



Designation: D 225 – 01

Standard Specification for Asphalt Shingles (Organic Felt) Surfaced With Mineral Granules¹

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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 asphalt roofing in shingle form, composed of single or multiple thicknesses of organic felt saturated and coated on both sides with asphalt and surfaced on the weather side with mineral granules.

1.2 Shingles meeting this specification are intended to be applied with a headlap of not less than 51 mm (2 in.).

2. Referenced Documents

2.1 *ASTM Standards:*

D 228 Test Methods for Asphalt Roll Roofing, Cap Sheets, and Shingles²

D 1079 Terminology Relating to Roofing, Waterproofing, and Bituminous Materials²

D 3161 Test Method for Wind-Resistance of Asphalt Shingles (Fan-Induced Method)²

D 4977 Test Method for Granule Adhesion to Mineral Surfaced Roofing by Abrasion²

E 108 Test Methods for Fire Tests of Roof Coverings³

3. Terminology

3.1 *Definitions*—For definitions of terms, see Terminology D 1079.

3.2 *Definitions of Terms Specific to This Standard:*

3.2.1 *weather-exposed portion*—any portion of a shingle exposed to the weather when applied in accordance with the manufacturer's instructions, excluding any part of the upper portion exposed by a cutout.

4. Classification

4.1 *Type I*—Uniform or nonuniform thickness shingles of any style (see Table 1).

4.2 *Type III*—Uniform or nonuniform thickness shingles of any style (see Table 1).

5. Materials and Manufacture

5.1 In the process of manufacture, a single thickness of dry felt shall be impregnated with a hot asphaltic saturant, then coated on both sides with a hot asphaltic coating, and finally surfaced on the weather side with mineral granules. Laminated shingles need have mineral granules only on the weather side of the laminate. The reverse side shall be covered with a suitable material to prevent the shingles from sticking together in the package.

5.2 The felt shall be produced primarily from organic fibers. The surface of the felt shall be uniform and relatively smooth. Upon splitting or tearing on the bias, the felt shall appear reasonably free of lumps of underbeaten stock and particles of foreign substances.

5.3 The asphaltic coating may be compounded with a fine mineral stabilizer substantially insoluble in water.

6. Physical Requirements

6.1 During handling and application, the shingles shall not crack at ambient temperatures above 10°C (50°F) nor be so sticky at temperatures below 60°C (140°F) as to cause tearing or other material damage upon being unpacked.

6.2 *Loss and Behavior on Heating*—The shingles shall conform to the physical requirements prescribed in Table 2.

7. Dimensions, Mass, and Permissible Variations

7.1 The style and dimensions of the shingles shall be as agreed upon by the purchaser and the seller as part of the purchase contract. Shingles shall not vary more than ± 6 mm ($\frac{1}{4}$ in.) from nominal dimensions established for each style and size.

7.2 The shingles shall conform to the masses prescribed in Table 1.

8. Workmanship, Finish, and Appearance

8.1 The felt (each felt in a laminated shingle) shall be thoroughly and uniformly saturated and shall show no unsaturated spots at any point upon cutting 50-mm (2-in.) wide strips at random across the entire shingle and splitting them open to their full length.

8.2 The weather side shall be uniform in finish and texture,

¹ This specification is under the jurisdiction of ASTM Committee D08 on Roofing, Waterproofing, and Bituminous Materials and is the direct responsibility of Subcommittee D08.02 on Prepared Roofing, Shingles, and Siding Materials.

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

³ *Annual Book of ASTM Standards*, Vol 04.07.