



Standard Specification for Acrylonitrile-Butadiene-Styrene (ABS) Plastic Pipe Fittings, Schedule 40¹

This standard is issued under the fixed designation D 2468; 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. Consult the DoD Index of Specifications and Standards for the specific year of issue which has been adopted by the Department of Defense.

1. Scope

1.1 This specification covers acrylonitrile-butadienestyrene (ABS) Schedule 40 pipe fittings. Included are requirements for materials, workmanship, dimensions, and burst pressure.

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 values stated in inch-pound units are to be regarded as the standard. The values given in parentheses are for information only.

1.4 The following safety hazards caveat pertains only to the test method 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 Testing²
- D 1599 Test Method for Short-Time Hydraulic Failure Pressure of Plastic Pipe, Tubing, and Fittings³
- D 1600 Terminology for Abbreviated Terms Relating to Plastics²
- D 1788 Specification for Rigid Acrylonitrile-Butadiene-Styrene (ABS) Plastics⁴
- D 2122 Test Method for Determining Dimensions of Thermoplastic Pipe and Fittings³
- F 412 Terminology Relating to Plastic Piping Systems³
- F 1498 Specification for Taper Pipe Threads 60° for Thermoplastic Pipe and Fittings³

2.2 NSF Standard:

Standard No. 14 for Plastic Piping Components and Related Materials⁵

3. Terminology

3.1 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 plastics is ABS.

4. Classification

4.1 *General*—This specification covers Schedule 40 ABS pipe fittings, made from four ABS plastic compounds and intended for use with Iron Pipe Size (IPS) outside-diameter plastic pipe.

4.1.1 Fittings covered by this specification are normally molded. Inline fittings, such as couplings, unions, bushings, caps, nipples, etc., shall be molded or machined from extruded stock.

4.1.2 Fittings fabricated by welding are not included in this specification.

5. Materials

5.1 This specification covers ABS pipe fittings made from four ABS plastics as defined in Specification D 1788. These are Type I, Grade 1 (cell 322); Type I, Grade 2 (cell 522); Type I, Grade 3 (cell 355); and Type II, Grade 1 (cell 445).

5.2 *Compound*—The ABS plastic compound shall meet the requirements of Type I, Grade 1; Type I, Grade 2; Type I, Grade 3; or Type II, Grade 1, as described in Specification D 1788.

NOTE 1—Mechanical strength, heat resistance, impact strength, and chemical resistance requirements are covered in Specification D 1788.

5.3 *Rework Material*—The manufacturers shall use only their own clean rework fitting material and the fittings produced shall meet all the requirements of this specification.

6. Requirements

6.1 Dimensions and Tolerances:

¹ This specification is under the jurisdiction of ASTM Committee F-17 on Plastic Piping Systems and is the direct responsibility of Subcommittee F17.10 on Fittings. Current edition approved Sept. 10, 1996. Published November 1996. Originally published as D 2468 – 65 T. Last previous edition D 2468 – 96.

² Annual Book of ASTM Standards, Vol 08.01.

³ Annual Book of ASTM Standards, Vol 08.04.

⁴ Annual Book of ASTM Standards, Vol 08.02.

⁵ Available from the National Sanitation Foundation, P.O. Box 1468, Ann Arbor, MI 48106.