Designation: D4586/D4586M – 07 (Reapproved 2024)

Standard Specification for Asphalt Roof Cement, Asbestos-Free[1]

This standard is issued under the fixed designation D4586/D4586M; 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 U.S. 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 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 nonconformance 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:*[2]

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

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 D312/D312M, Type I; Specification D449/D449M, Type I or II; or Specification D946/D946M.

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 and dry 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 D312/D312M, Type II or III; or Specification D449/D449M, Type II or III.

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

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
Water content, %	...	3.0
Nonvolatile content, %	70	...
Mineral and/or other stabilizers, %	15	40
Bitumen (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

[1] 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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[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.