



Designation: F 1986 – 00a1

An American National Standard

Standard Specification for Multilayer Pipe Type 2, Compression Fittings, and Compression Joints for Hot and Cold Drinking-Water Systems¹

This standard is issued under the fixed designation F 1986; 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 requirements for multilayer pipe type 2 and compression fittings for hot and cold drinking-water systems, with a maximum pressure rating of 1000 kPa (145 psi) at 82°C (180°F).

NOTE 1—*Multilayer Pipe Type 2*—Construction-based pressure rated pipe comprising more than one layer in which at least 60 % of the wall thickness is polymeric material.

1.2 Multilayer pipe type 2 is produced using a butt-welded aluminum pipe as a core, with an extruded inside layer of crosslinked polyethylene (PEX). An adhesive layer is used to bond the inside layer to the wall of the aluminum pipe. An outer layer of polyethylene (PE) and an adhesive layer are extruded to the outer wall of the aluminum pipe.

1.3 Multilayer pipe type 2 is produced in configurations 1 and 2, as referenced in Fig. 1.

1.4 This specification includes compression fittings, which are referenced in Fig. 2.

1.5 Specifications for thread or solder adapters for use with pipe and fittings meeting the requirements of this specification are given in Annex A1 and Annex A2.

1.6 The following precautionary caveat pertains only to the test method portion 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.*

1.6.7 The values stated in either SI units or in inch-pound units are to be regarded separately as standard. The values stated in each system may not be exact equivalents; therefore, each system shall be used independently of the other. Combining values from the two systems may result in nonconformance with the standard.

2. Referenced Documents

2.1 *ASTM Standards:*

¹ This test method is under the jurisdiction of ASTM Committee F17 on Plastic Piping Systems and is the direct responsibility of Subcommittee F17.11 on Composite. Current edition approved April 10, 2000. Published January 2000. Originally published as F 1986 – 00. Last previous edition F 1986 – 00a.