



Designation: ~~D5432-93 (Reapproved 2000)~~^{ε1} Designation: D5432 - 12

Standard Performance Specification for Blanket Products for Institutional and Household Use¹

This standard is issued under the fixed designation D5432; 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.

~~^{ε1}Note—Editorial corrections were made throughout in February 2001.~~

1. Scope

1.1 This specification covers the evaluation of specific performance characteristics of importance in thermal woven, conventional woven, flocked, nonwoven, and knitted blanket products for use in institutional and household environments.

1.2 This specification may be used by mutual agreement between the purchaser and the supplier to establish purchasing specification requirements.

1.3 The requirements in Table 1 apply to the length and width directions for those properties where fabric direction is pertinent.

1.4 This specification does not include requirements for electric blankets. Electric blankets are specified under UL 964 requirements dictated by the Underwriter's Laboratories.

1.5 *This standard does not purport to address all of the safety problems, 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~~²

D629 ~~Test Methods for Quantitative Analysis of Textiles~~²

D1518 ~~Test Method for Thermal Resistance of Batting Systems Using a Hot Plate~~² Terminology Relating to Textiles

D2724 Test Methods for Bonded, Fused, and Laminated Apparel Fabrics

D2905 Practice for Statements on Number of Specimens for Textiles

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

D3786 ~~Test Method for Bursting Strength of Textile Fabrics~~ Diaphragm Bursting Strength Tester Method³

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~~⁴

D3993 ~~Performance Specification for Woven, Thermal, Flocked, Nonwoven, and Knitted Household Blanket Fabrics~~⁴

D3938 ~~Guide for Determining or Confirming Care Instructions for Apparel and Other Textile Products~~⁴ Diaphragm Bursting Strength Tester Method

D4151 Test Method for Flammability of Blankets

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

D6797 Test Method for Bursting Strength of Fabrics Constant-Rate-of-Extension (CRE) Ball Burst Test

D7023 Terminology Relating to Home Furnishings

2.2 AATCC Methods:³

8 Colorfastness to Crocking

16A Colorfastness to Light: Carbon Arc Lamp Continuous Light Colorfastness to Crocking: Crockmeter Method

16E Colorfastness to Light: Water Cooled Xenon-Arc Lamp, Continuous Light

23 Colorfastness to Burnt Gas Fumes 16 Option 3 Colorfastness to Light: Xenon-Arc Lamp, Continuous Light

¹ 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 Aug. 15, 1993. Published October 1993. DOI: 10.1520/D5432-93R00E01.

Current edition approved Feb. 1, 2012. Published March 2012. Originally approved in 1993. Last previous edition approved in 2000 as D5432-93 (2000)^{ε1} which was withdrawn October 2009 and reinstated in February 2012. DOI: 10.1520/D5432-12.

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 ~~Discontinued: see 1997 Annual Book of ASTM Standards, Vol 07.02.~~

⁴ Available from American Association of Textile Chemists and Colorists (AATCC), P.O. Box 12215, Research Triangle Park, NC 27709.

TABLE 1 Specification Requirements

Characteristic	Requirements		
	Knits/Flock	Woven/Nonwoven	Section
Breaking Force (CRT method) ^A each direction	...	89 N (20 lbf) min	7.1.1
Bursting force, (ball burst) ^A	345 kpa (50 psi) min		7.1.2
Dimensional change: After 5 launderings each direction			7.2.1
Wool (50 % or more)	6.0 max	6.0 max	
Cotton	5.0 max	5.0 max	
All others	3.5 max	3.5 max	
After 3 drycleanings each direction			7.2.3
All fabrics	3.5 max	3.5 max	
Colorfastness: ^B Laundering:			7.3.1
Shade Change	Class 4 ^C min	Class 4 ^C min	
Shade Change	Grade 4 ^C min	Grade 4 ^C min	
Staining	Class 3 ^D min	Class 3 ^D min	
Staining	Grade 3 ^D min	Grade 3 ^D min	
Drycleaning			7.3.2
Shade Change	Class 4 ^C min	Class 4 ^C min	
Shade Change	Grade 4 ^C min	Grade 4 ^C min	
Burnt Gas Fumes			7.3.3
Croaking: 2-cycles			7.3.3
Shade Change	Class 4 ^C min	Class 4 ^C min	7.3.4
Croaking:			
Dry	Class 4 ^E min	Class 4 ^E min	
Dry	Grade 4 ^E min	Grade 4 ^E min	
Wet	Class 3 ^E min	Class 3 ^E min	
Wet	Grade 3 ^E min	Grade 3 ^E min	
Light (20 AATCC)	Step 4 ^C min	Step 4 ^C min	7.3.5
Light (20 AATCC SFU, xenon-arc ^A) AFU, xenon-arc ^A)	Step 4 ^C min	Step 4 ^C min	7.3.4
Flammability	Class I	Class I	7.4
Thermal	Acceptable ^E	Acceptable ^E	7.5
Laundered	Acceptable ^F	Acceptable ^F	7.5
Transmittance			
Laundered	Acceptable ^G	Acceptable ^G	7.6.1
Laundered	Acceptable ^G	Acceptable ^G	7.5.1
Appearance			

^AThere is more than one standard method that can be used to measure breaking force, bursting force, and lightfastness. These methods cannot be used interchangeably since there may be no overall correlation between them (see Notes 2-5, and 8).

^BGI Grassde for color change and color transfer is based on a numerical scale of 5 for negligible or no color change or color transfer to 1 for severe color change or color transfer. The numerical rating in Table 1 or higher is acceptable.

^CAATCC Gray Scale for Color Change.

^DAATCC Gray Scale for Staining.

^EAATCC 9-Step Chromatic Transference Scale.

^F7.5 Information.

^GAs agreed upon between the purchaser and the supplier.

~~61 Colorfastness to Washing, Domestic and Laundering Commercial, Accelerated~~

~~88B Appearance of Seams in Wash and Wear Items After Home Laundering - Colorfastness to Laundering: Accelerated~~

~~88B Smoothness of Seams in Fabrics after Repeated Home Laundering~~

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

~~97 Non-Cotton Extractable Content of Bleached Cotton Textiles~~

~~116 Colorfastness to Crocking: Rotary Vertical Crockmeter Method~~

~~132 Colorfastness to Drycleaning~~

~~135 Dimensional Changes in Automatic Home Laundering of Woven or Knit Fabrics - Dimensional Changes of Fabrics after Home Laundering~~

~~Evaluation Procedure 1 Gray Scale for Color Change~~

~~Evaluation Procedure 2 Gray Scale for Staining~~

~~Evaluation Procedure 3 AATCC Chromatic Transference Scale~~