

## **JEA TECHNICAL SPECIFICATIONS**

### **FIBER OPTIC POLYMER CONCRETE MANHOLE**

ITEM ID: MAN HO 008

#### **1. APPLICABLE STANDARDS**

All manholes shall meet or exceed the following industry standards except where specifically noted:

ACI 548.7-04

Western Underground Committee Guide 3.6

American National Standard ANSI/SCTE 77 2002

ASTM C857

AASHTO Standard Specification for Highway Bridges, 15<sup>th</sup> Edition

#### **2. DESIGN AND DIMENSIONS**

Manhole Body shall be of one piece construction with a solid cover. Manhole dimensions shall be:

<u>JEA ITEM ID</u>	<u>INTERIOR DIMENSION</u>	<u>COVER DIMENSIONS (SEE EXHIBIT 1)</u>
MAN HO 008	60"L x 30"W x 30"H	63"L x 33"W x 3" THICK (Square corners)

#### **3. MATERIAL SPECIFICATIONS**

3.1. Cover: polymer concrete or composite as approved by JEA Standards.

3.2. Body: Reinforced Plastic Mortar (RPM) consisting of Fiberglass and Isopholic Resin. The base will have a flange of two inches from the inside wall.

3.3. Ring: The ring will be of Polymer Concrete and will be permanently fused to the body during the curing process.

#### **4. LOADING**

4.1. Manhole and Cover shall be designed to meet or exceed AAHSHTO H-20 incidental traffic load rating. (32,000 LB min test load for off road use. The side load required is 800 psf.) The ACI 548.7-04 test method for load capacity shall be used.

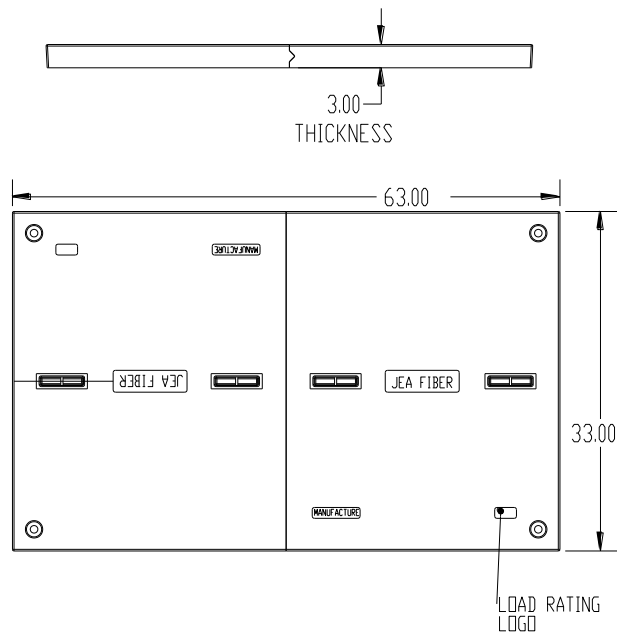
4.2. JEA will annually spot test items in stock supplied by the manufactures. The manufactures will be required to submit a replacement item (at no charge) that will be used to replace the item randomly pulled from stock.

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### 5. COVER

- 5.1. Cover shall be secured using captive stainless steel ½-13 NC penta head bolts. The stainless steel nuts shall be self centering corrosion resistance.
- 5.2. Cover shall be marked "JEA FIBER".
- 5.3. Cover shall have a "3M, APC EMS" electronic power marker molded or cast into the cover.
- 5.4. Cover pick holes shall be 4 inches in length, ¾ inches wide and 1-¾ inches depth. Stainless steel pull pin pull strength shall be 2 times the cover weight lbs.
- 5.5. Load rating shall be marked on the Cover.
- 5.6. Captive floating nut assembly Box floating shall withstand a minimum vertical pullout load of 1500 lbs, tested without the cover installed. Box floating nut shall be field replaceable, without damaging or altering the original condition of the box. The nut must have a minimum float of 3/16" in all four directions.

**NOTE: Each manufactures covers shall be interchangeable with other manufactures.**



3060 DIMENSIONS  
MANH0008

## EXHIBIT 1

### 6. LIFTING U-BOLTS

Manholes shall have two (2) U-Bolts for lifting purposes. One (1) U-bolt on each end of manhole.

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### **7. APPROVED MANUFACTURES**

Prior to the JEA Purchasing Department posting an Invitation for Bid (IFB) or a Request for Proposal (RFP), only those manufacturers listed in the JEA Master Material Catalogs posted on JEA.com for each specific item shall be approved to bid or provide a proposal.

### **8. TEST DATA**

Manufactures shall submit test data witnessed and certified (sealed) by a licensed professional engineer showing compliance with all the requirements of this specification. The information must be received and approved by JEA Standards prior to the manufacturer receiving a Bid Award or issuance of a Purchase Order.

### **9. APPROVAL DRAWINGS**

Manufacturers shall be required to submit drawings that illustrate the design and dimensions for their products including, applicable tolerances, for each specific product prior to receiving final approval.