



Designation: D4479/D4479M – 07 (Reapproved 2018)

## Standard Specification for Asphalt Roof Coatings—Asbestos-Free<sup>1</sup>

This standard is issued under the fixed designation D4479/D4479M; 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 U.S. Department of Defense.*

### 1. Scope

1.1 This specification covers asbestos-free asphalt roof coatings of brushing or spraying consistency.

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 The following precautionary caveat pertains only to the test method portion, Section 8, of this specification: *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:*<sup>2</sup>

D312/D312M Specification for Asphalt Used in Roofing

D449/D449M Specification for Asphalt Used in Dampproofing and Waterproofing

D946/D946M Specification for Penetration-Graded Asphalt Binder for Use in Pavement Construction

D6511/D6511M Test Methods for Solvent Bearing Bituminous Compounds

<sup>1</sup> This specification is under the jurisdiction of ASTM Committee D08 on Roofing and Waterproofing and is the direct responsibility of Subcommittee D08.05 on Solvent-Bearing Bituminous Compounds for Roofing and Waterproofing.

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<sup>2</sup> 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.

### 3. Classification

3.1 *Type I* is made from asphalts characterized as self-healing, adhesive, and ductile, and conforming to the requirements of Specification D312/D312M, Type I; Specification D449/D449M, Types I or II; or Specification D946/D946M.

3.2 *Type II* is made from asphalts characterized by high softening point and relatively low ductility, and conforming to the requirements of Specification D312/D312M Types II or III; or Specification D449/D449M, Type III.

### 4. Materials and Manufacture

4.1 Asphalt roof coatings shall consist of an asphalt base, volatile petroleum solvents, and mineral or other stabilizers, or both, excluding asbestos fiber, mixed to a smooth, uniform consistency suitable for application by squeegee, three-knot brush, paint brush, roller, or by spraying.

### 5. Composition

5.1 Asphalt roof coatings complying with this specification shall conform to the following composition limits:

	min	max
Water content, %	...	2.5
Nonvolatile content, %	50	...
Mineral and/or other stabilizers	5	20
Bitumen (asphalt), %	40	...

### 6. Physical Requirements

6.1 *Uniformity*—After a thoroughly stirred sample has stood for 72 h at room temperature  $23 \pm 2^\circ\text{C}$  [ $73.4 \pm 3.6^\circ\text{F}$ ] in a closed container, it shall show no separation of solvent or settling that cannot be overcome by moderate stirring.

6.2 *Consistency*—The roof coating shall be of a consistency that will spread readily and permit application by squeegee, brush, roller or spray at the rate of  $1.25 \text{ m}^2/\text{litre}$  [ $50 \text{ ft}^2/\text{gal}$ ] on prepared roofing, saturated felt, and metal surfaces at ambient temperatures above  $10^\circ\text{C}$  [ $50^\circ\text{F}$ ]. Consistency at  $25^\circ\text{C}$  [ $77^\circ\text{F}$ ] shall be between 50 and 400 Stomper s/100 revolutions.

6.3 *Behavior at  $60^\circ\text{C}$  [ $140^\circ\text{F}$ ]*—The roof coating shall show no evidence of blistering, and sag or slide shall be no greater than 6 mm [ $1/4 \text{ in.}$ ]. Staining or absorption of the coating on the reverse side of the prepared roofing test panel shall not exceed 5 % of the coated area.