



Standard Specification for Acrylonitrile-Butadiene- Styrene (ABS) Sewer Pipe and Fittings¹

This standard is issued under the fixed designation D 2751; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

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

1. Scope

1.1 This specification covers acrylonitrile-butadienestyrene (ABS) sewer pipe, produced by single extrusion or simultaneous multiple coextrusion. This specification also covers fittings. Included are requirements and test methods for materials, dimensions, workmanship, chemical resistance, water resistance, and joint tightness. A form of marking to indicate compliance with this specification is also included.

1.2 The text of this specification references notes, footnotes, and appendixes which provide explanatory material. These notes and footnotes (excluding those in tables and figures) shall not be considered as requirements of the specification.

1.3 The following precautionary caveat pertains only to the test methods portion, Section 8, 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:

- D 618 Practice for Conditioning Plastics for Testing
- D 1600 Terminology for Abbreviated Terms Relating to Plastics
- D 2122 Test Method of Determining Dimensions of Thermoplastic Pipe and Fittings
- D 2235 Specification for Solvent Cement for Acrylonitrile-Butadiene-Styrene (ABS) Plastic Pipe and Fittings
- D 2321 Practice for Underground Installation of Thermoplastic Pipe for Sewers and Other Gravity-Flow Applications
- D 2412 Test Method for Determination of External Loading Characteristics of Plastic Pipe by Parallel-Plate Loading
- D 2444 Test Method for Determination of the Impact Resistance of Thermoplastic Pipe and Fittings by Means of a Tup (Falling Weight)

D 3212 Specification for Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals

D 3965 Specification for Rigid Acrylonitrile-Butadiene-Styrene (ABS) Compounds for Pipe and Fittings

F 412 Terminology Relating to Plastic Piping Systems

F 477 Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe

2.2 Federal Standard:

Fed. Std. No. 123 Marking for Shipment (Civil Agencies)²

2.3 Military Standard:

MIL-STD-129 Marking for Shipment and Storage²

3. Terminology

3.1 *Definitions*:—Definitions are in accordance with Terminology F 412, and abbreviations are in accordance with Terminology D 1600, unless otherwise specified. The abbreviation for acrylonitrile-butadiene-styrene plastic is ABS.

3.1.1 *acrylonitrile-butadiene-styrene (ABS) pipe and fitting plastics*—plastics containing polymers or blends of polymers, or both, in which the minimum butadiene content is 6 %, the minimum acrylonitrile content is 15 %, the minimum styrene or substituted styrene content, or both, is 15 %, and the maximum content of all other monomers is not more than 5 %, plus lubricants, stabilizers, and colorants.

4. Significance and Use

4.1 The requirements of this specification are intended to provide pipe and fittings suitable for nonpressure drainage of sewage, surface water, and certain other liquid wastes, in applications outside the building limits.

NOTE 1—Industrial waste disposal lines should be installed only with the specific approval of the cognizant building code authority, since chemicals not commonly found in drains and sewers and temperatures in excess of 80°C (180°F) may be encountered.

5. Pipe Classification

5.1 Pipe is produced by single extrusion or simultaneous multiple coextrusion. Pipe produced by simultaneous multiple coextrusion shall be classified as “Coex.”

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. Current edition approved May 1, 2005. Published May 2005. Originally approved in 1968. Last previous edition approved in 1996 as D 2751 – 96a.

² Available from Standardization Documents Order Desk, Bldg. 4 Section D, 700 Robbins Ave., Philadelphia, PA 19111-5094, Attn: NPODS.