This document is not an ASTM standard and is intended only to provide the user of an ASTM standard an indication of what changes have been made to the previous version. Because it may not be technically possible to adequately depict all changes accurately, ASTM recommends that users consult prior editions as appropriate. In all cases only the current version of the standard as published by ASTM is to be considered the official document.



## Designation:D449-89(Reapproved 1999)<sup>€1</sup> Designation: D 449 - 03 (Reapproved 2008)

# Standard Specification for Asphalt Used in Dampproofing and Waterproofing<sup>1</sup>

This standard is issued under the fixed designation D 449; 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 ( $\varepsilon$ ) indicates an editorial change since the last revision or reapproval.

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

 $\epsilon^{1}$ Note—Editorially switched from English dominant to SI dominant.

### 1. Scope

1.1 This specification covers three types of asphalt suitable for use as a mopping coat in dampproofing; or as a plying or mopping cement in the construction of membrane waterproofing systems with felts <del>conforming to in accordance with</del> Specification D 226; fabrics <del>conforming to in accordance with</del> Specifications D 173 or D 1668 (asphalt types); asphalt-impregnated glass mat <del>conforming to in accordance with</del> Specifications D 2178; and with primer <del>conforming to in accordance with</del> Specification D 41.

1.2 The values stated in SI units are to be regarded as the standard. The values given in parentheses are for information only.

1.3 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: <sup>2</sup>

D 5 Test Method for Penetration of Bituminous Materials

- D 36 Test Method for Softening Point of Bitumen (Ring-and-Ball Apparatus)
- D 41 Specification for Asphalt Primer Used in Roofing, Dampproofing, and Waterproofing
- D 92 Test Method for Flash and Fire Points by Cleveland Open Cup Tester
- D 113 Test Method for Ductility of Bituminous Materials
- D 140 Practice for Sampling Bituminous Materials
- D 173 Specification for Bitumen-Saturated Cotton Fabrics Used in Roofing and Waterproofing
- D 226 Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing
- D 1668 Specification for Glass Fabrics (Woven and Treated) for Roofing and Waterproofing
- D 2042 Test Method for Solubility of Asphalt Materials in Trichloroethylene
- D 2178 Specification for Asphalt Glass Felt Used in Roofing and Waterproofing

D2398Test Method for Softening Point of Bitumen in Ethylene Glycol (Ring-and-Ball) 3461 Test Method for Softening Point of Asphalt and Pitch (Mettler Cup-and-Ball Method)

### 3. Classification

3.1 Asphalts covered by this specification include three types:

3.1.1 *Type I*—A soft, adhesive, "self-healing" asphalt that flows easily under the mop and is suitable for use below grade under uniformly moderate temperature conditions both during the process of installation and during service.

NOTE 1-Type I asphalt is suitable for foundations, tunnels, subways, etc. and so forth.

3.1.2 *Type II*—A somewhat less susceptible asphalt than Type I, with good adhesive and "self-healing" properties, suitable for use above grade where it will not be exposed to temperatures exceeding  $50^{\circ}$ C ( $122^{\circ}$ F).

Note 2-Type II asphalt is suitable for railroad bridges, culverts, retaining walls, tanks, dams, conduits, spray decks, etc.- and so forth.

Current edition approved April 28, 1989. Published July 1989. Originally published as D449 - 37. Last previous edition D449-79(1983).

Copyright © ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959, United States.

<sup>&</sup>lt;sup>1</sup> This specification is under the jurisdiction of ASTM Committee D-8 on Roofing, Waterproofing, and Bituminous Materials and is the direct responsibility of Subcommittee D08.03 on Surfacing and Bituminous Materials for Membrane Waterproofing and Builtup Roofing.

<sup>&</sup>lt;sup>1</sup> This specification is under the jurisdiction of ASTM Committee D08 on Roofing and Waterproofing and is the direct responsibility of Subcommittee D08.03 on Surfacing and Bituminous Materials for Membrane Waterproofing and Built-up Roofing.

Current edition approved May 1, 2008. Published June 2008. Originally approved in 1937. Last previous edition approved in 2003 as D 449 - 03.

<sup>&</sup>lt;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 , Vol 04.03, volume information, refer to the standard's Document Summary page on the ASTM website.