

SECTION 40 27 00.11
CHLORINATED POLYVINYL CHLORIDE (CPVC) PIPE AND
FITTINGS

Item	Size	Description
General	All	Physical Characteristics: Chlorinated Poly-Vinyl-Chloride (PVC) pipe and fittings. Pipe and fittings shall be manufactured with titanium dioxide for ultraviolet protection. Functional Characteristics: Service Flow Streams on Piping Schedule as shown on the Drawings. Performance Characteristics: Materials in contact with potable water shall conform to NSF 61 acceptance.
Pipe	All	Performance Characteristics: Schedule 80 CPVC: Type IV, Grade I or Class 23447-B conforming to ASTM D1784 and ASTM F441/F441M.
Secondary Containment Pipe	All	Performance Characteristics: Schedule 40 CPVC: Type I, Grade I, or Class 23447 conforming to ASTM D1784 and ASTM F441/F441M. Pipe shall be manufactured with titanium dioxide for ultraviolet protection.
Fittings	All	Performance Characteristics: Schedule to Match Pipe Above: Conforming to the requirements of ASTM F439 for socket weld type and Schedule 80 ASTM F437 for threaded type.
Joints	All	Performance Characteristics: Solvent socket weld except where connection to flanged valves and equipment may.
Flanges	All	Performance Characteristics: One-piece, molded hub Type CPVC flat face flange in accordance with Fittings above; ASME B16.1, Class 125 drilling.

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Bolting	All	Performance Characteristics: Flat Face Mating Flange and In Corrosive Areas: ASTM A193/A193M, Type 316 stainless steel Grade B8M hex head bolts, ASTM A194/A194M Grade 8M hex head nuts and ASTM F436 Type 3 alloy washers at nuts and bolt heads. Achieve 40 percent to 60 percent of bolt minimum yield stress. Raised Face Mating Flange: Carbon steel ASTM A307 Grade B square head bolts, ASTM A563 Grade A heavy hex head nuts and ASTM F436 hardened steel washers at nuts and bolt heads. Achieve 40 percent to 60 percent of bolt minimum yield stress.
Gaskets	All	Performance Characteristics: Flat Face Mating Flange: Full faced 1/8-inch thick ethylene propylene (EPR) rubber. Raised Face Mating Flange: Flat ring 1/8-inch ethylene propylene (EPR) rubber, with filler gasket between OD of raised face and flange OD to protect the flange from bolting moment.
Solvent Cement	All	Performance Characteristics: All socket type joints shall be made employing primer and solvent cements that meet or exceed the requirements of ASTM F493 and primers that meet or exceed the requirements of ASTM F656, resistant to the fluid service, and as recommended by the pipe and fitting manufacturer. Solvent weld cement for CPVC pipe joints in sodium hypochlorite service shall be free of silica filler and shall be certified by the manufacturer to be suitable for that service, IPS Weld-On P-70 primer and 724 cement, or equal. Certification shall be submitted. Solvent cement and primer shall be listed by NSF 61 for contact with potable water.

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Item	Size	Description
Thread Lubricant	All	Performance Characteristics: Polytetrafluoroethylene (PTFE) tape.

END OF SECTION

