Designation: D6455 – 11 (Reapproved 2018)

Standard Guide for the Selection of Test Methods for Prefabricated Bituminous Geomembranes (PBGMs)[1]

This standard is issued under the fixed designation D6455; 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 guide provides recommendations for the selection of appropriate test methods for prefabricated bituminous sheet used in geomembrane applications to provide consistency in data reporting.

1.2 This guide includes test methods for all types of prefabricated bituminous geomembranes (PBGMs).

1.3 This guide is intended to aid all personnel involved in the selection, manufacture, or evaluation of prefabricated bituminous geomembranes. Field-related evaluation of PBGMs, including but not limited to seam testing, is beyond the scope of this guide.

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]

D36/D36M Test Method for Softening Point of Bitumen (Ring-and-Ball Apparatus)

D471 Test Method for Rubber Property—Effect of Liquids

D573 Test Method for Rubber—Deterioration in an Air Oven

D696 Test Method for Coefficient of Linear Thermal Expansion of Plastics Between –30°C and 30°C with a Vitreous Silica Dilatometer

D746 Test Method for Brittleness Temperature of Plastics and Elastomers by Impact

D751 Test Methods for Coated Fabrics

D792 Test Methods for Density and Specific Gravity (Relative Density) of Plastics by Displacement

D1079 Terminology Relating to Roofing and Waterproofing

D1204 Test Method for Linear Dimensional Changes of Nonrigid Thermoplastic Sheeting or Film at Elevated Temperature

D1434 Test Method for Determining Gas Permeability Characteristics of Plastic Film and Sheeting

D3776/D3776M Test Methods for Mass Per Unit Area (Weight) of Fabric

D4354 Practice for Sampling of Geosynthetics and Rolled Erosion Control Products (RECPs) for Testing

D4355/D4355M Test Method for Deterioration of Geotextiles by Exposure to Light, Moisture and Heat in a Xenon Arc Type Apparatus

D4439 Terminology for Geosynthetics

D4595 Test Method for Tensile Properties of Geotextiles by the Wide-Width Strip Method

D4833/D4833M Test Method for Index Puncture Resistance of Geomembranes and Related Products

D4873/D4873M Guide for Identification, Storage, and Handling of Geosynthetic Rolls and Samples

D4885 Test Method for Determining Performance Strength of Geomembranes by the Wide Strip Tensile Method

D5147/D5147M Test Methods for Sampling and Testing Modified Bituminous Sheet Material

D5199 Test Method for Measuring the Nominal Thickness of Geosynthetics

D5261 Test Method for Measuring Mass per Unit Area of Geotextiles

[1] This guide is under the jurisdiction of ASTM Committee D35 on Geosynthetics and is the direct responsibility of D35.10 on Geomembranes.

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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.