



Designation: D 1752 – 04

Standard Specification for Preformed Sponge Rubber Cork and Recycled PVC Expansion Joint Fillers for Concrete Paving and Structural Construction¹

This standard is issued under the fixed designation D 1752; 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 approval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

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

1. Scope

1.1 This specification covers preformed expansion joint fillers of the following four types for use in concrete, brick, or stone construction.

1.1.1 *Type I*—Sponge rubber.

1.1.2 *Type II*—Cork.

1.1.3 *Type III*—Self-expanding cork.

1.1.4 *Type IV*—Recycled PVC.

1.2 The values stated in inch-pound units are to be regarded as the standard.

NOTE 1—Attention is called to Specification D 994 and D 1751.

2. Referenced Documents

2.1 *ASTM Standards*:²

D 545 Test Methods for Preformed Expansion Joint Fillers for Concrete Construction (Nonextruding and Resilient Types)

D 994 Specification for Preformed Expansion Joint Filler for Concrete (Bituminous Type)

D 1751 Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Nonextruding and Resilient Bituminous Types)

3. Ordering Information

3.1 Products conforming to this specification are manufactured in sheet form to a range of thicknesses: $\frac{1}{4}$ in., $\frac{3}{8}$ in., $\frac{1}{2}$ in., $\frac{3}{4}$ in., and 1 in. Sheet sizes may be 3 or 4 ft in width and lengths of 3, 5, 6, 10, or 12 ft. Purchaser must specify sheet sizes when ordering (excluding Type IV—Recycled PVC).

3.2 Joint filler in strip form is cut from the sheets as manufactured. When ordering joint filler strips the purchaser

must specify thickness, widths, and length; strip widths are available from 2 in. (50 mm) in increments of $\frac{1}{2}$ in. (13 mm).

3.3 Type IV joint filler is available in strip form, cut from the sheets as manufactured, and available in a range of thicknesses: $\frac{1}{4}$ in., $\frac{3}{8}$ in., $\frac{1}{2}$ in., or $\frac{3}{4}$ in. When ordering joint filler strips, the purchaser must specify thickness, widths, and length; strip widths are available from 2 in. (50 mm) in increments of $\frac{1}{2}$ in. (13 mm).

4. Materials

4.1 *Sponge Rubber*—The joint filler shall consist of preformed strips of a durable, elastic sponge rubber compound, using synthetic rubber or natural rubber as a base and containing no reclaim rubber or factice. Unless otherwise specified, the sponge rubber shall have a cement gray color to blend with concrete in appearance.

4.2 *Cork and Self-Expanding Cork*—The joint filler shall consist of preformed strips that have been formed from clean granulated cork particles securely bound together by a synthetic resin of an insoluble nature.

4.3 *Recycled PVC*—The joint filler shall consist of preformed strips that have been extruded using scrap PVC material and using either no binder or a synthetic resin of an insoluble nature to securely bind it together.

NOTE 2—Unless otherwise specified, the recycled PVC should have a cement gray color to blend with concrete in appearance.

4.4 Preformed strips of expansion joint fillers shall be of such character as not to be deformed or broken by ordinary handling when exposed to atmospheric conditions. Pieces of the joint filler which have been damaged shall be rejected.

5. Requirements

5.1 *Test Specimen*—The sample to be tested shall be cut from the sheet, as manufactured, and shall be representative of the sheet stock.

5.2 *Recovery*—The test specimen shall be compressed to 50 % of its thickness before test. The load shall be released immediately after application. At the end of 10 min after release of application of the load, the specimen shall have recovered to at least 90 % of its thickness before test.

¹ This specification is under the jurisdiction of ASTM Committee D04 on Road and Paving Materials and is the direct responsibility of Subcommittee D04.34 on Preformed Joint Fillers, Sealers, and Sealing Systems.

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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.