



Designation: D 225 – 03

# Standard Specification for Asphalt Shingles (Organic Felt) Surfaced With Mineral Granules<sup>1</sup>

This standard is issued under the fixed designation D 225; 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 ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval.

*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.).

1.3 The values stated in SI 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 228 Test Method for Sampling, Testing, and Analysis of Asphalt Roll Roofing, Cap Sheets, and Shingles Used in Roofing and Waterproofing<sup>2</sup>

D 1079 Terminology Relating to Roofing, Waterproofing, and Bituminous Materials<sup>2</sup>

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

D 3462 Specification for Asphalt Shingles Made from Glass Felt and Surfaced with Mineral Granules<sup>2</sup>

D 4977 Test Method for Granule Adhesion to Mineral Surfaced Roofing by Abrasion<sup>2</sup>

E 108 Test Methods for Fire Tests of Roof Coverings<sup>3</sup>

## 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  $\pm 6$  mm ( $\frac{1}{4}$  in.) from nominal dimensions established for each style and size.

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

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<sup>2</sup> *Annual Book of ASTM Standards*, Vol 04.04.

<sup>3</sup> *Annual Book of ASTM Standards*, Vol 04.07.