



Standard Specification for Polyethylene (PE) Plastic Pipe (DR-PR) Based on Controlled Outside Diameter¹

This standard is issued under the fixed designation D3035; 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.

1. Scope*

1.1 This specification covers polyethylene (PE) pipe made in thermoplastic pipe dimension ratios based on outside diameter and pressure rated for water (see [Appendix X1](#)). Included are requirements for polyethylene compounds and PE plastic pipe, a system of nomenclature for PE plastic pipe, and requirements and test methods for materials, workmanship, dimensions, sustained pressure, and burst pressure. Methods of marking are also given.

1.2 All pipes produced under this specification are intended for use as the distribution and transmission of potable and non-potable water, grey water, reclaimed water, wastewater, force main and gravity municipal sewage, etc. The user should consult the manufacturer to determine whether the material being transported is compatible with polyethylene pipe and will not affect the service life beyond limits acceptable to the user.

1.3 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.

1.4 The following safety hazards caveat pertains only to the test methods 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](#)

¹ This specification is under the jurisdiction of ASTM Committee F17 on Plastic Piping Systems and is the direct responsibility of Subcommittee F17.26 on Olefin Based Pipe.

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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.

[D1238 Test Method for Melt Flow Rates of Thermoplastics by Extrusion Plastometer](#)

[D1598 Test Method for Time-to-Failure of Plastic Pipe Under Constant Internal Pressure](#)

[D1599 Test Method for Resistance to Short-Time Hydraulic Pressure of Plastic Pipe, Tubing, and Fittings](#)

[D1600 Terminology for Abbreviated Terms Relating to Plastics](#)

[D2122 Test Method for Determining Dimensions of Thermoplastic Pipe and Fittings](#)

[D2290 Test Method for Apparent Hoop Tensile Strength of Plastic or Reinforced Plastic Pipe](#)

[D2837 Test Method for Obtaining Hydrostatic Design Basis for Thermoplastic Pipe Materials or Pressure Design Basis for Thermoplastic Pipe Products](#)

[D3350 Specification for Polyethylene Plastics Pipe and Fittings Materials](#)

[F412 Terminology Relating to Plastic Piping Systems](#)

2.2 NSF International Standards:³

[NSF/ANSI Standard 14 for Plastic Piping Components and Related Materials](#)

[NSF/ANSI Standard 61 for Drinking Water System Components—Health Effects](#)

2.3 Other Documents:

[TR-4 Listing of Hydrostatic Design Bases \(HDB\), Strength Design Bases \(SDB\), Pressure Design Bases \(PDB\) and Minimum Required Strength \(MRS\) Ratings for Thermoplastic Piping Materials or Pipe](#)⁴

[APWA Uniform Color Code](#)⁵

3. Terminology

3.1 *Definitions*—Definitions are in accordance with Terminology [F412](#), and abbreviations are in accordance with Terminology [D1600](#), unless otherwise specified.

3.2 *Definitions of Terms Specific to This Standard:*

³ Available from NSF International, P.O. Box 130140, 789 N. Dixboro Rd., Ann Arbor, MI 48113-0140, <http://www.nsf.org>.

⁴ Available from Plastics Pipe Institute (PPI), 105 Decker Court, Suite 825, Irving, TX 75062, <http://www.plasticpipe.org>.

⁵ APWA, 2345 Grand Boulevard, Suite 500, Kansas City, MO 64018-2641, <http://www.apwa.net>.

*A Summary of Changes section appears at the end of this standard