Designation: F2087 – 13 (Reapproved 2019)

An American National Standard

Standard Specification for Packing, Fiberglass, Braided, Rope, and Wick[1]

This standard is issued under the fixed designation F2087; 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 U.S. Department of Defense.

1. Scope

1.1 This specification covers the general requirements and tests for braided, rope, and wick fiberglass packing used for boiler, furnace, and other high-temperature equipment seals for service temperatures up to 1000°F (538°C).

1.2 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.

1.3 *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.*

1.4 *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]

D578 Specification for Glass Fiber Strands

D3951 Practice for Commercial Packaging

D4268 Test Methods for Testing Fiber Ropes (Withdrawn 2002)[3]

2.2 *ISO Standards:*[4]

ISO 9000 Series of Standards

3. Terminology

3.1 *Definitions:*

3.1.1 *braided fiberglass, n*—a braid constructed of continuous fiberglass strands.

3.1.2 *lot, n*—unless otherwise specified herein, a lot shall consist of all finished packing of one type and size produced in a continuous run or at the same time under essentially the same conditions. The sampling unit shall be one spool, reel, or coil of packing as necessary to enable performance of the required examinations or tests.

3.1.3 *plied, n*—a yar product produced by twisting together two or more ends of single fiberglass yarns.

3.1.4 *strand, n*—an ordered assemblage of textile fibers having a high ratio of length to diameter and normally used as a unit, including slivers, rovings, single yarns, plied yarns, cords, braids, ropes, and so forth.

3.1.5 *yarn, n*—portion of fiberglass reduced to thread to obtain a fine and thin strand.

4. Classification

4.1 *Classification*—The material shall be of the following types as specified (see 5.1):

4.1.1 *Type I*—Wick.

4.1.2 *Type II*—Rope.

4.1.3 *Type III*—Braided.

5. Ordering Information

5.1 *Acquisition Requirements*—Acquisition documents shall specify the following:

5.1.1 Title, number, and date of this specification;

5.1.2 Type, size, and weight of spool, reel, or coil required (see Section 7);

5.1.3 Marking requirements (see Section 15);

5.1.4 Packaging requirements (see Section 16);

5.1.5 Performance requirements; and

5.1.6 Inspection, testing, and certification of the material shall be agreed upon between the purchaser and the supplier as part of the purchase contract (see Sections 12 and 14).

[1] This specification is under the jurisdiction of ASTM Committee F25 on Ships and Marine Technology and is the direct responsibility of Subcommittee F25.02 on Insulation/Processes.

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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.

[3] The last approved version of this historical standard is referenced on www.astm.org.

[4] Available from International Organization for Standardization (ISO), ISO Central Secretariat, BIBC II, Chemin de Blandonnet 8, CP 401, 1214 Vernier, Geneva, Switzerland, http://www.iso.org.