



Designation: **D8139–17** **D8139 – 23**

Standard Specification for Semi-Rigid, Closed-Cell Polypropylene Foam, Preformed Expansion Joint Fillers for Concrete Paving and Structural Construction¹

This standard is issued under the fixed designation D8139; 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 preformed expansion joint fillers made from closed-cell polypropylene foam materials having suitable compressibility, recovery from compression, nonextruding, and weather-resistant characteristics.

1.1.1 Type I, closed-cell polypropylene foam.

1.2 These joint fillers are intended for use in concrete pavements in full-depth joints. There are several variations in size with typical thicknesses of $\frac{1}{2}$ in. (12.7 mm), $\frac{3}{4}$ in. (19.05 mm), and 1 in. (25.4 mm); typical widths of $3\frac{1}{2}$ in. (88.9 mm), 4 in. (101.6 mm), 5 in. (127 mm), 6 in. (152.5 mm), 7 in. (177.8 mm), 8 in. (203.2 mm), or 48 in. (1.2 m) sheet; and typical lengths of 5 ft (1.52 m) and 10 ft (3.05 m).

1.3 The values stated in inch-pound units are to be regarded as the 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.*

2. Referenced Documents

2.1 *ASTM Standards:*²

[C666/C666M Test Method for Resistance of Concrete to Rapid Freezing and Thawing](#)

[D545 Test Methods for Preformed Expansion Joint Fillers for Concrete Construction \(Nonextruding and Resilient Types\)](#)

[D1623 Test Method for Tensile and Tensile Adhesion Properties of Rigid Cellular Plastics](#)

[D4329 Practice for Fluorescent Ultraviolet \(UV\) Lamp Apparatus Exposure of Plastics](#)

[D5249 Specification for Backer Material for Use with Cold- and Hot-Applied Joint Sealants in Portland Cement Concrete and Asphalt Joints](#)

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.