



Designation: D6554/D6554M – 09

## Standard Specification for 100 % Cotton Denim Fabrics<sup>1</sup>

This standard is issued under the fixed designation D6554/D6554M; 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 performance requirements for 100 % cotton woven denim fabrics, prior to the manufacture of jeans, casual apparel, work clothing, and outerwear.

1.2 This specification is not applicable to woven denim fabrics used as interlinings or protective clothing.

1.3 This specification covers the performance of denim fabric on rolls ready for garment manufacturing.

1.4 The values stated in either SI units or inch-pound units are to be regarded separately as standard. The values stated in each system may not be exact equivalents; therefore, each system shall be used independently of the other. Combining values from the two systems may result in non-conformance with the 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 and health practices and to determine the applicability of regulatory limitations prior to use.*

### 2. Referenced Documents

#### 2.1 ASTM Standards:

D123 Terminology Relating to Textiles

D434 Test Method for Resistance to Slippage of Yarns in Woven Fabrics Using a Standard Seam (Withdrawn 2003)<sup>2</sup>

D1230 Test Method for Flammability of Apparel Textiles (Withdrawn 2010)<sup>2</sup>

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

D3107 Test Methods for Stretch Properties of Fabrics Woven from Stretch Yarns

D3774 Test Method for Width of Textile Fabric

D3776 Test Methods for Mass Per Unit Area (Weight) of Fabric

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)

D7022 Terminology Relating to Apparel

2.2 AATCC Standards<sup>3</sup>:

Test Method 8 Colorfastness to Crocking: AATCC Crockmeter Method

Test Method 16 (Option E) Colorfastness to Light: Water-Cooled Xenon-Arc Lamp, Continuous Light

Test Method 61 Colorfastness to Laundering, Home and Commercial: Accelerated

Test Method 109 Colorfastness to Ozone in the Atmosphere Under Low Humidities

Test Method 116 Colorfastness to Crocking: Rotary Vertical Crockmeter Method

Test Method 135 Dimensional Changes in Automatic Home Laundering of Woven or Knit Fabrics

Evaluation Procedure 1 Gray Scale for Color Change

Evaluation Procedure 2 Gray Scale for Staining

Evaluation Procedure 8 AATCC—9 Step Chromatic Transference Scale

2.3 Federal Standard:

16 CFR 16.10, Chapter II, Subchapter D—Flammable Fabrics Act Regulations<sup>4</sup>

2.4 Other Document:

Glossary of AATCC Standard Terminology<sup>3</sup>

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

### 3. Terminology

3.1 For all terminology relating to D13.61, Apparel, refer to Terminology D7022.

3.1.1 The following terms are relevant to this standard: denim, indigo dyed, jeans, heavy-weight, light-weight, medium-weight.

3.2 For all other terms related to textiles, see Terminology D123 and the Glossary of AATCC Standard Terminology.

<sup>1</sup> This specification is under the jurisdiction of ASTM Committee D13 on Textiles and is direct responsibility of Subcommittee D13.61 on Apparel.

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<sup>2</sup> The last approved version of this historical standard is referenced on [www.astm.org](http://www.astm.org).

<sup>3</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>4</sup> Available from US Government Printing Office, Washington, DC 20402.