



Designation: F 1987 – 00a¹

An American National Standard

Standard Specification for Multilayer Pipe Type 2, Compression Fittings, and Compression Joints for Hydronic Heating Systems¹

This standard is issued under the fixed designation F 1987; 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 hydronic heating systems, with a maximum pressure/temperature range 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 shown in Fig. 1.

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

1.5 Specifications for threaded 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 safety hazards 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 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 this specification.

NOTE 2—Multilayer pipe type 2, configurations 1 and 2, for hydronic heating systems are not compatible for drinking water use.

2. Referenced Documents

2.1 *ASTM Standards:*

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