



Standard Specification for Vapor Permeable Flexible Sheet Water-Resistive Barriers Intended for Mechanical Attachment¹

This standard is issued under the fixed designation E2556/E2556M; 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 is limited to vapor permeable flexible sheet materials which are intended to be mechanically attached and are generally installed behind the cladding system in exterior walls.

1.2 This specification is limited to the evaluation of materials and does not address installed performance. Although the fastening practices (type of fastener, fastening schedule, etc.) may affect the installed function of these materials, they are not included in this specification.

1.3 This specification does not address integration of the water-resistive barrier with other wall elements. The topic is addressed in more detail in Practice E2112 and Guide E2266.

1.4 The values stated in either SI units or inch-pound units are to be regarded separately as standard. The values stated in each system may not be exact equivalents; therefore, each system shall be used independently of the other. Combining values from the two systems may result in non-conformance with the standard.

1.5 *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.*

2. Referenced Documents

2.1 ASTM Standards:²

- D226/D226M Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing
- D779 Test Method for Determining the Water Vapor Resistance of Sheet Materials in Contact with Liquid Water by

the Dry Indicator Method

D828 Test Method for Tensile Properties of Paper and Paperboard Using Constant-Rate-of-Elongation Apparatus

D882 Test Method for Tensile Properties of Thin Plastic Sheeting

D4869/D4869M Specification for Asphalt-Saturated Organic Felt Underlayment Used in Steep Slope Roofing

D5034 Test Method for Breaking Strength and Elongation of Textile Fabrics (Grab Test)

E96/E96M Test Methods for Water Vapor Transmission of Materials

E631 Terminology of Building Constructions

E1677 Specification for Air Barrier (AB) Material or System for Low-Rise Framed Building Walls

E2112 Practice for Installation of Exterior Windows, Doors and Skylights

E2128 Guide for Evaluating Water Leakage of Building Walls

E2136 Guide for Specifying and Evaluating Performance of Single Family Attached and Detached Dwellings—Durability

E2266 Guide for Design and Construction of Low-Rise Frame Building Wall Systems to Resist Water Intrusion

G154 Practice for Operating Fluorescent Ultraviolet (UV) Lamp Apparatus for Exposure of Nonmetallic Materials

2.2 Other Standards:

AATCC Test Method 127 Water Resistance: Hydrostatic Pressure Test³

CGSB CAN2-51.32.M77 Sheathing Membrane, Breather Type⁴

Federal Specification UU-B-790a Federal Specification Building Paper, Vegetable Fiber (Kraft, Waterproofed, Water Repellent and Fire Resistant)⁵

¹ This specification is under the jurisdiction of ASTM Committee E06 on Performance of Buildings and is the direct responsibility of Subcommittee E06.55 on Performance of Building Enclosures.

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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.

³ Available from American Association of Textile Chemists and Colorists (AATCC), P.O. Box 12215, Research Triangle Park, NC 27709-2215, <http://www.aatcc.org>.

⁴ Available from Canadian General Standards Board (CGSB), 11 Laurier St., Phase III, Place du Portage, Gatineau, Quebec K1A 0S5, Canada, <http://www.tpsgc-pwgsc.gc.ca/ongc-cgsb>.

⁵ Available from DLA Document Services, Building 4/D, 700 Robbins Ave., Philadelphia, PA 19111-5094, <http://quicksearch.dla.mil>.