

02-02

**ROGERS WATER UTILITIES WATER SYSTEM  
ROGERS, ARKANSAS**

**SPECIFICATIONS FOR GRAY-IRON AND  
DUCTILE-IRON FITTINGS AND COUPLINGS  
REVISED DECEMBER 2004**

1. **SCOPE**

This specification covers 4” through 64” in size designed and manufactured for use with gray-iron, standard/compact fittings, anchor fittings and couplings.

2. **GENERAL REQUIREMENTS FOR FITTINGS**

- a. Except as otherwise modified or supplemented herein, the latest revision of ANSI A21.10/AWWA C110 (full body) for Gray-iron and Ductile-Iron Fittings, 4 inch through 64 inch for Water and other Liquids and ANSI A21.53/AWWA C153 (compact body) for Ductile-Iron Compact Fittings, shall govern the design, manufacture, and testing for all fittings under this specification.
- b. For 4” through 24-inch size range, the pressure rating of all fittings shall be a minimum of 350 psi. The working pressure for all fittings of size greater than 24 inches shall be a minimum of 250 psi.
- c. Fittings shall be furnished with the types of end combination specified.
- d. Anchor fittings shall be furnished in size and type or length as specified, and shall conform to ANSI A21.53/AWWA C153.
- e. Flanged fittings have 150 lb. flanges and shall be faced and drilled in accordance with ANSI Specification B16.1, Class 125.
- f. The exterior of all fittings shall be provided with a petroleum asphaltic coating in accordance with the latest revision of AWWA C110. The interior of flanged fittings supplied under this specification shall be cement-mortar lined with seal cost in accordance with the latest revision of AWWA Standard as specified. The interior of all other fitting supplied under this specification shall be cement-mortar lined in accordance with the latest revision of ANSI A21.04/AWWA C104.
- g. All fittings shall be domestically manufactured.

**GRAY-IRON AND DUCTILE-IRON  
FITTINGS AND COUPLINGS  
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**2. GENERAL REQUIREMENTS FOR COUPLINGS**

- a. Couplings shall be made of ductile iron (full body) with mechanical joint (MJ) ends. Coupling shall conform to ANSI/AWWA C110/A21.10 and ANSI/AWWA C111/A21.11.
- b. The minimum length of a coupling is 8 inch.
- c. Standard mechanical joint tee-bolts and nuts shall be high strength steel conforming to AWWA C111/A21.11-90 and C153/A21.53-88.
- d. Coating of the coupling shall be provided with a petroleum asphaltic coating in accordance with the latest revision of ANSI/AWWA C151/A21.51.
- e. Where specifications state a cast transition or reducing coupling in place of a straight coupling, the sleeve and follower flange shall be of the same manufacturer and compatible for the specific used intended.
- f. The coupling shall be designed for a minimum working pressure as follows:

<u>Pipe Diameter</u>	<u>Minimum Working Pressure</u>
12" and smaller	200 psi
18"	175 psi
24" and larger	150 psi

- g. All ductile iron couplings shall be domestically manufactured.

The following manufactures are approved for fittings and couplings.

**APPROVED MANUFACTURERS LIST**

American Cast Iron Pipe Company  
Tyler Pipe Company  
Clow Valve Company

U.S. Pipe Company  
McWane Cast Iron Company  
Mueller Company

**Previous Specifications**

April 16,1997