



Standard Specification for Asphalt Roof Cement, Asbestos-Containing¹

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This standard has been approved for use by agencies of the Department of Defense.

^{ε1} NOTE—Units information was editorially revised in June 2011.

1. Scope

1.1 This specification covers asbestos-containing asphalt roof cement used for trowel application to roofings and flashings.

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 safety hazards caveat pertains only to the test methods described in 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:²

D312 Specification for Asphalt Used in Roofing

D449 Specification for Asphalt Used in Dampproofing and Waterproofing

D946 Specification for Penetration-Graded Asphalt Cement for Use in Pavement Construction

D1079 Terminology Relating to Roofing and Waterproofing

D6511 Test Methods for Solvent Bearing Bituminous Compounds

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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.

3. Terminology

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

4. Classification

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

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

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

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

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

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

5. Materials and Manufacture

5.1 Asphalt roof cement shall consist of an asphalt base, volatile petroleum solvents, and mineral stabilizers including asbestos fiber, mixed to a smooth, uniform consistency suitable for trowel application.

6. Composition

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

	min	max	
Water, %	...	1.0	(D6511, Section 10)
Nonvolatile matter, %	70	...	(D6511, Section 7)
Asbestos and other mineral stabilizers, %	15	45	(D6511, Section 18)
Asphalt, %	30	60	(D6511, Section 18)

Mineral matter based
on original mass of
insoluble residue, %

80

...

(D6511,
Section 19)

7. Physical Requirements

7.1 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. (See Test Methods D6511, Section 5 on Uniformity.)

7.2 Workability—The cement shall be of a consistency that will spread readily and permit troweling smooth coatings, 2 to 6 mm [$\frac{1}{16}$ to $\frac{1}{4}$ in.] thick, on prepared roofing, saturated felt, and metal surfaces at ambient temperatures above 10°C [50°F].

7.3 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 [$\frac{1}{4}$ in.]. (See Test Methods D6511, Section 12 on Behavior at 60°C [140°F].)

7.4 Pliability at 0°C [32°F]—There shall be no cracking or separation of the cement from the metal. (See Test Methods D6511, Section 13 on Pliability at 0°C [32°F].)

7.5 Adhesion to Damp, Wet, or Underwater Surfaces—The average of three test samples shall be greater than 80 % adhesion for compliance with Class II requirements. (See Test Methods D6511, Section 17 on Adhesion to Damp, Wet, or Underwater Surfaces.)

8. Sampling

8.1 Sample the material from the original containers immediately after stirring to a uniform consistency in accordance with Section 4, Sampling, of Test Methods D6511. Restir samples to ensure uniformity immediately before withdrawing portions for individual tests.

9. Test Methods

9.1 Determine composition and physical requirements by using the procedures in Test Methods D6511.

10. Precision

10.1 See Section 21, Precision and Bias, of Test Methods D6511.

11. Inspection

11.1 Inspection of the material shall be agreed upon by the purchaser and the seller as part of the purchase contract.

12. Rejection and Resubmittal

12.1 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.

13. Packaging and Package Marking

13.1 Asphalt roofing cement shall be suitably packaged to permit acceptance by the carrier and to afford adequate protection from the normal hazards of handling and shipment.

13.2 Each container shall be plainly marked with the name and brand of the manufacturer or supplier, the type of product, the manufacturer's production code or lot number, and wording indicating that the material contains asbestos.

13.3 Each container shall be plainly marked to indicate that the product was manufactured to meet ASTM D2822.

14. Keywords

14.1 asbestos; asphalt; roof cement

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