Designation: D3018/D3018M – 10a

Standard Specification for Class A Asphalt Shingles Surfaced with Mineral Granules[1]

This standard is issued under the fixed designation D3018/D3018M; 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 Department of Defense.

1. Scope

1.1 This specification covers granule-surfaced asphalt roofing shingles that meet the requirements for Class A fire test, behavior on heating, and wind testing.

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 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.

2. Referenced Documents

2.1 *ASTM Standards:*[2]

D228 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

D3161 Test Method for Wind-Resistance of Asphalt Shingles (Fan-Induced Method)

E108 Test Methods for Fire Tests of Roof Coverings

3. Terminology

3.1 *Definition:*

3.1.1 *glass mat*—for testing purposes in accordance with Test Methods D228, glass mat shall be considered as felt.

3.2 For definitions of terms used in this specification, see Terminology D1079.

4. Classification

4.1 Asphalt shingles covered by this specification are of two types:

4.1.1 *Type I*—Self-sealing.

4.1.2 *Type II*—Non-self-sealing.

5. Materials and Manufacture

5.1 The shingles covered by this specification shall consist of organic felt or glass mat(s) saturated or impregnated and coated on both sides with a hot asphaltic material and completely surfaced on the weather side with mineral granules embedded in the coating.

5.2 The hot asphaltic material used to saturate or impregnate and coat the organic felt or glass mat(s) may be compounded with a mineral stabilizer.

5.3 The reverse side of the shingles shall be covered with a suitable material to prevent the shingles from sticking together in the package.

5.4 Type I shingles shall have a factory-applied adhesive that will seal the shingles together after application.

6. Physical Requirements

6.1 Shingles shall not stick together in the package so as to cause damage upon being unpacked at ambient temperatures above 10° C [50°F].

6.2 *Loss and Behavior on Heating*—There shall be not more than 1.5 % average loss of volatile matter, and the granular surfacing shall not slide more than 2 mm [1⁄16 in.].

6.3 *Fire Test Classification*—Shingles shall pass all of the Class A fire exposure tests.

6.4 *Wind Resistance*—Shingles shall be classified in accordance with the wind-resistance test (see 9.1.3).

7. Dimensions and Permissible Variations

7.1 The form and size of the shingles shall be as agreed upon by the purchaser and seller.

7.2 The shingles shall not vary in length more than ±3.2 mm [⅛ in.] from nominal dimensions established for each size, except that the length of shingles without cutouts shall not vary more than ±6.4 mm [¼ in.]. The width of the shingles shall not vary more than ±6.4 mm [¼ in.].

[1] This specification is under the jurisdiction of ASTM Committee D08 on Roofing and Waterproofing and is the direct responsibility of Subcommittee D08.02 on Steep Roofing Products and Assemblies.

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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.