



Designation: D5329 – 20

Standard Test Methods for Sealants and Fillers, Hot-Applied, for Joints and Cracks in Asphalt Pavements and Portland Cement Concrete Pavements¹

This standard is issued under the fixed designation D5329; 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 These test methods cover tests for hot-applied types of joint and crack sealants and fillers for portland cement concrete and asphaltic concrete pavements. There are numerous standard material specifications that use these test methods. Refer to the respective standard material specification of interest to determine which of the following test methods to use. For sample melting and concrete block preparation, see their respective standard practices.

1.2 The test methods appear in the following sections:

	Section
Artificial Weathering	13
Asphalt Compatibility	12
Bond, Non-Immersed	8
Bond, Water-Immersed	9
Cone Penetration, Non-Immersed	6
Flexibility	15
Flow	7
Resilience	10
Resilience, Oven-Aged	11
Tensile Adhesion	14

1.3 The values stated in SI units are to be regarded as standard. No other units of measurement are included in this standard.

1.4 *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.*

1.5 *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.*

¹ These test methods are under the jurisdiction of ASTM Committee D04 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 May 1, 2020. Published May 2020. Originally approved in 1992. Last previous edition approved in 2016 as D5329 – 16. DOI: 10.1520/D5329-20.

2. Referenced Documents

2.1 ASTM Standards:²

- D5/D5M Test Method for Penetration of Bituminous Materials
- D217 Test Methods for Cone Penetration of Lubricating Grease
- D618 Practice for Conditioning Plastics for Testing
- D1074 Test Method for Compressive Strength of Asphalt Mixtures
- D1561/D1561M Practice for Preparation of Bituminous Mixture Test Specimens by Means of California Kneading Compactor
- D1985 Practice for Preparing Concrete Blocks for Testing Sealants, for Joints and Cracks
- D3381/D3381M Specification for Viscosity-Graded Asphalt Binder for Use in Pavement Construction
- D5167 Practice for Melting of Hot-Applied Joint and Crack Sealant and Filler for Evaluation
- D6690 Specification for Joint and Crack Sealants, Hot Applied, for Concrete and Asphalt Pavements
- E145 Specification for Gravity-Convection and Forced-Ventilation Ovens
- E177 Practice for Use of the Terms Precision and Bias in ASTM Test Methods
- E691 Practice for Conducting an Interlaboratory Study to Determine the Precision of a Test Method
- G151 Practice for Exposing Nonmetallic Materials in Accelerated Test Devices that Use Laboratory Light Sources
- G154 Practice for Operating Fluorescent Ultraviolet (UV) Lamp Apparatus for Exposure of Nonmetallic Materials
- G155 Practice for Operating Xenon Arc Light Apparatus for Exposure of Non-Metallic Materials

3. Significance and Use

3.1 These test methods describe procedures for determining specification conformance for hot-applied, field-molded joint and crack sealants and fillers.

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.