

## 1903 - CAST IRON AND DUCTILE IRON PIPE

### SECTION 1903

#### CAST IRON AND DUCTILE IRON PIPE

##### 1903.1 DESCRIPTION

This specification governs pipe, fittings, and accessory items produced from malleable, gray, or ductile (nodular) cast iron and intended for various piping system applications, including drainage systems.

##### 1903.2 REQUIREMENTS

**a. General.** Provide pipe, fittings, and accessory item castings that comply with the design, dimensions, alloy designation and thermal treatment, requirement for supplemental corrosion protection, and specific fabrication requirements as specified in the Contract Documents. Provide compliant components of pipe systems that are open to atmospheric pressure complying with **subsection 1903.2b**. Provide compliant closed systems that can be pressurized with the specification(s) selected from ASTM A 377 that is (are) appropriate for the intended application. The selected specification(s) is (are) denoted in the Contract Documents.

**b. Material Specifications.** Provide compliant components of open systems complying with ASTM A 48 when produced from gray cast iron or ASTM A 536 when produced from ductile cast iron. Accessory items may also be produced from ferritic malleable cast iron in compliance with ASTM A 47. Provide compliant pipe, fittings, and accessory items for these piping systems with ASTM A 74. The mechanical property requirements of ASTM A 74 determine the class or grade of cast iron required.

##### 1903.3 TEST METHODS

Conduct all tests required by the applicable ASTM or other specification of **subsection 1903.2b** according to the procedures specified in that standard.

##### 1903.4 PREQUALIFICATION

Not applicable.

##### 1903.5 BASIS OF ACCEPTANCE

Receipt and approval of a Type D certification as specified **DIVISION 2600**.

Inspection by field personnel of all products and components for compliance with dimensional and supplemental corrosion protection coating requirements when corrosion protection is specified, quality of workmanship, delivery condition, approval of the required associated documentation, and any other requirements as may be specified in the Contract Documents.