



Designation: D6630/D6630M – 16 (Reapproved 2022)

Standard Guide for Low-Slope Insulated Roof Membrane Assembly Performance¹

This standard is issued under the fixed designation D6630/D6630M; 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 lists test methods intended to establish a minimum level of performance for insulated roof membrane assemblies, and lists pertinent design guidelines and installation methods in a unified manner. Material tests and evaluations are included with and without roof insulation.

1.2 It is not possible to establish a precise correlation between laboratory tests on roof assemblies and natural weathering due to variations in geographical climate, design, material, and installation.

1.3 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 nonconformance with 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

D95 Test Method for Water in Petroleum Products and Bituminous Materials by Distillation

¹ This guide is under the jurisdiction of ASTM Committee D08 on Roofing and Waterproofing and is the direct responsibility of Subcommittee D08.20 on Roofing Membrane Systems.

Current edition approved July 1, 2022. Published July 2022. Originally approved in 2001. Last previous edition approved in 2016 as D6630/D6630M – 16. DOI: 10.1520/D6630_D6630M-16R22.

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.

D450/D450M Specification for Coal-Tar Pitch Used in Roofing, Dampproofing, and Waterproofing

D1079 Terminology Relating to Roofing and Waterproofing

D2523/D2523M Practice for Testing Load-Strain Properties of Roofing Membranes

D4434/D4434M Specification for Poly(Vinyl Chloride) Sheet Roofing

D4637/D4637M Specification for EPDM Sheet Used in Single-Ply Roof Membrane

D4798/D4798M Practice for Accelerated Weathering Test Conditions and Procedures for Bituminous Materials (Xenon-Arc Method)

D4799/D4799M Practice for Accelerated Weathering Test Conditions and Procedures for Bituminous Materials (Fluorescent UV, Water Spray, and Condensation Method)

D5019 Specification for Reinforced CSM (Chlorosulfonated Polyethylene) Sheet Used in Single-Ply Roof Membrane (Withdrawn 2011)³

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

D5601 Test Method for Tearing Resistance of Roofing and Waterproofing Materials and Membranes (Withdrawn 2002)³

D5602/D5602M Test Method for Static Puncture Resistance of Roofing Membrane Specimens

D5635/D5635M Test Method for Dynamic Puncture Resistance of Roofing Membrane Specimens

D5849/D5849M Test Method for Evaluating Resistance of Modified Bituminous Roofing Membrane to Cyclic Fatigue (Joint Displacement)

D6754/D6754M Specification for Ketone Ethylene Ester Based Sheet Roofing

D6878/D6878M Specification for Thermoplastic Polyolefin-Based Sheet Roofing

E96/E96M Test Methods for Gravimetric Determination of Water Vapor Transmission Rate of Materials

E631 Terminology of Building Constructions

³ The last approved version of this historical standard is referenced on www.astm.org.