



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

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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 inch-pound units are to be regarded as the standard. The values given in parentheses are for information only.

2. Referenced Documents

2.1 ASTM Standards:

- D 146 Test Methods for Sampling and Testing Bitumen-Saturated Felts and Woven Fabrics Used in Roofing and Waterproofing²
- D 228 Test Methods for Asphalt Roll Roofing, Cap Sheets, and Shingles²
- D 1079 Terminology Relating to Roofing, Waterproofing, and Bituminous Materials²

3. Terminology

3.1 *Definitions*—For definitions of terms used in this specification, refer to Terminology D 1079.

4. Classification

4.1 *Type I*—Standard Asphalt-Coated Glass-Fiber Venting Base Sheet

4.2 *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 50 and 140°F (10 and 60°C).

6.3 *Pliability at 77 ± 2°F (25 ± 1°C)*—At least eight out of ten strips shall not crack when tested in accordance with Test Methods D 228 except, for convenience, that the strips shall be conditioned in ambient conditions at 77 ± 2°F (25 ± 1°C) for at least 30 min prior to testing over a 3/4-in. (19-mm) radius.

6.4 *Loss and Behavior on Heating*—There shall be no flowing, sagging, or blistering of the asphalt coating when tested in accordance with Test Methods D 228.

7. Workmanship, Finish, and Appearance

7.1 The glass mat shall be impregnated and shall show no white spots at any point.

7.2 The coating shall be applied to each side to the edges of the sheet. The coating must be smooth.

7.3 The top side shall be surfaced with mineral surfacing to prevent the roofing from sticking in the package.

7.4 The bottom side shall be surfaced with coarse mineral matter, at least 90 % retained on a 212- μ m (No. 70) sieve, embedded in the asphalt coating.

7.5 The finished material shall be free of visible external defects, such as holes, ragged or untrue edges, breaks, cracks, tears, protuberances, and indentations, except for intentionally provided holes or embossing.

¹ This specification is under the jurisdiction of ASTM Committee D-8 on Roofing, Waterproofing, and Bituminous Materials and is the direct responsibility of Subcommittee D08.04 on Felts and Fabrics for Bituminous Roofing and Waterproofing.

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² *Annual Book of ASTM Standards*, Vol 04.04.