

# SAN ANTONIO WATER SYSTEM SAN ANTONIO, TEXAS

## SPECIFICATIONS FOR C-900 POLYVINYL CHLORIDE (PVC) Pressure Pipe, 4-Inch Through 12-Inch REVISED March 2011

### 1. SCOPE

This product specification covers 4" through 12" diameter polyvinyl chloride (PVC) pressure pipe made from class 1245A or 1245B compounds as determined by ASTM Standard D1784 and providing for a hydrostatic test basis (HDB) of 4,000 psi. All pipe furnished shall be in conformance with AWWA Standard C900, or latest revision thereof.

### 2. GENERAL REQUIREMENTS

- a. Except as noted on the plans or procurement specifications for specific jobs, all C900 PVC pipe shall be Class 150 (DR 18) having a sustained pressure requirement of 500 psi (ASTM D2241) and a minimum burst pressure of 755 psi (ASTM D1599). C900 PVC pipe installed in the SAWS High Pressure Zone shall be class 200 (DR 14) having a sustained pressure requirement of 650 psi (ASTM D1598) and a minimum burst pressure of 985 psi (ASTM D1599).
- b. Dimensions and tolerances for each nominal pipe sizes shall be in accordance with Section 2.2, Table 1 of AWWA Standard C900.
- c. Pipe shall be furnished in standard laying lengths of 20 feet (plus or minus one inch) unless otherwise noted. Each pipe shall have an integral bell formed on the pipe end, and be designed to be at least as strong as the pipe wall (ASTM D2472).
- d. An elastomeric gasket shall be designed with a retainer ring, which "locks" the gasket into integral bell groove and shall be installed at the point of manufacturer. Gasket shall be in conformance with ASTM F477.
- e. Each length of pipe furnished shall bear identification markings in conformance with Section 2.6 of AWWA Standard C900.

**C-900 POLYVINYL CHLORIDE (PVC)**  
**SPECIFICATION NUMBER 05-12**

- f. Pipe shall be bundled in pallets for ease of handling and storage. Pipe bundles (units) shall be packaged to provide structural support to insure that the weight of upper units shall not cause deformation to pipe in lower units. No pipes bundles shall be accepted which show evidence of ultraviolet radiation "sunburn" on exposed pipe as may be caused from extended unprotected storage conditions.
  - g. The manufacturer shall take adequate measures during pipe production to assure compliance with AWWA C900 by performing quality-control tests and maintaining results of those tests as outlined in Section 3 of that Standard. Submission of product shall constitute certification of compliance with this standard.
  - h. The pipe is intended for use as an underground, direct bury pressure pipe for transport of potable water. The expected life of the pipe system, after installation, is 25 to 50 years.
  - i. A one-year warranty shall be provided for all materials sold and delivered for use and incorporated into the San Antonio water distribution system. Such warranty shall take effect on the date that the pipe is received and accepted by an authorized representative of the San Antonio Water System.
  - j. User references and a claims history shall be provided for further investigation, prior to rendering a final decision on the acceptance of the product to be furnished.
3. The San Antonio Water System may, at no cost to the manufacturer, subject random lengths of pipe to testing by an independent laboratory for compliance with this specification. Any visible defect of failure to meet the quality standards herein will be grounds for rejecting the entire order.
4. The attached manufacturer's product list identifies approved products.

**C-900 POLYVINYL CHLORIDE (PVC)**  
**SPECIFICATION NUMBER 05-12**

**APPROVED MANUFACTURER LIST**

PW Eagle  
J-M Manufacturing Company  
CertainTeed Corporation  
Diamond Plastics Corporation  
North American Pipe Corporation  
VinylTech Corporation  
JM Eagle  
Northern Pipe Products, Inc.  
Underground Solutions

Fusible C-900 PVC Pipe

**Previous Specification Dates**

October 2005  
April 2004  
February 1999  
January 2008