



Designation: D4897/D4897M – 16 (Reapproved 2023)

Standard Specification for Asphalt-Coated Glass-Fiber Venting Base Sheet Used in Roofing¹

This standard is issued under the fixed designation D4897/D4897M; 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 asphalt-impregnated and coated glass-fiber base sheet with mineral surfacing on the top side and coarse mineral granules on the bottom side for use as the first ply of a roofing membrane. These base sheets provide for the lateral release of pressure in roofing systems because they are not solidly attached and the coarse granular surface provides an open, porous channel in the horizontal plane beneath the membrane. The base sheets shall be permitted to be with or without perforations or embossings.

1.2 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 non-conformance with the 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

¹ This specification is under the jurisdiction of ASTM Committee D08 on Roofing and Waterproofing and is the direct responsibility of Subcommittee D08.04 on Felts, Fabrics and Bituminous Sheet Materials.

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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.

D146/D146M Test Methods for Sampling and Testing Bitumen-Saturated Felts and Woven Fabrics for Roofing and Waterproofing

D228/D228M Test Methods for Sampling, Testing, and Analysis of Asphalt Roll Roofing, Cap Sheets, and Shingles Used in Roofing and Waterproofing

D1079 Terminology Relating to Roofing and Waterproofing

3. Terminology

3.1 *Definitions*—For definitions of terms used in this specification, refer to Terminology D1079.

4. Classification

4.1 *Type II*—Heavy-duty asphalt-coated glass-fiber venting base sheet.

5. Materials and Manufacture

5.1 The mat shall be a thin porous sheet of uniformly distributed glass fibers, with or without the addition of reinforcing strands, or glass yarns, which are bonded with a water-resistant resinous binder.

5.2 In the process of manufacture, the glass mat is impregnated and coated on both sides with a hot asphaltic coating with or without a mineral stabilizer and surfaced on the bottom side with coarse mineral granules embedded in an asphaltic coating. The top side shall be surfaced with fine mineral surfacing.

5.3 The product shall be permitted to be embossed or unembossed on the bottom side. The product shall be permitted to contain holes designated for attachment with mopping asphalt.

6. Physical Requirements, Dimensions, and Masses

6.1 The material at the point of manufacture shall conform to the physical requirements in Table 1 and the dimensions and masses in Table 2.

6.2 The finished product shall not crack nor be so sticky as to cause tearing or other damage upon being unrolled at temperatures between 10 °C and 60 °C [50 °F and 140 °F].

6.3 *Pliability at 25 °C ± 1 °C [77 °F ± 2 °F]*—At least eight out of ten strips shall not crack when tested in accordance