



Designation: D 4479 – 00

Standard Specification for Asphalt Roof Coatings – Asbestos-Free¹

This standard is issued under the fixed designation D 4479; 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 asbestos-free asphalt roof coatings of brushing or spraying consistency.

1.2 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 and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 *ASTM Standards:*

- D 312 Specification for Asphalt Used in Roofing²
- D 449 Specification for Asphalt Used in Dampproofing and Waterproofing²
- D 946 Specification for Penetration-Graded Asphalt Cement for Use in Pavement Construction³
- D 6511 Test Methods for Solvents Bearing Bituminous Compounds²

3. Classification

3.1 *Type I* is made from asphalts characterized as self-healing, adhesive, and ductile, and conforming to the requirements of Specification D 312D 312, Type I; Specification D 449D 449, Types I or II; or Specification D 946D 946.

3.2 *Type II* is made from asphalts characterized by high softening point and relatively low ductility, and conforming to the requirements of Specification D 312D 312 Types II or III; or Specification D 449D 449, 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

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

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

³ *Annual Book of ASTM Standards*, Vol 04.03.

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
Moisture, %	...	2.5
Nonvolatile matter, %	50	...
Mineral or other stabilizer, or both, Stabilizers, %	5	20
Asphalt, %	40	...

6. Physical Requirements 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°C (50°F). Consistency at 25°C (77°F) shall be between 50 and 400 Stormer s/100 revolutions.

6.3 *Behavior at 60°C (140°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.

6.4 *Pliability at 0°C (32°F)*—There shall be no cracking or separation of the roof coating from the metal.

7. Sampling

7.1 See Section 4 of Test Methods D 6511D 6511.

8. Test Methods

8.1 Determine composition and physical requirements by using the procedures in Test Methods D 6511D 6511.

9. Precision and Bias

9.1 See Section 21 of Test Methods D 6511D 6511.