



Standard Test Method for Width of Textile Fabric¹

This standard is issued under the fixed designation D 3774; 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 the width of fabrics, pile or napped surface width, or both. The method is applicable to full rolls, bolts of fabric, and short specimens removed from a roll or bolt. Unless otherwise specified, measurements shall include the selvages when present.

1.2 The method offers two options:

1.2.1 *Option A*—Full Roll or Bolt.

1.2.2 *Option B*—Short Specimen Removed from Full Roll or Bolt.

1.3 The values stated in either SI units or U.S. customary units are to be regarded as standard. The U.S. customary units may be approximate.

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

2. Referenced Documents

2.1 *ASTM Standards:*

D 123 Terminology Relating to Textiles³

D 1776 Practice for Conditioning Textiles for Testing³

2.2 *Other Standard:*

ANSI/ASQC Z1.4—Inspection by Attributes⁴

3. Terminology

3.1 *Definitions:*

3.1.1 *width, n—of a fabric*, the distance from the outer edge of one selvage to the outer edge of the other selvage, measured perpendicular to the selvages while the fabric is held under zero tension and is free of folds and wrinkles.

3.1.2 *width, n—of a raised-surface fabric*, the dimension included within the outer limits of the nap or pile, but excluding the selvages, or as otherwise agreed upon by the

purchaser and supplier.

3.1.3 *width, n—of a fabric woven on a shuttleless loom*, the distance from the outer warp on one side to the outer warp on the other side, measured perpendicular to the warp yarns while the fabric is held under zero tension and is free of folds and wrinkles.

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

4. Summary of Test Method

4.1 The width of the fabric is measured directly by using a metal rule.

4.2 Option A offers two procedures for the measurement of fabric width, or pile width or napped surface width, or both, in full rolls or bolts. The first procedure is essentially a tension-free method, the second procedure provides for measurements made during finishing or inspection operations that may impart tension to the fabric.

4.3 Option B covers the measurement of fabric width, pile surface width or napped surface width, or both, when only a short length of fabric is available for testing. This procedure is applicable when a small swatch of fabric is sent to the laboratory to be used as the test specimen.

5. Significance and Use

5.1 Option A procedures of Test Method D 3774 for width are considered satisfactory for acceptance testing of commercial shipments because they are used extensively in the trade.

5.1.1 In case of a dispute arising from differences in reported test values when using Test Method D 3774 for acceptance testing of commercial shipments, the purchaser and the supplier should conduct comparative tests to determine if there is a statistical bias between their laboratories. Competent statistical assistance is recommended for the investigation of bias. As a minimum, the two parties should take a group of test specimens which are as homogeneous as possible and which are from a lot of material of the type in question. The test specimens should then be randomly assigned in equal numbers to each laboratory for testing. The average results from the two laboratories should be compared using Student's *t*-test for unpaired data and an acceptable probability level chosen by the two parties before testing is begun. If a bias is found, either its cause must be found and corrected or the purchaser and the

¹ These test methods are under the jurisdiction of ASTM Committee D-13 on Textiles and are the direct responsibility of Subcommittee D13.60 on Fabric Test Methods, Specific.

Current edition approved April 10, 1996. Published June 1996. Replaces Sections 13 to 17 of Methods D 1910 – 89, Test for Construction Characteristics of Woven Fabrics.

² *Annual Book of ASTM Standards*, Vol 07.02.

³ *Annual Book of ASTM Standards*, Vol 07.01.

⁴ Available from American National Standards Institute, 11 W. 42nd St., 13th Floor, New York, NY 10036