



Designation: D5848 – 20

Standard Test Method for Mass Per Unit Area of Pile Yarn Floor Coverings¹

This standard is issued under the fixed designation D5848; 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 test method covers the measurement of mass per unit area of machine-made woven, knitted, and tufted pile yarn floor covering both before and after an adhesive-back coating application.

1.2 This test method encompasses three techniques for determination of mass per unit area as applicable:

1.2.1 Section 7, for determining total mass per unit area, applies to both coated and uncoated (unfinished) pile floor coverings.

1.2.2 Section 8, for determining component mass per unit area, applies only to uncoated (unfinished) pile yarn floor coverings.

1.2.3 Section 9, for determining pile yarn mass per unit area, applies only to back-coated, or finished, pile yarn floor coverings.

1.3 Determination of mass per unit area of pile yarn floor coverings was previously contained within Test Methods D418. For user convenience, Subcommittee D13.21 subdivided Test Methods D418 into separate standards, of which this test method is one.

1.4 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only (except where shown in 1.4.1) and are not considered standard.

1.4.1 The following sections are measured in SI units: Table 1, sections 9.8.4.2, 9.8.6.3 to 9.8.6.10, A2.1, A2.2, and A2.3.

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. Specific precautionary statements are given in 9.5.*

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

- D123 Terminology Relating to Textiles
- D418 Test Method for Testing Pile Yarn Floor Covering Construction (Withdrawn 1998)³
- D1193 Specification for Reagent Water
- D1776 Practice for Conditioning and Testing Textiles
- D1909 Standard Tables of Commercial Moisture Regains and Commercial Allowances for Textile Fibers
- D5684 Terminology Relating to Pile Floor Coverings
- E122 Practice for Calculating Sample Size to Estimate, With Specified Precision, the Average for a Characteristic of a Lot or Process
- D2904 Practice for Interlaboratory Testing of a Textile Test Method that Produces Normally Distributed Data (Withdrawn 2008)³
- D2906 Practice for Statements on Precision and Bias for Textiles (Withdrawn 2008)³

3. Terminology

3.1 For definitions of terms relating to Pile Floor Coverings, D13.21, refer to Terminology D5684.

3.1.1 The following terms are relevant to this standard: back coating, backing, backing fabric, binding sites, buried pile yarn, carpet, components, extractable matter, finished, finished pile yarn floor covering, floor covering, multilevel pile, pile, pile yarn floor covering, pile yarn mass, pitch, primary backing, secondary backing, stubble, textile floor covering, total mass, tufted fabric.

3.2 For all other terminology related to textiles, refer to Terminology D123.

¹ This test method is under the jurisdiction of ASTM Committee D13 on Textiles and is the direct responsibility of Subcommittee D13.21 on Pile Floor Coverings.

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