

DUCTILE IRON PIPE RESEARCH ASSOCIATION

SUGGESTED SAMPLE SPECIFICATION FOR DUCTILE IRON PIPE & FITTINGS

Ductile iron pipe shall be designed in accordance with the latest revision of ANSI/AWWA C150/A21.50 for a minimum 150 psi rated working pressure plus a 100-psi surge allowance. If anticipated project requirements include greater working or surge pressures, the actual anticipated total pressure should be used. This design standard incorporates a 2 to 1 factor of safety on the sum of working pressure plus surge pressure. The laying condition shall be Type ____ and a depth of cover of ____ feet shall be used.

Ductile iron pipe shall be manufactured in accordance with the latest revision of ANSI/AWWA C151/A21.51. The raw material for ductile iron shall have an average minimum recycled content consisting of 90% scrap iron and steel. Ductile iron pipe shall be manufactured in the USA in accordance with ANSI/AWWA C151/A21.51 by American Cast Iron Pipe Company, McWane Ductile or U.S. Pipe. Each pipe shall be subjected to a hydrostatic pressure test of at least 500 psi at the point of manufacture.

Pipe shall have the standard coating on the exterior and shall also have a cement-mortar lining on the interior in accordance with ANSI/AWWA C104/A21.4, of latest revision.

The class or nominal thickness, net weight without lining, and casting period shall be clearly marked on each length of pipe. Additionally, the mark of the manufacturer, country where cast, year in which the pipe was produced, and the letters "DI" or "Ductile" shall be cast or stamped on the pipe.

All pipe shall be furnished with push-on type joints, either Tyton® or Fastite®. Joints shall be in accordance with ANSI/AWWA C111/A21.11, of latest revision, and be furnished complete with all necessary accessories.

Fittings shall be ductile iron. Fittings shall conform to the latest revision of either ANSI/AWWA C110/A21.10 or ANSI/AWWA C153/A21.53. Fittings and accessories shall be furnished with either Push-on or Mechanical Type Joints in accordance with ANSI/AWWA C111/A21.11, of latest revision.

All pipe, fittings and accessories shall be installed and tested in accordance with the latest revision of ANSI/AWWA C600. Newly installed ductile iron water mains shall be disinfected in accordance with the latest revision of ANSI/AWWA C651 prior to placing in service.