



Standard Test Methods for Sampling, Testing, and Analysis of Asphalt Roll Roofing, Cap Sheets, and Shingles Used in Roofing and Waterproofing¹

This standard is issued under the fixed designation D 228; 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 reappraisal. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reappraisal.

1. Scope

1.1 These test methods include procedures for sampling, examination, physical testing, and analyses of asphalt-containing materials used in roofing and waterproofing. These materials include but are not limited to roll roofing, cap sheets, and shingles. Any of these materials are allowed to be partially or fully coated, surfaced, or laminated, or combination thereof.

1.2 The values stated in SI units are to be regarded as the standard. The values given in parentheses are for information only.

1.3 The test methods and procedures in this standard appear in the following order:

Section	Content
5	Types of Roofing
6	Sampling
7	Mass and Area Determination
8	Selection of Representative Specimens
9	Moisture
10	Pliability
11	Weight Loss and Behavior on Heating
12	Tear Strength
13	Preparation and Selection of Small Test Specimens for Analyses
14	Analysis of Glass Felt Products
15	Analysis of Roofing Products with Organic or Asbestos Felts
16	Ash of Desaturated Felt
17	Calculation
18	Adjusting Back Coating Fine Mineral Matter and Back Surfacing
19	Report
20	Precision and Bias

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

2. Referenced Documents

2.1 ASTM Standards:²

- D 95 Test Method for Water in Petroleum Products and Bituminous Materials by Distillation
- D 146 Test Methods for Sampling and Testing Bitumen-Saturated Felts and Woven Fabrics for Roofing and Waterproofing
- D 225 Specification for Asphalt Shingles (Organic Felt) Surfaced with Mineral Granules
- D 1079 Terminology Relating to Roofing, Waterproofing, and Bituminous Materials
- D 1922 Test Method for Propagation of Tear Resistance of Plastic Film and Thin Sheeting by Pendulum Method
- D 2178 Specification for Asphalt Glass Felt Used in Roofing and Waterproofing
- D 2626 Specification for Asphalt-Saturated and Coated Organic Felt Base Sheet Used in Roofing
- D 3462 Specification for Asphalt Shingles Made from Glass Felt and Surfaced with Mineral Granules
- D 3909 Specification for Asphalt Roll Roofing (Glass Felt) Surfaced with Mineral Granules
- D 4601 Specification for Asphalt-Coated Glass Fiber Base Sheet Used in Roofing
- D 4897 Specification for Asphalt-Coated Glass-Fiber Venting Base Sheet Used in Roofing
- D 6380 Specification for Asphalt Roll Roofing (Organic Felt)

3. Terminology

3.1 Definitions:

3.1.1 For definitions of terms used in these test methods, see Terminology D 1079.

3.1.2 As referenced in 13.1, “Materials of Uniform Composition” designates products that are manufactured to be the

¹ These test methods are under the jurisdiction of ASTM Committee D08 on Roofing and Waterproofing and are the direct responsibility of Subcommittee D08.02 on Prepared Roofing, Shingles, and Siding Materials.

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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.