



Standard Test Method for Binding Sites per Unit Length or Width of Pile Yarn Floor Coverings¹

This standard is issued under the fixed designation D 5793; 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 describes the measurement of the number of binding sites per unit length or width of machine-made, woven, knitted, and tufted pile yarn floor covering both before and after adhesive backing application.

1.2 The values stated in SI units are to be regarded as the standard for all measurements. The inch-pound values provided are for information purposes only.

1.3 Determination of the number of binding sites per unit length or width of pile floor covering previously was contained within Test Methods D 418.

NOTE 1—For user convenience, Subcommittee D13.21 has subdivided Test Method D 418 into separate standards, of which this test method is one.

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 123 Terminology Relating to Textiles

D 418 Test Methods of Testing Pile Yarn Floor Covering Construction

D 1776 Practice for Conditioning and Testing Textiles

D 1909 Table of Commercial Moisture Regains for Textile Fibers

D 2904 Practice for Interlaboratory Testing of a Textile Test Method that Produces Normally Distributed Data

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 Yarn 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.

D 2906 Practice for Statements of Precision and Bias of Textiles

D 5684 Terminology Relating to Pile Floor Coverings

E 122 Practice for Calculating Sample Size to Estimate With a Specified Tolerable Error, the Average Characteristic of a Lot Process

3. Terminology

3.1 For definitions of pile yarn floor covering related terms used in this test method, refer to Terminology D 5684.

3.2 For definitions of other textile terms used in this test method, refer to Terminology D 123.

4. Summary of Test Method

4.1 The length of pile floor covering containing 40 binding sites is measured in either the lengthwise or widthwise direction as required and the number of binding sites per unit length is calculated.

5. Significance and Use

5.1 This test method is useful in quality and cost control during manufacture. Both appearance and performance of pile yarn floor coverings can be affected by the number of binding sites per length and width.

5.2 This test method is considered satisfactory for acceptance testing of commercial shipments because current estimates of between-laboratory precision are acceptable and the method is used extensively in the trade for acceptance testing.

5.2.1 If there are differences of practical significance between reported test results for two laboratories (or more), comparative tests should be performed to determine if there is statistical bias between them using competent statistical assistance. As a minimum, use test samples for such comparative tests that are as homogeneous as possible, drawn from the same lot of material as the samples that resulted in the disparate results during initial testing, and that are randomly assigned in equal numbers to each laboratory for testing. The test results from the laboratories should be compared using a statistical test for unpaired data at a probability level chosen prior to the testing series. If a bias is found either its cause must be found