



Standard Specification for Acrylonitrile-Butadiene-Styrene (ABS) Schedule 40 Plastic Drain, Waste, and Vent Pipe and Fittings¹

This standard is issued under the fixed designation D 2661; 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.

ε¹ NOTE—Changes were made editorially in August 1999.

1. Scope

1.1 This specification covers fittings and single and coextruded acrylonitrile-butadiene-styrene (ABS) plastic drain, waste, and vent pipe (DWV) made to Schedule 40 iron pipe sizes (IPS). Plastic which does not meet the material requirements specified in Section 5 is excluded from single layer and all coextruded layers.

1.2 Specification for fittings for use with pipe meeting the requirements of this specification are given in Annex A1.

1.3 Acrylonitrile-butadiene-styrene plastic, which does not meet the definition of virgin ABS plastic as given in 3.2.2, is excluded, as performance of plastic other than those defined as virgin was not determined. ABS rework plastic, which meets the requirements of rework plastic as given in 5.3, is acceptable.

1.4 Reprocessed plastic or recycled plastic as defined in Terminology D 883 is excluded.

1.5 Recommendations for storage, joining, and installation are provided in Appendix X1, Appendix X2, and Appendix X3, respectively.

1.6 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.

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

2. Referenced Documents

2.1 ASTM Standards:

- D 618 Practice for Conditioning Plastics and Electrical Insulating Materials for Testing²
- D 883 Terminology Relating to Plastics²
- D 1600 Terminology for Abbreviated Terms Relating to Plastics²

¹ This specification is under the jurisdiction of ASTM Committee F-17 on Plastic Piping Systems and is the direct responsibility of Subcommittee F17.63 on Drain, Waste, and Vent Pipe.

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² *Annual Book of ASTM Standards*, Vol 08.01.

D 1898 Practice for Sampling of Plastics²

D 2122 Test Method for Determining Dimensions of Thermoplastic Pipe and Fittings³

D 2235 Specification for Solvent Cement for Acrylonitrile-Butadiene-Styrene (ABS) Plastic Pipe and Fittings³

D 2321 Practice for Underground Installation of Thermoplastic Pipe for Sewers and Other Gravity-Flow Applications³

D 2412 Test Method for Determination of External Loading Characteristics of Plastic Pipe by Parallel-Pipe Loading³

D 2444 Test Method for Impact Resistance of Thermoplastic Pipe and Fittings by Means of a Tup (Falling Weight)³

D 3311 Specification for Drain, Waste, and Vent (DWV) Plastic Fittings Patterns³

D 3965 Specification for Rigid Acrylonitrile-Butadiene-Styrene (ABS) Compounds for Pipe and Fittings⁴

E 105 Practice for Probability Sampling of Materials⁵

E 122 Practice for Choice of Sample Size to Estimate a Measure of Quality for a Lot or Process⁵

F 402 Practice for Safe Handling of Solvent Cements and Primers Used for Joining Thermoplastic Pipe and Fittings³

F 412 Terminology Relating to Plastic Piping Systems³

F 1498 Specification for Taper Threads 60° for Thermoplastic Pipe and Fittings³

2.2 Federal Standard:

Fed. Std. No. 123 Marking for Shipment (Civil Agencies)⁶

2.3 Military Standard:

MIL-STD-129 Marking for Shipment and Storage⁶

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 is ABS.

3.1.1 *coextruded pipe*—pipe consisting of two or more concentric layers of material bonded together in processing by

³ *Annual Book of ASTM Standards*, Vol 08.04.

⁴ *Annual Book of ASTM Standards*, Vol 08.02.

⁵ *Annual Book of ASTM Standards*, Vol 14.02.

⁶ Available from Standardization Documents Order Desk, Bldg. 4 Section D, 700 Robbins Ave., Philadelphia, PA 19111-5094, Attn: NPODS.