally.

The extreme top, bottom, and sidewalls of the fiberglass manholes should be checked.

Any exterior scratches or damaged areas should be inspected internally.

Areas where shipping cradles, side, and end blocking make contact with fiberglass manholes should be checked for signs that they may have shifted or rotated in shipment resulting in cracks or crazing at the point of contact.

If damage has occurred, so note on carrier's bill of lading. To determine the proper repair procedure, notify LFM immediately.

This brochure on inspection, handling, and installation recommendations is meant as a guide to proper handling or fiberglass manholes, which is essential to maintaining maximum corrosion resistance and long-term life with minimal maintenance.