

Materials Specification – 3 for DUCTILE IRON WATERWORKS FITTINGS

1. GENERAL:

Ductile iron fittings shall be manufactured in accordance with AWWA C110 or C153, as applicable, with the following additional requirements or exceptions.

2. JOINT TYPE:

Fittings that are installed in the City and County of Denver or in Total Service Contract Areas shall be furnished with mechanical joint ends that conform to AWWA C111 with tee-head bolts and hexagon nuts fabricated from a high-strength, low alloy steel known in the industry as Cor-Ten, Usalloy or Durabolt. Ductile iron flange faces are to be serrated.

Accessories for the mechanical joint shall consist of the gasket, gland and fasteners and shall be furnished and packaged separately from the fittings. Each package shall be labeled in such a manner as to provide for proper identification and the number of units listed per package or bundle.

3. PRESSURE RATING:

Ductile iron fittings, nominal size 3-inch through 24-inch shall have a pressure rating of 350 psi; nominal size 30-inch through 42-inch shall have a pressure rating of 250 psi.

4. MATERIAL STRENGTH:

The grade of iron shall be 70-50-05 or 65-45-12.

5. LININGS AND COATINGS:

Ductile iron fittings shall be coated with an asphaltic material, lined with cement-mortar and given a seal coat of asphaltic material in accordance with AWWA C104. Ductile iron fittings may also be lined and coated with fusion-bonded epoxy in accordance with AWWA C116.

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, including compliance with ANSI/NSF 61, shall be sent to Denver Water.

7. ACCEPTABLE MANUFACTURERS:

Tyler Pipe Industries
United States Pipe and Foundry Company
Griffin Pipe Products Company
Union Foundry Company
Star Pipe Products
Sigma

*Material Specification – 3
Ductile Iron Waterworks Fittings*