

STANDARD SPECIFICATIONS

SECTION 15072

ASBESTOS CEMENT DISTRIBUTION PIPE
(6 Inch through 16 Inch)

PART 1 - GENERAL

A. Description

The installation of asbestos cement pipe (ACP) is not permitted within the District. This section includes the connection to and handling and disposal of existing asbestos cement distribution pipe..

B. Related Work Described Elsewhere

All related work specified elsewhere, or in other codes or standards, will be as last revised, unless a specific date of issuance is called out in opposition to later revision date(s).

Other sections of the technical specifications, not referenced below, shall also apply to the extent required for proper performance of this work.

- 1. Trenching, Backfilling, and Compacting: 02223
- 2. Concrete: 03300
- 3. Chlorination of Domestic Water Mains for Disinfection: 15041
- 4. Hydrostatic Testing of Pressure Pipe: 15042
- 5. Hot Tap Connections: 15050
- 6. Ductile Iron Pipe and Fittings: 15056
- 7. PVC Pressure Distribution Pipe: 15064
- 8. Combination Air and Vacuum Release Valve Assembly: 15089
- 9. Manual Valves: 15100
- 10. Domestic and Recycled water Facilities Identification: 15151

C. Referenced Standards

AWWA C400 "Asbestos-Cement Transmission Pipe 6 in. through 16 in for Water and Other Liquids."

D. Certification

Removal of ACP pipe shall be performed by a contractor registered by Cal/OSHA and certified by the State Contractors Licensing Board for asbestos removal.

PART 2 - MATERIALS

A. Fittings

1. Ductile-iron fittings shall conform with Section 15056.
2. All ring-gasketed fittings shall have ring grooves that conform to the same dimensions and tolerances that the manufacturer of the pipe specifies for asbestos-cement couplings. Each groove shall be gauged for tolerance before arriving at the construction site.

B. Rubber Rings

Rubber rings for use in the ACP couplings and fittings shall conform to the requirements of ASTM D 1869.

C. ACP Closure systems

1. PVC MOA (machined over all)
 - a. PVC MOA's shall conform with Section 15064 except as modified herein.
 - b. The outside diameter of PVC MOA's shall be the same as that of an ACP machined section. This dimension shall conform with AWWA C400. Table A1, dimension D2. Wall thicknesses shall conform with DR-18 for Class 150 and DR-14 for Class 200.
2. ACP Closure Couplings and Lengths
 - a. ACP closure couplings and lengths shall conform with all requirements of this specification.

D. Lubricants

Lubricant for pipe insertion shall be food grade, and biodegradable.

E. Health Hazard

The contractor is warned that asbestos is a known human carcinogen when inhaled and poses serious health risks. Asbestos fibers are easily inhaled and can result in chronic respiratory illness, cancer and other server health effects.

PART 3 - EXECUTION

A. General

1. The contractor shall install all the pipe, closure sections, fittings, valves, and appurtenances shown including pipe supports, bolts, nuts, gaskets, and jointing materials.

2. Where closure sections are required by the contractor's installation operations, the sections shall be installed in accordance with the applicable sections of these specifications. Field cutting of AC pipe using abrasive wheel equipment will not be permitted.

B. Cutting and Handling

1. Pipe cutting will be permitted only when repairing or joining existing ACP, as determined by the District representative. The contractor shall perform all cutting and handling of asbestos-cement pipe in strict conformance with all applicable Cal/OSHA, EPA and governing health agency requirements. The contractor shall provide sufficient supervision and monitoring to assure said conformance.
2. All connecting parts of pipe, rings, couplings, and castings shall be clean before assembly. After bearing has been obtained, couplings shall be assembled in a proper manner (as determined by the District representative). The use of excessive lubricant will not be permitted, and the assembly of the couplings and rings shall be in accordance with the manufacturer's recommendations. Lubricant and rubber rings shall be supplied by the pipe manufacturer. All fittings and valves shall have joints that match the type of adjoining pipe.

C. Removal of Existing Pipe

Removal of existing asbestos material shall be performed by a contractor registered by Cal/OSHA and certified by the State Contractors Licensing Board for asbestos removal. Copies of the certification shall be submitted to the District prior to the commencement of any asbestos removal activities. The contractor or subcontractor shall comply with all State and Federal laws regarding handling and removal of asbestos materials. The contractor shall be responsible for the proper identification, removal and disposal of all asbestos materials.

D. Combination Air and Vacuum Release Valves

1. Air release valve assemblies and combination air and vacuum valves shall be installed at each point in the pipeline as shown on the drawings or as specified by the District representative.
2. The tap for the air valves shall be made in a level section of pipe no closer than 18 inches to a bell, coupling, joint, or fitting. No tap shall be permitted in any machined section of ACP.
3. Valves shall be installed in accordance with MNWD standard drawing W-9 and Section 15089.

E. Blow Off Assemblies

1. Either in-line type or the end-of-line type blow off assemblies shall be installed in accordance with the standard drawings at locations noted on the plans and at such additional locations as required by the District representative for removing water or sediment from the pipeline.
2. The assembly shall be installed in a level section of pipe.
3. The tap for blow off in the line shall be no closer than 18 inches to a valve, coupling, joint, or fitting unless it is at the end of the main. No tap will be permitted in any machined section of ACP.

4. Blow offs shall be installed in accordance with MNWD standard drawing W-10 and the applicable sections of these specifications.
5. Blow offs shall not be connected to any sewer, submerged in any stream, or installed in any manner that will permit back siphoning into the distribution system.

F. Pipe Identification

Warning and locator tape shall be installed on all recycled water pipelines and on-site domestic water piping installed within the limits of a non-potable irrigation system. The pipe identification shall be in accordance with Section 15151.

END OF SECTION