

American Public Works Association New Mexico Chapter Modified Section 130: Gray Iron and Ductile Iron Fittings

These Standards amend or supplement the American Public Works Association New Mexico Chapter (NMAPWA) Current Edition as indicated below in red. All sections, which are not so amended or supplemented, remain in full force and effect.

130.1 GENERAL: Fittings required in the installation of ductile iron, polyvinyl chloride and asbestos cement pipes shall be either gray iron or ductile iron, as specified herein.

130.2 REFERENCES:

Delete Section 130.2.1 in its entirety and substitute the following:

130.2.1 American Water Works Association (AWWA) (Latest Edition):

C104 Cement-Mortar Lining for Ductile-Iron Pipe and Fittings

C110 Ductile-Iron and Gray-Iron Fittings

Add the following:

C111 Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings

C153 Ductile-Iron Compact Fittings

130.3 COATINGS: All fittings shall be coated in accordance with AWWA C110 and cement-mortar lined, per AWWA C104.

130.4 MECHANICAL JOINT FITTINGS:

130.4.1 Mechanical joint fittings shall be used in all buried installations. The type of fitting shall be as required to install the line in conformance with the grade and alignment shown on the construction drawings or as directed by the ENGINEER.

130.4.2 Mechanical joint fittings shall conform to the requirements of AWWA C110 and C153.

130.4.3 Fittings shall be installed in accordance with manufacturer's published recommendations. Malleable iron or gray iron bolts, as per AWWA C110, shall be used to complete the connection.

Bolts shall be of sufficient length to provide a minimum of three threads beyond the tightened nut. The bolts shall be tightened evenly such that the distance between the gland and the face of the flange is approximately equal around the circumference of the pipe. All bolts shall be tightened with a torque-measuring wrench and the torque values shall be as follows:

<u>Fitting Size</u>	<u>Torque Range</u>
4" thru 24"	75 - 90
30" thru 36"	100-120
Larger than 36"	120-150

130.5 FLANGED JOINT FITTINGS:

130.5.1 Flanged end fittings shall only be used where specifically required on the construction drawings or as approved by the ENGINEER.

130.5.2 Bolting material for pipe connection and installation shall be the same as Subsection 130.4.3.

130.6 RESTRAINTS:

Delete Section 130.6.1 in its entirety and substitute the following:

130.6.1 The Design Engineer shall be responsible for identifying the requirements for joint restraint on the construction plans, where required. Mechanical joint restraints shall be the method of choice for joint restraint. Concrete thrust blocking may be used when determined by the Design Engineer. When concrete thrust blocking is used, a polyethylene liner, minimum thickness of 8 mils, shall be installed between the fitting and any concrete.

Delete Section 130.6.2 in its entirety

130.7 PRESSURE RATING: All fittings shall have a minimum pressure rating of 250 psi.

130.8 MEASUREMENT AND PAYMENT:

Delete Section 130.8.1 in its entirety and substitute the following:

130.8.1 All cast iron and ductile iron fittings shall be measured and paid for at the contract

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unit price per pound (lb) for the type and size of fitting used. The contract unit price per pound (lb) shall include all gaskets, glands, bolts and nuts required, no separate payment will be made for these items.

130.8.2 Restrained joint fittings shall be measured and paid for in the same manner as Subsection 130.8.1.