



Designation: **D3785 – 14 D3785 – 20**

## Standard Performance Specification for Woven Necktie and Scarf Fabrics<sup>1</sup>

This standard is issued under the fixed designation D3785; 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 ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval.

### 1. Scope

1.1 This performance specification covers woven necktie and scarf fabrics composed of any textile fiber or mixture of textile fibers.

1.2 This performance specification is not applicable to woven fabrics used for interlinings.

1.3 These requirements apply to the length and width directions for those properties where fabric direction is pertinent.

1.3.1 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 and are not considered standard.

1.4 The following precautionary caveat pertains only to the test methods portion, Section 7, of this specification. *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.*

1.5 *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:<sup>2</sup>

[D123 Terminology Relating to Textiles](#)

[D434 Test Method for Resistance to Slippage of Yarns in Woven Fabrics Using a Standard Seam \(Withdrawn 2003\)](#)<sup>3</sup>

[D1336 Test Method for Distortion of Yarn in Woven Fabrics](#)

[D1424 Test Method for Tearing Strength of Fabrics by Falling-Pendulum \(Elmendorf-Type\) Apparatus](#)

[D1682 Test Method for Breaking Load and Elongation of Textile Fabric \(Withdrawn 1992\)](#)<sup>3</sup>

[D2262 Test Method for Tearing Strength of Woven Fabrics by the Tongue \(Single Rip\) Method \(Constant-Rate-of-Traversal Tensile Testing Machine\) \(Withdrawn 1995\)](#)<sup>3</sup>

~~[D2724 Test Method for Bond Strength of Bonded, Fused, and Laminated Apparel Fabrics](#)~~

[D2905 Practice for Statements on Number of Specimens for Textiles \(Withdrawn 2008\)](#)<sup>3</sup>

[D7022 Terminology Relating to Apparel](#)<sup>3</sup>

<sup>1</sup> This performance specification is under the jurisdiction of ASTM Committee D13 on Textiles and is the direct responsibility of Subcommittee D13.61 on Apparel. Current edition approved Feb. 1, 2014; July 1, 2020. Published March 2014; August 2020. Originally approved in 1979. Last previous edition approved in 2013 as D3785 – 13; D3785 – 14,  $\epsilon$ . DOI: 10.1520/D3785-14.10.1520/D3785-20.

<sup>2</sup> 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.

<sup>3</sup> The last approved version of this historical standard is referenced on www.astm.org.

## 2.2 AATCC Methods:<sup>4</sup>

[8TM8](#) Colorfastness to Crocking: Crockmeter Method  
[15TM15](#) Colorfastness to Perspiration  
~~16.3~~[TM16.3](#) Colorfastness to Light: Xenon-Arc  
[23TM23](#) Colorfastness to Burnt Gas Fumes  
~~64~~[TM61](#) Colorfastness to Laundering: Accelerated  
~~96~~[TM96](#) Dimensional Changes in Commercial Laundering of Woven and Knitted Fabrics Except Wool  
~~116~~[TM116](#) Colorfastness to Crocking: Rotary Vertical Crockmeter Method  
~~124~~[TM124](#) Smoothness Appearance of Fabrics After Repeated Home Laundering  
~~132~~[TM132](#) Colorfastness to Drycleaning  
~~135~~[TM135](#) Dimensional Changes of Fabrics After Home Laundering  
[TM158](#) Dimensional Changes on Drycleaning in Perchloroethylene: Machine Method  
~~172~~[TM172](#) Colorfastness to Powdered Non-Chlorine Bleach in Home Laundering  
~~188~~[TM188](#) Colorfastness to Sodium Hypochlorite Bleach in Home Laundering  
~~Evaluation Procedure 1EP1~~ Gray Scale for Color Change  
~~Evaluation Procedure 2EP2~~ Gray Scale for Staining  
~~Evaluation Procedure 8EP8~~ AATCC 9-Step Chromatic Transference Scale

NOTE 1—Reference to test methods in this specification give only the permanent part of the designation of ASTM, AATCC, or other test methods. The current editions of each test method cited shall prevail.

## 2.3 Federal Standard<sup>5</sup>

[16 CFR 1610, Chapter II Consumer Product Safety Commission Subchapter D-Flammable Fabrics Act Regulations](#)

## 2.4 ASTM Adjuncts:

NOTE 1—Reference to test methods in this specification give only the permanent part of the designation of ASTM, AATCC, or other test methods. The current editions of each test method cited shall prevail.

## 3. Terminology

3.1 For all terminology related to Apparel see Terminology [D7022](#).

3.1.1 The following terms are relevant to this standard: scarf.

3.2 For terms relating to chemical or colorfastness testing, refer to specific AATCC methods. For definitions of all other textile terms see Terminology [D123](#).

## 4. Specification Requirements

4.1 The properties of fabrics for woven neckties and scarfs shall conform to the specification requirements in [Table 1](#).

## 5. Significance and Use

5.1 Upon mutual agreement between the purchaser and the seller, woven fabrics intended for this end use should meet all of the requirements listed in [Table 1](#) of this specification.

5.2 It is recognized that for purposes of fashion or aesthetics the ultimate consumer of articles made from these fabrics may find acceptable fabrics that do not conform to all of the requirements in [Table 1](#). Therefore, one or more of the requirements listed in [Table 1](#) may be modified by mutual agreement between the purchaser and the seller.

5.2.1 In such cases, any references to the specification shall specify that: This fabric meets ASTM Specification D3785 except for the following characteristic(s).

5.3 Where no prepurchase agreement has been reached between the purchaser and the seller, and in case of controversy, the

<sup>4</sup> Available from American Association of Textile Chemists and Colorists (AATCC), P.O. Box 12215, Research Triangle Park, NC 27709, <http://www.aatcc.org>.

<sup>5</sup> Available from Superintendent of Documents, Government Printing Office, Washington, DC 20402.

**TABLE 1 Specification Requirements**

NOTE 1—Grade in colorfastness and SA requirements is based on a numerical scale of 5 for negligible or no color change, color transfer, or fabric wrinkle or color transfer to 1 for severe color change, color transfer, or fabric wrinkle. A grade for fabric smoothness requirements is based on SA-5 for a very smooth, pressed, finished appearance to a grade of SA-1 crumpled, creased and severely wrinkled appearance.

Characteristic	Requirements	Section
Breaking strength (load) (CRT)	20 lbf (89 N), min	7.1
Yarn slippage	¼-in. (6.3-mm) separation at 15 lbf(67 N), min	7.2
Tongue tear strength	1.5 lbf (6.7 N), min	7.3
Yarn distortion:		7.4
Satis	0.10 in. (2.5 mm), min	
All other	0.05 in. (1 mm), min	
Dimensional change:		
After five launderings	3 % max	7.5.1
After three dry cleanings	2 % max	7.5.2
Colorfastness:		
Burnt gas fumes—2 cycles:		7.6.1
Shade change, original fabric	Grade 4 <sup>A</sup> min	
Shade change after one laundering or one dry cleaning	Grade 4 <sup>A</sup> min	
Sodium Hypochlorite Bleach	Grade 4 <sup>A</sup> min	7.6.7
Powdered Non-Chlorine Bleach	Grade 4 <sup>A</sup> min	7.6.8
Laundering: <sup>E</sup>		7.6.2
Shade change	Grade 4 <sup>A</sup> min	
Staining	Grade 3 <sup>B</sup> min	
Dry cleaning:		7.6.3
Shade change	Grade 4 <sup>A</sup> min	
Staining	Grade 3 <sup>B</sup> min	
Crocking: <sup>E</sup>		7.6.4
Dry	Grade 4 <sup>C</sup> min	
Wet	Grade 3 <sup>C</sup> min	
Perspiration: <sup>E</sup>		7.6.5
Shade change	Grade 4 <sup>A</sup> min	
Staining	Grade 3 <sup>B</sup> min	
Light (20 AATCC Fading Units) (xenon-arc)	Grade 4 <sup>A</sup> min	7.6.6
Light (20 AFUs) (xenon-arc)	Grade 4 <sup>A</sup> min	7.6.6
Fabric appearance (see 7.7.1.1)	SA 3.5 <sup>D</sup> min	7.7
Flammability	pass	7.8
Flammability	Class 1	7.8

<sup>A</sup> AATCC Gray Scale for Color Change.

<sup>B</sup> AATCC Gray Scale for Staining.

<sup>C</sup> AATCC 9-Step Chromatic Transference Scale

<sup>D</sup> For durable-press fabrics only.

<sup>E</sup> See Note 7.

requirements listed in Table 1 are intended to be used as a guide only. As noted in 5.2, ultimate consumer demands dictate varying performance parameters for any particular style of fabric.

5.4 The significance and use of particular properties and test methods are discussed in the appropriate sections of the specified test methods.

## 6. Sampling

6.1 Tests shall be performed on the fabric as it will reach the consumer.

6.2 Unless otherwise agreed upon, as when specified in an applicable material specification, take the number of specimens directed in each of the applicable test methods.

6.2.1 If there has been no prior agreement and the test method does not specify the number of specimens, use the procedure in Practice D2905 to determine the number of specimens, such that the user may expect at the 95 % probability level that the test result is no more than 5 % of the average above or below the lot average (that is, the average that would be obtained by applying