

Designation: D3019/D3019M - 17

Standard Specification for Lap Cement Used with Asphalt Roll Roofing, Non-Fibered, and Fibered¹

This standard is issued under the fixed designation D3019/D3019M; 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.

1. Scope

- 1.1 This specification covers lap cement consisting of asphalt dissolved in a volatile petroleum solvent with or without mineral or other stabilizers, or both, for use with roll roofing. The fibered version of these cements excludes the use of asbestos fibers.
- 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 precautionary caveat applies only to the test method portion, Section 5, 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:²

D36/D36M Test Method for Softening Point of Bitumen (Ring-and-Ball Apparatus)

D6511/D6511M Test Methods for Solvent Bearing Bituminous Compounds

3. Classification

3.1 *Type I*—Brushing consistency non-fibered lap cement intended for use in the exposed-nailing method of roll roofing application. Type I lap cement contains no mineral or other stabilizers.

- 3.1.1 *Grade 1*—Made with an air-blown asphalt.
- 3.1.2 *Grade* 2—Made with a vacuum-reduced or steam-refined asphalt.
- 3.2 *Type III*—Heavy brushing or light troweling consistency fibered lap cement intended for use in the concealed-nailing method of roll roofing application. Type III lap cement contains a quantity of mineral or other stabilizers, or both, but contains no asbestos.

4. Physical Requirements

4.1 The material shall conform to the requirements prescribed in Table 1.

5. Sampling

5.1 See Section 4, Sampling, of Test Methods D6511/D6511M.

6. Test Methods

- 6.1 Determine composition and physical requirements by using the procedures in Test Methods D6511/D6511M and Test Method D36/D36M.
 - 6.2 *Strength of Lap:*
- 6.2.1 *Significance*—The lap strength is of importance only for Type III cement used in the concealed-nailing method of roll roofing application.

7. Inspection

7.1 Inspection of the material shall be as agreed upon between the purchaser and the supplier as part of the purchase contract.

8. Rejection and Resubmittal

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

9. Packaging and Package Marking

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

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.

Current edition approved Jan. 1, 2017. Published January 2017. Originally approved in 1972. Last previous edition approved in 2008 as D3019 – 08. DOI: 10.1520/D3019_D3019M-17.

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.

TABLE 1 Requirements for Lap Cement

	Type I				
_	Grade 1		Grade 2		Type III
_	min	max	min	max	_
Water, volume percent of original sample		0.5		0.5	2.5 max
Distillation, total distillate to each temperature,					
volume percent of original sample:					
to 190°C [374°F]	5	20	2	20	
to 225°C [437°F]	15	35	15	35	
to 260°C [500°F]	25	40	25	40	
to 316°C [600°F]	30	45	30	45	
to 360°C [680°F]		50		50	
Softening point of residue from distillation, °C [°F]	57 [135]		41 [106]		
Solubility of the lap cement in trichloroethylene, mass percent	92.5		92.5	•••	80.0 min
Strength of lap at indicated age, min, kN/m [lbf/in.]					
width: at 24 h		***			3.0 [17.0] ^A

^A Felt may break outside the area of the cemented lap.

10. Keywords

10.1 asphalt; lap cement; non-fibered; roll roofing

ASTM International takes no position respecting the validity of any patent rights asserted in connection with any item mentioned in this standard. Users of this standard are expressly advised that determination of the validity of any such patent rights, and the risk of infringement of such rights, are entirely their own responsibility.

This standard is subject to revision at any time by the responsible technical committee and must be reviewed every five years and if not revised, either reapproved or withdrawn. Your comments are invited either for revision of this standard or for additional standards and should be addressed to ASTM International Headquarters. Your comments will receive careful consideration at a meeting of the responsible technical committee, which you may attend. If you feel that your comments have not received a fair hearing you should make your views known to the ASTM Committee on Standards, at the address shown below.

This standard is copyrighted by ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959, United States. Individual reprints (single or multiple copies) of this standard may be obtained by contacting ASTM at the above address or at 610-832-9585 (phone), 610-832-9555 (fax), or service@astm.org (e-mail); or through the ASTM website (www.astm.org). Permission rights to photocopy the standard may also be secured from the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923, Tel: (978) 646-2600; http://www.copyright.com/