



Standard Specification for Poly(Vinyl Chloride) (PVC) Corrugated Sewer Pipe With a Smooth Interior and Fittings¹

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This standard has been approved for use by agencies of the U.S. Department of Defense.

1. Scope*

1.1 This specification covers requirements, test methods, and materials for 4 to 48 in. diameter poly(vinyl chloride) (PVC) corrugated pipe with a smooth interior. This profile wall pipe consists of an outer corrugated wall fused to a smooth inner wall providing pipe stiffness levels of 46 psi and 115psi. Joints and fittings are included in this specification.

1.2 The requirements of this specification are intended to provide pipe and fittings suitable for underground use in nonpressure applications for sanitary sewers, storm sewers, and perforated and unperforated pipes for subdrainage.

NOTE 1—Industrial waste disposal lines should be installed only with the specific approval of the cognizant code authority, since chemicals not commonly found in drains and sewers and temperatures in excess of 140°F (60°C) may be encountered.

1.3 Pipe and fittings produced to this specification shall be installed in accordance with Practice [D2321](#).

NOTE 2—For perforated pipe applications, the size of the embedment zone and permeability of the embedment material are important to the system's ability to provide the desired level of infiltration or exfiltration. The gradation of the embedment material must be compatible with the perforation slot size to avoid backfill migration into the pipe.

1.4 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

1.5 The following precautionary caveat pertains only to the test method portion, Section 7, of this specification: *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 ASTM Standards:²

- [D618](#) Practice for Conditioning Plastics for Testing
- [D1600](#) Terminology for Abbreviated Terms Relating to Plastics
- [D1784](#) Specification for Rigid Poly(Vinyl Chloride) (PVC) Compounds and Chlorinated Poly(Vinyl Chloride) (CPVC) Compounds
- [D2122](#) Test Method for Determining Dimensions of Thermoplastic Pipe and Fittings
- [D2152](#) Test Method for Adequacy of Fusion of Extruded Poly(Vinyl Chloride) (PVC) Pipe and Molded Fittings by Acetone Immersion
- [D2321](#) Practice for Underground Installation of Thermoplastic Pipe for Sewers and Other Gravity-Flow Applications
- [D2412](#) Test Method for Determination of External Loading Characteristics of Plastic Pipe by Parallel-Plate Loading
- [D2444](#) Test Method for Determination of the Impact Resistance of Thermoplastic Pipe and Fittings by Means of a Tup (Falling Weight)
- [D2564](#) Specification for Solvent Cements for Poly(Vinyl Chloride) (PVC) Plastic Piping Systems
- [D2855](#) Practice for Making Solvent-Cemented Joints with Poly(Vinyl Chloride) (PVC) Pipe and Fittings
- [D3034](#) Specification for Type PSM Poly(Vinyl Chloride) (PVC) Sewer Pipe and Fittings
- [D3212](#) Specification for Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals
- [F412](#) Terminology Relating to Plastic Piping Systems
- [F477](#) Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe
- [F679](#) Specification for Poly(Vinyl Chloride) (PVC) Large-Diameter Plastic Gravity Sewer Pipe and Fittings
- [F1057](#) Practice for Estimating the Quality of Extruded Poly(Vinyl Chloride) (PVC) Pipe by the Heat Reversion Technique

¹ This specification is under the jurisdiction of ASTM Committee [F17](#) on Plastic Piping Systems and is the direct responsibility of Subcommittee [F17.62](#) on Sewer.

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.