



Standard Specification for Packing, Fiberglass, Braided, Rope, and Wick¹

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This standard has been approved for use by agencies of the 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).

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D4268 Test Methods for Testing Fiber Ropes (Withdrawn 2002)³

3. Terminology

3.1 *braided fiberglass*—A braid constructed of continuous fiberglass strands.

3.2 *plied*—A yarn product produced by twisting together two or more ends of single fiberglass yarns.

3.3 *strand*—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.

3.4 *yarn*—Portion of fiberglass reduced to thread to obtain a fine and thin strand.

3.5 *lot*—Unless otherwise specified herein, a lot should 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 should be one spool, reel, or coil of packing as necessary to enable performance of the required examinations or tests.

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. Classification

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

Type I—Wick

Type II—Rope

Type III—Braided

5. Ordering Information

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

(a) Title, number, and date of this specification;

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

(c) Marking requirements (see Section 15);

(d) Packaging requirements (see Section 16);

(e) Performance requirements; and

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

6. Materials and Manufacture

6.1 *Material*—The material shall be a continuous, high-density-type ETG fiberglass material (see Specification D578). Asbestos and components containing asbestos are prohibited.

6.2 *Construction*—The packing shall be composed of twisted plied strands made into a braided packing or laid up into the general form of a wick or a loosely twisted rope according to the manufacturer's design. If a core is used, it shall be of the same material and construction.

7. Dimensions and Tolerances

7.1 *Type I Wick Packing*—Unless otherwise specified (see 5.1), the packing shall come in 13-lb (5.9-kg) or 25-lb (11.3-kg) spools, reels, or coils in the sizes listed in Table 1.

7.2 *Type II Rope Packing*—Unless otherwise specified (see 5.1), the packing shall come in 25-lb (11.3-kg) or 50-lb (22.7-kg) spools, reels, or coils in the sizes listed in Table 2.

7.3 *Type III Braided Packing*—Unless otherwise specified (see 5.1), the packing shall come in 25-lb (11.3-kg) or 50-lb (22.7-kg) spools, reels, or coils in the sizes listed in Table 3.