



Standard Specification for Asphalt Roof Cement, Asbestos-Free¹

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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 asbestos-free asphalt roof cement suitable for trowel application to roofings and flashings.

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 Solvent Bearing Bituminous Compounds²

3. Classification

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

3.1.1 Class I is used for application to essentially dry surfaces.

3.1.2 Class II is used for application to damp, wet, or underwater surfaces.

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

3.2.1 Class I is used for application to essentially dry surfaces.

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.

3.2.2 Class II is used for application to damp, wet, or underwater surfaces.

4. Materials and Manufacture

4.1 Asphalt roof cement shall consist of an asphalt base, volatile petroleum solvents, and mineral and/or other stabilizers, excluding asbestos, mixed to a smooth, uniform consistency suitable for trowel application.

5. Composition

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

	min	max
Moisture, %	...	3.0
Nonvolatile matter, %	70	...
Mineral and/or other stabilizers, %	15	40
Asphalt, %	35	65

6. Physical Requirements

6.1 *Uniformity*—A thoroughly stirred sample shall show no separation of solvent or settling that cannot be overcome by moderate stirring after standing for 72 h at room temperature in a closed container.

6.2 *Workability*—The cement shall be of a consistency that will spread readily and permit troweling smooth coatings, 2 to 6 mm ($1/16$ to $1/4$ in.) thick, on prepared roofing, saturated felt, and metal surfaces at ambient temperatures above 10°C (50°F).

6.3 *Behavior at 60°C (140°F)*—The cement shall show no evidence of blistering, and sag or slide shall be no greater than 6 mm ($1/4$ in.).

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

7. Sampling

7.1 See Section 4 of Test Methods D 6511.

8. Test Methods

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

9. Precision and Bias

9.1 See Section 21 of Test Methods D 6511.

10. Inspection

10.1 Inspection of the material shall be agreed upon by the

purchaser and the seller as part of the purchase contract.

11. Rejection and Rehearing

11.1 Failure to conform to any of the requirements prescribed in this specification shall constitute grounds for rejection. In cases of rejection, the seller shall have the right to reinspect and resubmit the lot after removal of those packages not conforming to the specified requirements.

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12. Packaging and Package Marking

12.1 All products shall be packaged and labeled in accordance with applicable regulations. Each package shall be marked to indicate the applicable ASTM specification.

13. Keywords

13.1 asbestos-free; asphalt; roof cement