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.

Designation: D1970/D1970M – 19

Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection[1]

This standard is issued under the fixed designation D1970/D1970M; 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 polymer modified bituminous sheet materials intended for use as underlayment on roof eaves, or valleys, or both, to prevent leakage of shingle, tile, or metal roofs from water back-up due to ice dams.

1.2 These underlayment sheets have a sticky adhesive layer which is exposed by removal of a protective sheet. The top surface is suitable to work on during the application of the exposed roofing.

1.3 *Table of Contents:*

	Section
Scope	1
Referenced Documents	2
Terminology	3
Workmanship, Finish, and Appearance	4
Physical Requirements	5
Sampling	6
Test Methods	7
Conditioning	7.1
Thickness	7.2
Maximum Load and Elongation at Break	7.3
Adhesion to Plywood	7.4
Thermal Stability	7.5
Flexibility at –29 °C [–20 °F]	7.6
Tear Resistance	7.7
Moisture Vapor Permeability	7.8
Capability to Seal Around Nail (Head of Water Test)	7.9
Waterproof Integrity of Side Lap Seam (Head of Water Test)	7.10
Precision and Bias	8
Inspection	9
Rejection and Rehearing	10
Packaging and Package Marking	11
Keywords	12

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 nonconformance 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, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.6 *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]

D228/D228M Test Methods for Sampling, Testing, and Analysis of Asphalt Roll Roofing, Cap Sheets, and Shingles Used in Roofing and Waterproofing

D903 Test Method for Peel or Stripping Strength of Adhesive Bonds

D1079 Terminology Relating to Roofing and Waterproofing

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

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

D4073/D4073M Test Method for Tensile-Tear Strength of Bituminous Roofing Membranes

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

D7349/D7349M Test Method for Determining the Capability of Roofing and Waterproofing Materials to Seal around Fasteners

E96/E96M Test Methods for Water Vapor Transmission of Materials

[1] This specification is under the jurisdiction of ASTM Committee D08 on Roofing and Waterproofing and is the direct responsibility of Subcommittee D08.02 on Steep Roofing Products and Assemblies.

Current edition approved Nov. 1, 2019. Published November 2019. Originally approved in 1990. Last previous edition approved in 2018 as D1970/D1970M – 18. DOI: 10.1520/D1970_D1970M-19.

[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.

Copyright © ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959. United States