



Ductile Iron Pipe  
Research Association

**Strength** and **Durability** for **Life**<sup>®</sup>

DESIGN

# Suggested Sample Specification for Ductile Iron Pipe & Fittings for Water and Other Liquids

Last Revised:  
May 2016

Ductile Iron Pipe shall be designed in accordance with the latest revision of ANSI/AWWA C150/A21.50 for a minimum 150 psi (or project requirements, whichever is greater) rated working pressure plus a 100 psi surge allowance (if anticipated surge pressures are other than 100 psi, the actual anticipated pressure should be used); a 2 to 1 factor of safety on the sum of working pressure plus surge pressure; Type \_\_\_\_\_ laying condition and a depth of cover of \_\_\_\_\_ feet.

Ductile Iron Pipe shall be manufactured in accordance with the latest revision of ANSI/AWWA C151/A21.51. Each pipe shall be subjected to a hydrostatic pressure test of at least 500 psi at the point of manufacture.

Pipe shall have standard coating on the exterior. Pipe 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 manufacturer's mark, 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, such as 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.

For more information contact DIPRA or any of its member companies.

### Ductile Iron Pipe Research Association

An association of quality producers dedicated to the highest pipe standards through a program of continuing research and service to water and wastewater professionals.

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### Social Media

Get in the flow with Ductile Iron Pipe by connecting with us on Facebook, Twitter, and LinkedIn.

Visit our website, [www.dipra.org/videos](http://www.dipra.org/videos), and click on the YouTube icon for informational videos on Ductile Iron Pipe's ease of use, economic benefits, strength and durability, advantages over PVC, and more.



### Member Companies

AMERICAN Ductile Iron Pipe  
P.O. Box 2727  
Birmingham, Alabama 35202-2727

Canada Pipe Company, Ltd.  
55 Frid St. Unit #1  
Hamilton, Ontario L8P 4M3 Canada

McWane Ductile  
P.O. Box 6001  
Coshocton, Ohio 43812-6001

United States Pipe and Foundry Company  
Two Chase Corporate Drive  
Suite 200  
Birmingham, Alabama 35244

Ductile Iron Pipe is  SMART certified