

Materials Specification – 33 for MANHOLE RINGS, COVERS AND RISERS

1. GENERAL:

The manufacturer of manhole rings, covers and risers shall be experienced in their design and construction, regularly engaged in their manufacture and have produced manhole rings, covers and risers that have performed successfully in service for at least 5 years.

2. MATERIALS:

Manhole rings, covers and risers shall be made of gray iron that conforms to the requirements of ASTM A48, Class 35B or ductile iron that conforms to the requirements of ASTM A536, Grade 65-45-12.

3. DESCRIPTION:

Manhole rings, covers and risers shall be heavy duty and designed, manufactured and tested in accordance with AASHTO M306.

4. FINISH:

The horizontal seating surface and the vertical facing surface that are common to the ring and the cover shall be machine finished to ensure non-rocking and to ensure full bearing for the entire width and circumference of the bearing surface in order to permit interchangeability with other castings of the same design. The vertical face that is common to the ring and the cover shall be beveled.

5. LABELING:

Covers shall be labeled as follows: Name or symbol of the manufacturer, country of origin and date of manufacture to be located at the manufacturer's option. In addition, the cover shall contain the owner's name, "Denver Water," in 3-inch high lettering that is centered and recessed on the exposed face.

6. CERTIFICATION:

The manufacturer shall furnish a sworn statement that the inspection and all of the specified tests have been completed and that the results comply with the requirements of these Standards. A copy of the Certification shall be sent to Denver Water. The report shall include material data that is traceable to the originating foundry, traceable test bars that match, the name of the manufacturer and the date of the pour.

7. ACCEPTABLE MANUFACTURERS:

Castings, Inc.; D & L Foundry; Deeter Foundry, Inc.; East Jordan Iron Works; Nennah Foundry Company; Saint-Gobain PAMREX; GMI Composite Covers