

Designation: D 1851 - 67 (Reapproved 1977)²

An American National Standard

AMERICAN SOCIETY FOR TESTING AND MATERIALS

1916 Race St., Philadelphia, Pa. 19103

Reprinted from the Annual Book of ASTM Standards, Copyright ASTM

If not listed in the current combined index, will appear in the next edition.

Standard Methods of Testing

CONCRETE JOINT SEALERS, COLD-APPLICATION TYPE¹

This standard is issued under the fixed designation D 1851; 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 NOTE—Note 2 was added editorially in March 1980.

² Section 2 was added editorially and the subsequent sections were renumbered in December 1984.

1. Scope

1.1 These methods cover tests for concrete joint sealers for cold-application, of the mastic-multiple component type and the single component, ready-mixed type. The following tests are covered:

	Sections
Penetration	5
Flow	6
Bond	7 to 9

NOTE 1—Joint sealers intended for use in structures serving jet-fuel-powered vehicles such as jet aircraft are not specifically covered by these methods. Reference should be made to ASTM Methods D 1853, Testing Jet-Fuel-Resistant Joint Sealer for Concrete, Cold-Application Elastic Type.²

2. Applicable Documents

2.1 ASTM Standards:

C 220 Specification for Flat-Asbestos-Cement Sheets²

D 1191 Methods of Testing Concrete Joint Sealers³

D 1853 Methods of Testing Jet-Fuel-Resistant Joint Sealer for Concrete, Cold-Application Elastic Type⁴

3. Safety Precautions

3.1 *Evaporating Solvent*—The ready-mixed type of joint sealing compound generally contains inflammable solvent. Only explosion-proof heating equipment should be used for heating this material, and the heating should be done in a well-ventilated hood.

4. Preparation of Sample

4.1 *Mastic - Multiple Component Type*—Prepare the sample for tests from separate ingredi-

ents in accordance with instructions furnished by the manufacturer. The separate ingredients may be combined by mechanical or manual stirring, and may be heated, if necessary, to a temperature not to exceed 100°F (38°C). Prepare test specimens with the mixed sealing compound within 1 h of the time of mixing and while it is at a temperature between 70 and 80°F (21 and 27°C).

4.2 *Single Component, Ready-Mixed Type*—Prepare the sample with the material as received, but heat or cool to a temperature between 70 and 80°F (21 and 27°C) unless otherwise indicated.

PENETRATION

5. Procedure

5.1 Determine penetration in accordance with Methods D 1191, using specimens prepared as follows: Place material, prepared as described in 4.1 for multiple component types or as in 8.3 for single component types, in the specified container, flush with the top edge. Allow the specimen to stand in a well-ventilated room at 70 to 80°F (21 to 27°C) for 48 h immediately prior to immersion in the specified conditioning bath for penetration.

¹ These methods are under the jurisdiction of ASTM Committee D-4 on Road and Paving Materials and are the direct responsibility of Subcommittee D04.33 on Formed-In-Place Sealants for Joints and Cracks in Pavements.

Current edition approved Sept. 8, 1967. Originally published 1961. Replaces D 1851 - 61 T.

² Annual Book of ASTM Standards, Vol 04.05.

³ Annual Book of ASTM Standards, Vol 04.03.

⁴ Discontinued; see 1967 Book of ASTM Standards, Part 10.