Designation: F2830 – 11 (Reapproved 2017)

An American National Standard

Standard Specification for Manufacture and Joining of Polyethylene (PE) Gas Pressure Pipe With a Peelable Polypropylene (PP) Outer Layer[1]

This standard is issued under the fixed designation F2830; 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 standard specification covers manufacturing and joining requirements for peelable (skinned) polyethylene (PE) pipe, which is PE pipe meeting the requirements of Specification D2513, with a peelable outer layer of polypropylene (PP). These requirements are in addition to those in Specification D2513 for the PE pipe.

1.2 The peelable PP layer does not contribute to outside diameter and wall thickness used for pressure rating or tensile loading calculations.

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

1.4 *Units*—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.

1.5 *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, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.6 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 *ASTM Standards:*[2]

D1600 Terminology for Abbreviated Terms Relating to Plastics

D2513 Specification for Polyethylene (PE) Gas Pressure Pipe, Tubing, and Fittings

D4101 Specification for Polypropylene Injection and Extrusion Materials

F412 Terminology Relating to Plastic Piping Systems

F1055 Specification for Electrofusion Type Polyethylene Fittings for Outside Diameter Controlled Polyethylene and Crosslinked Polyethylene (PEX) Pipe and Tubing

F1563 Specification for Tools to Squeeze-off Polyethylene (PE) Gas Pipe or Tubing

2.2 *ISO Standard:*[3]

ISO 17454 Plastics piping systems - multilayer pipe - test method for the adhesion of the different layers using a pulling rig.

2.3 *EN Standard:*[4]

EN 1411 - Plastics piping and ducting systems – Thermoplastics pipes – determination of resistance to external blows by the staircase method.

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:*

3.2.1 *Peelable pipe, n*—Specification D2513 polyethylene (PE) pipe coextruded with a peelable outer layer of polypropylene (PP). When the peelable PP layer is removed, the PE pipe is the same as D2513 PE pipe.

4. PE Pipe and PP Layer Requirements

4.1 *PE Pipe Requirements:*

4.1.1 The PE pipe shall meet all the requirements of Specification D2513, excluding marking, when tested in accordance with 6.1. Marking shall be in accordance with Section 7.

[1] This specification is under the jurisdiction of ASTM Committee F17 on Plastic Piping Systems and is the direct responsibility of Subcommittee F17.60 on Gas.

Current edition approved Aug. 1, 2017. Published September 2017. Originally approved in 2011. Last previous edition approved in 2011 as F2830–11. DOI: 10.1520/F2830-11R17.

[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.

[3] Available from International Organization for Standardization (ISO), 1, ch. de la Voie-Creuse, Case postale 56, CH-1211, Geneva 20, Switzerland, http://www.iso.ch.

[4] Available from European Committee for Standardization (CEN), 36 rue de Stassart, B-1050, Brussels, Belgium, http://www.cenorm.be.