



Standard Terminology Relating to Plastic Piping Systems¹

This standard is issued under the fixed designation F 412; 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—The terms **Hydrostatic Design Stress** and **Pressure Rating** were editorially updated in June 2002.

1. Scope

1.1 This terminology is a compilation of definitions of technical terms used in the plastic piping industry. Terms that are generally understood or adequately defined in other readily available sources are not included.

1.2 When a term is used in an ASTM document for which Committee F-17 is responsible it is included only when judged, after review, by Subcommittee F17.94 to be a generally usable term.

1.3 Definitions that are identical to those published by other ASTM committees or other standards organizations are identified with the committee number (for example, D-20) or with the abbreviation of the name of the organization (for example, IUPAC International Union of Pure and Applied Chemistry).

1.4 A definition is a single sentence with additional information included in notes.

2. Referenced Documents

2.1 ASTM Standards:

- C 114 Test Methods for Chemical Analysis of Hydraulic Cement²
- D 256 Test Methods for Impact Resistance of Plastics and Electrical Insulating Materials³
- D 638 Test Method for Tensile Properties of Plastics³
- D 648 Test Method for Deflection Temperature of Plastics Under Flexural Load³
- D 747 Test Method for Apparent Bending Modulus of Plastics by Means of a Cantilever Beam³
- D 790 Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials³
- D 882 Test Methods for Tensile Properties of Thin Plastic Sheet³
- D 1003 Test Method for Haze and Luminous Transmittance

of Transparent Plastics³

D 1238 Test Method for Flow Rates of Thermoplastics by Extrusion Plastometer³

D 1505 Test Method for Density of Plastics by the Density-Gradient Technique³

D 2444 Test Method for Impact Resistance of Thermoplastic Pipe and Fittings by Means of a Tup (Falling Weight)⁴

D 2837 Test Method for Obtaining Hydrostatic Design Basis for Thermoplastic Pipe Materials⁴

2.2 ISO Standards:⁵

ISO 3 Preferred Numbers

ISO 497 Preferred Numbers

ISO R 161 Pipes of Plastics Materials for the Transport of Fluids (Outside Diameters and Nominal Pressures) Part I, Metric Series

ISO TR 9080 Thermoplastics Pipes for the Transport of Fluids-Methods of Extrapolation of Hydrostatic Stress Rupture Data to Determine the Long-Term Hydrostatic Strength of Thermoplastic Pipe Materials

2.3 ANSI Standard:⁵

Z17.1 ANSI Preferred Numbers

2.4 PPI Standard:⁶

PPI TR-4

3. Terminology

acceptance testing—testing performed on a product to determine whether or not an individual lot of the product conforms with specified requirements.

DISCUSSION—The number of requirements are usually fewer than for **qualification testing** (see definition).

acetal plastics, *n*—highly crystalline linear thermoplastic homopolymers or copolymers characterized by repeating oxymethylene units.

acrylonitrile-butadiene-styrene (ABS) pipe and fitting

¹ This terminology is under the jurisdiction of ASTM Committee F17 on Plastic Piping Systems and is the direct responsibility of Subcommittee F17.94 on Terminology.

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² *Annual Book of ASTM Standards*, Vol 04.01.

³ *Annual Book of ASTM Standards*, Vol 08.01.

⁴ *Annual Book of ASTM Standards*, Vol 08.04.

⁵ Available from American National Standards Institute, 11 West 42nd St., 13th Floor, New York, NY 10036.

⁶ Available from the Plastic Pipe Institute, 1825 Connecticut Ave., NW Suite 680 Washington, DC 20009