

**SAN ANTONIO WATER SYSTEM
SAN ANTONIO, TEXAS**

**SPECIFICATIONS FOR DUCTILE-IRON RESTRAINED JOINT FITTINGS
FOR USE ON DUCTILE IRON AND POLY-VINYL CHLORIDE PIPE**

APRIL 2002

1. SCOPE

This specification covers ductile-iron restrained joint fittings 4 inches through 12 inches in size designed and manufactured for use with ductile-iron or poly-vinyl chloride (PVC) pipe.

2. GENERAL REQUIREMENTS

- a. Ductile iron restrained joint fittings shall be designed with the restraint system as an integral part of the fitting and shall be for use interchangeably on ductile iron pipe conforming to ANSI/AWWA C151/A21.51 and PVC pipe conforming to AWWA C900.
- b. Fittings shall be manufactured of ductile iron conforming to the requirements of ASTM A 536 grade 65-45-12.
- c. Gaskets shall in all respects conform to the requirements of ASTM F 477 and Table 8 of ANSI/AWWA C111/A21.11.
- d. Fittings shall be fusion-bonded epoxy coated inside and outside meeting all of the requirements of AWWA C116.
- e. Fittings, including the joints and restraint systems, shall have a minimum pressure rating of 250 psi. Unless a change in pressure rating is directed by purchase.
- f. The joint shall be tested on both ductile iron and PVC pipe using the procedures found in ASTM F 1674, including a short term high pressure test, a sustained pressure test, a cyclic surge test and shall be capable of being assembled without beveling a cut pipe.
- g. Joint dimensions and weight shall be standard and as shown in the One-Bolt, Inc. bulletins entitled "One Bolt, Fittings," or approved equal.

RESTRAINT JOINT FITTINGS

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3. TESTS

The San Antonio Water System may, at no cost to the manufacturer, subject random joint restraint system products to testing by an independent laboratory for compliance with these standards. Any visible defect or failure to meet the quality standards herein will be ground for rejecting the entire order.

4. PRODUCT LIST

The attached qualified product list identifies specified manufacturers models approved for installation in SAWS water distribution systems.

5. APPROVED MANUFACTURERS

One-Bolt, Inc.