



Designation: D8007 – 24

Standard Test Method for Wale and Course Count of Weft Knitted Fabrics¹

This standard is issued under the fixed designation D8007; 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 wale and course counts of weft knitted fabrics. Weft knit fabrics are made on circular or flat-bed knitting machines and include single- as well as double-knit fabric categories. Typical examples of single-knits include jersey and single-pique fabrics; typical double-knits are rib, interlock, and swiss pique fabrics.

1.2 This test method is not applicable to warp knit fabrics such as tricot or raschel.

1.3 Wale and course counts are to be reported separately.

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

[D123 Terminology Relating to Textiles](#)

[D1776/D1776M Practice for Conditioning and Testing Textiles](#)

[D3887 Specification for Tolerance for Knitted Fabrics \(Withdrawn 2017\)](#)³

[D4850 Terminology Relating to Fabrics and Fabric Test Methods](#)

[E177 Practice for Use of the Terms Precision and Bias in ASTM Test Methods](#)

[E691 Practice for Conducting an Interlaboratory Study to Determine the Precision of a Test Method](#)

3. Terminology

3.1 For terminology related to fabrics, see Terminology [D4850](#).

3.2 The following terms are relevant to this test method: count-in knitted fabrics, courses-in knitted fabrics, knitted fabric, and wales-in knitted fabrics.

3.3 For definitions of other textile terms used in this test method, refer to Terminology [D123](#).

4. Summary of Test Method

4.1 The number of wales and the number of courses per unit distance of a knitted fabric are counted using a suitable ruler, magnifying device, or digital camera system. For an illustration of a simple knitted fabric wale and course orientation, see [Fig. 1](#).

5. Significance and Use

5.1 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 a statistical bias between them using competent statistical assistance. As a minimum, ensure that the test samples to be used are as homogeneous as possible and drawn from the material from which the disparate test results were obtained. The test specimens are to be randomly assigned in equal numbers to each laboratory for testing. The test results from the participating laboratories should be compared using a statistical test for unpaired data to a probability level chosen before initiation of the testing. If a bias is found, either its cause shall be found and corrected, or future test results for that material shall be adjusted in consideration of the known bias.

¹ This test method is under the jurisdiction of ASTM Committee [D13](#) on Textiles and is the direct responsibility of Subcommittee [D13.60](#) on Fabric Physical Test Methods B.

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at www.astm.org/contact. 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.