



Designation: D6663 – 08 (Reapproved 2019)

# Standard Specification for Woven and Knitted Comforter and Accessory Products for Institutional and Household Use<sup>1</sup>

This standard is issued under the fixed designation D6663; 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 specification covers the evaluation of specific performance characteristics of importance in woven and knit comforter and accessory products, except for pillows and window treatments, for use in institutional and household environments.

1.2 The following safety hazards caveat pertains only to the test methods described in 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.*

1.3 *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
- D1230 Test Method for Flammability of Apparel Textiles
- D1776 Practice for Conditioning and Testing Textiles
- D2905 Practice for Statements on Number of Specimens for Textiles (Withdrawn 2008)<sup>3</sup>
- D3136 Terminology Relating to Care Labeling for Apparel, Textile, Home Furnishing, and Leather Products
- D3512 Test Method for Pilling Resistance and Other Related

<sup>1</sup> This specification is under the jurisdiction of ASTM Committee D13 on Textiles and is the direct responsibility of Subcommittee D13.63 on Home Furnishings.

Current edition approved Jan. 15, 2019. Published February 2019. Originally approved in 2001. Last previous edition approved in 2013 as D6663–08 (2013). DOI: 10.1520/D6663-08R19.

<sup>2</sup> For referenced ASTM standards, visit the ASTM website, [www.astm.org](http://www.astm.org), or contact ASTM Customer Service at [service@astm.org](mailto: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](http://www.astm.org).

Surface Changes of Textile Fabrics: Random Tumble Pilling Tester

D3786 Test Method for Bursting Strength of Textile Fabrics—Diaphragm Bursting Strength Tester Method

D3787 Test Method for Bursting Strength of Textiles—Constant-Rate-of-Traverse (CRT) Ball Burst Test

D3882 Test Method for Bow and Skew in Woven and Knitted Fabrics

D5034 Test Method for Breaking Strength and Elongation of Textile Fabrics (Grab Test)

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

TM8 Colorfastness to Crocking: AATCC Crockmeter Method

TM15 Colorfastness to Perspiration

TM16.2 Colorfastness to Light: Carbon-Arc

TM16.3 Colorfastness to Light: Xenon-Arc

TM61 Colorfastness to Laundering: Accelerated

TM88B Seam Smoothness in Fabrics After Home Launderings

TM96 Dimensional Changes in Commercial Laundering of Woven and Knitted Fabrics Except Wool

TM116 Colorfastness to Crocking: Rotary Vertical Crockmeter Method

TM124 Smoothness Appearance of Fabrics After Home Laundering

TM132 Colorfastness to Drycleaning

TM135 Dimensional Changes in Automatic Home Laundering of Woven and Knit Fabrics

TM143 Appearance of Apparel and Other Textile End Products After Home Launderings

TM158 Dimensional Changes on Drycleaning in Perchloroethylene: Machine Method

EP1 Gray Scale for Color Change

EP2 Gray Scale for Staining

EP8 9-Step Chromatic Transference Scale

M11 Glossary for AATCC Standard Terminology

NOTE 1—Reference to documents in this specification give only the pertinent part of the designation of ASTM, AATCC, or other test methods

<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>.

and standards. The current edition of each test method shall prevail.

2.3 *Other Documents:*

**3. Terminology**

3.1 *Definitions:*

3.1.1 For definitions of other textile terms used in this performance specification, refer to Terminology **D123** and the AATCC Glossary. For definitions of care labeling terms, refer to Terminology **D3136**.

3.1.2 *bedskirt, n*—a decorative product which is positioned below the mattress and drapes to the floor; a dustruffle.

3.1.3 *comforter, n*—a bed covering assembly, consisting of an insulating filler secure between two layers of fabric, designed to reduce heat loss.

3.1.4 *comforter accessories, n*—products which augment or enhance the decorative feature of the comforter.

3.1.4.1 *Discussion*—Accessories can include pillowshams, dustruffles, bedskirts, duvets, etc. but does not include pillows or window treatments.

3.1.5 *duvet, n*—a decorative outercover in which a comforter is inserted.

3.1.6 *fill leakage, n*—in comforters, either partial or total penetration of batting material through the outer or face fabric.

3.1.7 *pillow sham, n*—a decorative product which covers a bed pillow.

3.1.8 For definitions of other textile terms used in this specification, refer to Terminology **D123** and the AATCC Glossary. For definitions of care labeling terms, refer to Terminology **D3136**.

**4. Significance and Use**

4.1 Upon mutual agreement between the purchaser and the supplier, comforter and accessory products intended for this end use should meet all of the requirements listed in **Table 1** of this specification.

4.2 It is recognized that, for purposes of fashion or aesthetics, the ultimate consumer of articles made from these fabrics may find acceptable products that do not conform to all of the requirements in **Table 1**. Therefore, one or more of the requirements in **Table 1** may be modified by mutual agreement between the purchaser and the supplier.

**TABLE 1 Specification Requirements**

Characteristics	Requirements		Section
	Woven Comforter and Accessories	Knitted Comforter and Accessories	
Breaking Force (CRT) Type Machine—Each Direction <sup>A</sup>	133 N (30 lbf) Min	NA	7.1.1
Bursting Strength <sup>A</sup>	NA	155 kPa (35 psi) Min	7.1.2
Pilling	4.0 Min	4.0 Min	7.1.3
Dimensional Change to:			7.1.4
Laundering—Each Direction	±3.0 % Max	±5.0 % Max	
Dry Cleaning—Each Direction	±3.0 % Max	±5.0 % Max	
Refurbishing Appearance (Fabric)			7.2.1
Polyester/Cotton	SA 3.0 Min <sup>B</sup>	SA 3.0 Min <sup>B</sup>	
100 % Cotton	SA 2.2 Min <sup>B</sup>	SA 2.2 Min <sup>B</sup>	
Bow and Skewness			7.1.7
Fabric Weave	3.0 % Max	3.0 % Max	
Pattern Print	Acceptable	Acceptable	
Colorfastness to:			
Laundering:			7.1.7.1
Shade Change	Class 4 Min <sup>C</sup>	Class 4 Min <sup>C</sup>	
Staining	Class 3 Min <sup>D</sup>	Class 3 Min <sup>D</sup>	
Dry Cleaning - (Shade Change)	Class 4 Min <sup>C</sup>	Class 4 Min <sup>C</sup>	7.1.7.2
Crocking			7.1.7.3
Dry	Class 4 Min <sup>D,E</sup>	Class 4 Min <sup>D,E</sup>	
Wet	Class 3 Min <sup>D,E</sup>	Class 3 Min <sup>D,E</sup>	
Light (20 AFU) Xenon-Arc <sup>A</sup>	Step 4 Min <sup>C</sup>	Step 4 Min <sup>C</sup>	7.1.7.4
Perspiration			7.1.7.5
Shade Change	Class 4 Min <sup>C</sup>	Class 4 Min <sup>C</sup>	
Staining	Class 3 Min <sup>D</sup>	Class 3 Min <sup>D</sup>	
Flammability (Product)	Class 1	Class 1	7.1.7.6
Refurbishing	Acceptable	Acceptable	7.2.1
Appearance (Product)			
Fill Leakage (Product)	Acceptable	Acceptable	7.2.2

<sup>A</sup> There is more than one standard method that can be used to measure breaking force, bursting force, tear resistance, and lightfastness. These methods cannot be used interchangeably because there may be no overall correlation between them. See **Notes 2-6**.

<sup>B</sup> Class in colorfastness and SA rating is based on a numerical scale of 5.0 for negligible color change, color transfer, or wrinkling to 1.0 for vary severe color change, color transfer or wrinkling. The numerical rating in **Table 1** or higher is acceptable.

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

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

<sup>E</sup> AATCC 9-Step Chromatic Transference Scale.