

METROPOLITAN UTILITIES DISTRICT OF OMAHA  
OMAHA, NEBRASKA

SPECIFICATIONS FOR  
DUCTILE IRON FITTINGS

Section - 1 General

Ductile iron fittings shall meet the latest version of AWWA C110 (full body fittings) or AWWA C153 (compact fittings) as applicable with the following additional requirements or exceptions. The grade of ductile iron shall be 70-50-05.

Section - 2 Linings and Coatings

2.1 The inside of all fittings shall be cement-mortar-lined or epoxy-lined. Cement-mortar lining shall meet the latest version of AWWA C104 and its standard thickness requirements. Epoxy lining shall meet the latest version of AWWA C116 with a minimum 6-mil nominal dry film thickness.

2.2 The outside of all fittings shall be petroleum asphaltic-coated per the latest version of AWWA C110 or epoxy-coated per the latest version of AWWA C116 with a minimum 6-mil nominal dry film thickness.

Section - 3 Joints

3.1 Mechanical joints and all joint materials including glands, bolts, nuts and gaskets shall meet the latest version of AWWA C111. All glands shall be ductile iron. Accessories for the mechanical joint consisting of the gasket, gland and fasteners shall be furnished and packaged separately from the fittings. All tee-head bolts and hexagon nuts shall be manufactured in the United States by Birmingham Fastener, Inc.

3.2 Connecting pieces with threaded flanges shall be cement-mortar-lined ductile iron pipe with ductile iron flanges per AWWA C115.

Section - 4 Inspection and Certification

4.1 The Bidder shall state the manufacturer of the fittings to be furnished and the country in which they are manufactured.

4.2 The Manufacturer shall furnish a sworn statement that all the inspections and specified tests have been made and the results thereof comply with the requirements of this specification.

\* Section - 5 Approved Manufacturers/Distributors

The following fitting manufacturers/distributors are approved:

American Cast Iron Pipe  
McWane, Inc. (Clow, Tyler Union)  
SIGMA  
SIP Industries  
STAR Pipe Products  
U.S. Pipe and Foundry Company