



Designation: ~~D5378-93 (Reapproved 2000)~~ Designation: D5378 - 12

Standard Performance Specification for Woven and Knitted Shower Curtains for Institutional and Household Use¹

This standard is issued under the fixed designation D5378; 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 specification covers the evaluation of specific performance characteristics of importance in woven and knitted shower curtains for use in institutional and household environments.

1.2 This specification may be used by mutual agreement between purchaser and 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 is not applicable for coated, laminated or vinyl product.

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 determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 ASTM Standards:²

D123 [Terminology Relating to Textiles](#)

~~D629 Test Methods for Quantitative Analysis of Textiles²~~

D1776 [Practice for Conditioning and Testing Textiles](#)

D2905 [Practice for Statements on Number of Specimens for Textiles](#)

D3436 [3136 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~~

~~D3882 Test Method for Bow and Skew in Woven and Knitted Fabrics³~~

~~D3938 Guide for Determining or Confirming Care Instructions for Apparel and Other Textile Products³~~ [Diaphragm Bursting Strength Tester Method](#)

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~~ [Colorfastness to Crocking: Crockmeter Method](#)

~~16a16 Option 1~~ [Colorfastness to Light: Carbon Arc Lamp Continuous Light](#)

~~16E Colorfastness to Light: Water-Cooled Xenon-Arc, Continuous Light~~ [16 Option 3 Colorfastness to Light: Xenon-Arc, Continuous Light](#)

35 [Water Resistance: Rain Test](#)

~~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~~

135 [Dimensional Changes in Automatic Home Laundering of Woven or Knitted Fabrics](#)

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

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

TABLE 1 Specification Requirements

NOTE 1—~~Class~~ Grade in a, b, and c, 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.

Characteristic	Requirement	Section
Breaking Force (Load) (CRT)		7.1.1
Dry	178 N (40 lbf), minimum	
Wet	89 N (20 lbf), minimum	
Bursting Force (Knit Fabrics)	178 N (40 lbf), minimum	7.1.2
Nonfibrous Material	3.0 % maximum	7.1.3
Dimensional Change (L × W)	3.0 % maximum	7.1.4
Dimensional Change (L × W)	3.0 % maximum	7.1.3
Fabric Appearance	5A 3.0 minimum	7.2.1
Skew	5A 3.0 minimum	7.2.1
Bow and Skewness	4.0 % maximum	7.1.5
Bow and Skewness	4.0 % maximum	7.1.4
Colorfastness:		
Laundering		7.1.6.1
Laundering		7.1.5.1
Shade change	Class 4 ^A minimum	
Shade change	Grade 4 ^A minimum	
Stain	Class 3 ^B minimum	
Stain	Grade 3 ^B minimum	
Crocking		7.1.6.2
Crocking		7.1.5.2
Dry	Class 4 ^C minimum	
Dry	Grade 4 ^C minimum	
Wet	Class 4 ^C minimum	
Wet	Grade 4 ^C minimum	
Light (20 AATCCFU) (xenon arc)	Class 4 ^A minimum	7.1.6.3
Light (20 AATCC AFU) (xenon arc)	Grade 4 ^A minimum	7.1.5.3
Water Resistance		7.1.7
Water Resistance		7.1.6
Categories based on minimum time for		
1-g weight		
2 ft (600 mm)	30 s shower	
2 ft (600 mm)	2 min rain	
2 ft (600 mm)	2 minute rain	
3 ft (915 mm)	5 minute storm	
3 ft (915 mm)	5 min storm	
Flammability	Pass	7.1.8
Appearance Retention	Satisfactory	7.2.1

^AAATCC Gray Scale for Color Change.

^BAATCC Gray Scale for Staining.

^CAATCC 9-Step Chromatic Transference Scale.

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

97 Non-Cotton Content of Bleached Cotton Textiles— Dimensional Changes in Commercial Laundering of Woven and Knitted Fabrics Except Wool

116 Colorfastness to Crocking: Rotary Vertical Crockmeter Method

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

Evaluation Procedure 1 Gray Scale for Color Change

Evaluation Procedure 2 Gray Scale for Staining

Evaluation Procedure 3 AATCC Chromatic Transference Scale

179 Skewness Change in Fabric and Garment Twist Resulting from Automatic Home Laundering

Evaluation Procedure 1 Gray Scale for Color Change

Evaluation Procedure 2 Gray Scale for Staining

Evaluation Procedure 8 AATCC 9-Step Chromatic Transference Scale

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

3. Terminology

3.1 Definitions:

3.1.1 *knitted fabric, n*—a structure produced by interlooping one or more ends of yarn or comparable material.

3.1.2 *shower curtain, n*—a hanging fabric used to prevent water spillage from a shower area.

3.1.3 *woven fabric, n*—a structure produced when at least two sets of strands are interlaced, usually at right angles to each other, according to a predetermined pattern of interlacing and such that at least one set is parallel to the axis along the lengthwise direction of the fabric.