



Designation: ~~D4721-89~~ (Reapproved 2000) Designation: D4721 - 12

Standard Practice for Evaluation of the Performance of Machine Washable and Drycleanable Bedcoverings and Accessories¹

This standard is issued under the fixed designation D4721; 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 practice may be used to evaluate specific characteristics of importance in the performance of bedcoverings and accessories (machine washable or drycleanable, woven and knit) including bedspreads, comforters, quilts, pillowshams, dust ruffles, and blankets, hereinafter referred to collectively as bedcoverings.

1.2 This practice is not to be used to evaluate bedcoverings that are refurbished by handwashing.

1.3 This practice shall not be construed to be a standard of performance for bedcoverings.

1.4 This practice shall not be used to evaluate sheets.

1.5 This practice may be used by mutual agreement between purchaser and supplier to set purchasing specifications.

1.6 *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. Referenced Documents

2.1 ASTM Standards:²

D123 Terminology Relating to Textiles

D1683 Test Method for Failure in Sewn Seams of Woven Apparel Fabrics

D1776 Practice for Conditioning and Testing Textiles

D3136 Terminology Relating to Care Labeling for Apparel, Textile, Home Furnishing, and Leather Products

D3773 Test Methods for Length of Woven Fabric

D3940 Test Method for Bursting Strength (Load) and Elongation of Sewn Seams of Knit or Woven Stretch Textile Fabrics

D3993 Performance Specification for Woven, Thermal, Flocked, Nonwoven, and Knitted Household Blanket Fabrics

~~D4037 Performance Specification for Woven, Knitted, or Flocked Bedspread Fabrics~~ Performance Specification for Woven, Knitted, or Flocked Bedspread Fabrics

~~D7023 Terminology Relating to Home Furnishings~~

2.2 AATCC Methods:³

AATCC Evaluation Procedure 1

~~AATCC 88B Appearance of Seams in Durable Press Items After Repeated Home Laundering~~ Smoothness of Seams in Fabrics after Repeated Home Laundering

AATCC 96 Dimensional Changes in Commercial Laundering of Woven and Knitted Fabrics Except Wool

~~AATCC 135 Dimensional Changes in Automatic Home Laundering of Woven and Knit Fabrics~~ Dimensional Changes of Fabrics after Home Laundering

AATCC 143 Appearance of Apparel and Other Textile End Products After Repeated Home Launderings

AATCC 158 Dimensional Changes on Drycleaning in Perchloroethylene: Machine Method

3. Terminology

3.1 Definitions:

¹ This practice is under the jurisdiction of ASTM Committee ~~D-13-D13~~ on Textiles and is the direct responsibility of Subcommittee D13.63 on Home Furnishings. Current edition approved June 30, 1989. Published August 1989. Originally published as D4721-87. Last previous edition D4721-87. DOI: 10.1520/D4721-89R00. Current edition approved Feb. 1, 2012. Published March 2012. Originally approved in 1987. Last previous edition approved in 2000 as D4721-89(2000) which was withdrawn October 2009 and reinstated in February 2012. DOI: 10.1520/D4721-12.

² 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, Vol 07.01, volume information, refer to the standard's Document Summary page on the ASTM website.

³ Annual Book of ASTM Standards, Vol 07.02.

³ Available from American Association of Textile Chemists and Colorists, P.O. Box 12215, Research Triangle Park, NC 27709.

3.1.1 *bedcovering*, *n*—a textile product used on a bed over the sheets for warmth or decoration.

3.1.2 *bedspread*, *n*—a type of bedcovering that is placed over the blankets and sheets for appearance and warmth.

3.1.3 *blanket*, *n*—*for bedding*, an unquilted fabric covering designed primarily to provide thermal insulation.

3.1.3.1 *Discussion*—Blankets may be made by any textile process from various types of fibers and may or may not have a raised fiber surface.

3.1.4 *comforter*, *n*—a bedcovering assembly, consisting of an insulating filler secured between two layers of fabric, used primarily to reduce heat loss.

3.1.5 *drop*, *n*—that part of a bedcovering that hangs perpendicular to the floor.

3.1.5.1 *Discussion*—For bedspreads, drop is measured from the top of the mattress to the bottom of the spread. For dust ruffles, drop is measured from the top of the box spring to the bottom of the ruffle.

3.1.6 *dust ruffle*, *n*—a fabric which (1) lies flat over the box spring under the mattress on a bed and (2) has a pleated, tucked, or gathered drop to the floor.

3.1.7 *founce*, *n*—a ruffled drop on a bedcovering.

3.1.8 *quilt*, *n*—a bedcovering assembly used primarily for warmth, consisting of an insulating filler secured between two layers of fabric, but generally lighter in weight and thinner than a comforter.

3.1.9 *sham*, *n*—a fabric covering for a bed pillow, usually of decorative fabric that matches the bedcovering.

3.1.10 For definitions of other textile terms used in this practice, refer to Terminology

3.1 For all terminology related to Home Furnishings see Terminology D7023.

3.2 The following terms are relevant to this standard: bedcovering, bedspread, blanket, comforter, drop, dust ruffle, founce, quilt, sham.

3.3 For definitions of all other textile terms see Terminologies D123 and Terminology and D3136.

4. Significance and Use

4.1 This practice may be used to evaluate pertinent performance characteristics of machine washable or drycleanable bedcoverings.

4.2 The characteristics to be evaluated and the acceptance criteria assigned to these areas shall be set by mutual agreement between purchaser and supplier.

4.3 The significance and use of specific properties are discussed in the appropriate test methods and performance standards.

5. Sampling, Selection, and Number of Specimens

5.1 *Division into Lots*—For acceptance testing, divide the product into lots as agreed upon by the purchaser and the supplier.

5.2 *Lot Sample*—As a lot sample for acceptance testing, take at random the number of shipping cartons directed in an applicable material specification or other agreement between the purchaser and the supplier. Consider shipping cartons of bedcoverings or accessories to be the primary sampling units.

NOTE 1—A realistic specification or other agreement between the purchaser and the supplier requires taking into account the variability between shipping cartons, between items within a carton, and between specimens within an item so as to provide a sampling plan which has a meaningful producer's risk, consumer's risk, acceptable quality level, and limiting quality level.

5.3 *Laboratory Sample*—As a laboratory sample for acceptance testing, take two items from each shipping carton in the lot sample.

5.4 *Test Specimens*—Take test specimens from each item in the laboratory sample as directed in individual test methods. Perform each test on the product as it will reach the customer.

CHARACTERISTICS AND TEST METHODS

6. Characteristics

6.1 The areas to be evaluated and the acceptance criteria assigned to these areas shall be set by mutual agreement between purchaser and supplier.

7. Fabric Performance Characteristics

7.1 The fabric in the item shall be evaluated as directed in Performance Specification D3993 for blanket fabrics, and Performance Specification D4037 for bedspread fabrics.

8. Bedcoverings Performance Characteristics Prior to Refurbishing

8.1 Evaluate joining seam performance (strength) as directed in Test Method D1683 for woven fabrics or Test Method D3940 for knit fabrics. Evaluate appearance of all seams as directed in AATCC Method 88B/AATCC 88B.

8.2 Mark and record measurements as directed in Section 10.11 of this practice to establish size consistency, side to side, and part to part.

8.3 Examine bedcoverings for shade difference from part to part, as directed in AATCC Evaluation Procedure 1.