



Designation: ~~C1619–11~~ **C1619 – 11 (Reapproved 2017)**

## Standard Specification for Elastomeric Seals for Joining Concrete Structures<sup>1</sup>

This standard is issued under the fixed designation C1619; 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 ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval.

### 1. Scope

1.1 This specification covers the physical property requirements of elastomeric seals (gaskets) used to seal the joints of precast concrete structures conforming to Specifications **C14**, **C14M**, **C118**, **C118M**, **C361**, **C361M**, **C443**, **C443M**, **C505**, or **C505M** used in gravity and low head pressure applications.

1.2 Requirements are given for natural or synthetic rubber gaskets, or a combination of both.

1.3 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

1.4 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 and health 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.

### 2. Referenced Documents

2.1 *ASTM Standards:*<sup>2</sup>

**C14** Specification for Nonreinforced Concrete Sewer, Storm Drain, and Culvert Pipe

**C14M** Specification for Nonreinforced Concrete Sewer, Storm Drain, and Culvert Pipe (Metric)

**C118** Specification for Concrete Pipe for Irrigation or Drainage

**C118M** Specification for Concrete Pipe for Irrigation or Drainage (Metric)

**C361** Specification for Reinforced Concrete Low-Head Pressure Pipe

**C361M** Specification for Reinforced Concrete Low-Head Pressure Pipe (Metric)

**C443** Specification for Joints for Concrete Pipe and Manholes, Using Rubber Gaskets

**C443M** Specification for Joints for Concrete Pipe and Manholes, Using Rubber Gaskets (Metric)

**C497** Test Methods for Concrete Pipe, Manhole Sections, or Tile

**C497M** Test Methods for Concrete Pipe, Manhole Sections, or Tile (Metric)

**C505** Specification for Nonreinforced Concrete Irrigation Pipe with Rubber Gasket Joints

**C505M** Specification for Nonreinforced Concrete Irrigation Pipe With Rubber Gasket Joints (Metric)

**C822** Terminology Relating to Concrete Pipe and Related Products

**D395** Test Methods for Rubber Property—Compression Set

**D412** Test Methods for Vulcanized Rubber and Thermoplastic Elastomers—Tension

**D471** Test Method for Rubber Property—Effect of Liquids

**D573** Test Method for Rubber—Deterioration in an Air Oven

**D1149** Test Methods for Rubber Deterioration—Cracking in an Ozone Controlled Environment

**D1566** Terminology Relating to Rubber

**D2240** Test Method for Rubber Property—Durometer Hardness

**D2527** Specification for Rubber Seals—Splice Strength

<sup>1</sup> This specification is under the jurisdiction of ASTM Committee C13 on Concrete Pipe and is the direct responsibility of Subcommittee C13.08 on Joints for Precast Concrete Structures.

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<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* volume information, refer to the standard's Document Summary page on the ASTM website.