



Designation: D4720 – 08 (Reapproved 2019)

Standard Performance Specification for Soft Window Covering Fabrics for Household Use¹

This standard is issued under the fixed designation D4720; 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 any washable or drycleanable soft window covering.

1.2 This specification is not a specification for washable or drycleanable soft window coverings but may be used by mutual agreement between the purchaser and the supplier to establish material specifications.

1.3 *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.*

1.4 *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:*²

[D123 Terminology Relating to Textiles](#)

[D1683 Test Method for Failure in Sewn Seams of Woven Fabrics](#)

[D3136 Terminology Relating to Care Labeling for Apparel, Textile, Home Furnishing, and Leather Products](#)

[D3691 Performance Specification for Woven, Lace, and Knit Household Curtain and Drapery Fabrics](#)

[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](#)

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.

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

[Fabrics \(Withdrawn 1995\)](#)³

2.2 *AATCC Test Methods:*⁴

[TM88B Seam Smoothness in Fabrics after Home Laundering](#)

[TM135 Dimensional Changes of Fabrics after Home Laundering](#)

[TM143 Appearance of Apparel and Other Textile End Products after Home Laundering](#)

[TM158 Dimensional Changes on Drycleaning in Perchloroethylene: Machine Method](#)

NOTE 1—Reference to documents in this specification give only the permanent part of the designation of ASTM, AATCC or other test methods or standards. The current edition of each standard prevails.

3. Terminology

3.1 *Definitions:*

3.1.1 *soft window coverings, n*—curtains, draperies, or other accessories on wall or window openings that are either lined or unlined and primarily constructed of textile fabrics.

3.1.1.1 *Discussion*—Washable soft window coverings include those that can be refurbished by any procedure in which the cleaning solvent is water. Drycleanable soft window coverings include those that should be refurbished by any procedure in which the cleaning solvent is primarily nonaqueous and used in drycleaning.

3.2 For definitions of textile terms used in this specification refer to Terminology [D123](#) and Terminology [D3136](#).

4. Significance and Use

4.1 This specification may be used to evaluate pertinent performance characteristics of washable and drycleanable soft window coverings, whether lined or unlined.

4.1.1 Soft window covering characteristics to be evaluated prior to repeated refurbishing include, but are not limited to, seam strength and appearance, uniformity of shade (part to part), and size consistency (side to side and part to part).

4.1.2 Soft window covering characteristics to be evaluated after repeated refurbishing include, but are not limited to,

³ The last approved version of this historical standard is referenced on www.astm.org.

⁴ Available from American Association of Textile Chemists and Colorists (AATCC), P.O. Box 12215, Research Triangle Park, NC 27709-2215, <http://www.aatcc.org>.

colorfastness, dimensional change, seam strength, appearance, and compatibility of components. Compatibility of dimensional change between drapery fabric and lining should be noted.

4.2 The specified home laundry machine settings do not reflect advances in cycle design or special features of washer and dryers which enhance the performance of these products. The standard washing and drying procedure reflects the minimum capabilities of current home laundering equipment used by consumers in accordance with care label instructions.

4.2.1 The reproducibility of the results of the test method specified in 9.2 depends on the use of procedures for automatic home laundering as specified on care labels.

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

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 curtains or draperies to be the primary sampling units.

NOTE 2—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 random 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 the individual test methods. Perform each test on the product as it will reach the consumer.

CHARACTERISTICS AND TEST METHODS

6. Characteristics

6.1 The areas to be evaluated and the criteria assigned to those 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 Specification **D3691**.

8. Product Performance Characteristics Prior to Refurbishing

8.1 Seam performance shall be evaluated as directed in Test Method **D1683** (for woven) or Test Method **D3940** (for knit) and in AATCC TM88B, as appropriate.

8.2 Mark and record measurements as directed in Section **11** of this specification to establish size consistency, side to side and part to part, and as a basis for determining dimensional changes.

8.3 Examine the soft window coverings for unacceptable shade difference from part to part, using a commercially available laboratory light source as agreed upon by purchaser and supplier.

8.4 Examine soft window coverings for any other pertinent defects.

9. Refurbishing Conditions

9.1 *Laundering:*

9.1.1 Launder soft window coverings as directed in AATCC TM135 as in the permanently attached care label instructions. Use laundering temperatures as directed in AATCC TM135.

9.1.2 Any domestically available detergent, as agreed upon by purchaser and supplier, may be used.

9.1.3 When chlorine bleach is to be used, introduce one cup of any liquid chlorine household bleach containing 5.25 % sodium hypochlorite (5 % available chlorine) into the washer in the manner directed on the bleach container. When testing with non-chlorine bleach is indicated, introduce it into the washer in the amount and manner directed on the bleach container.

9.1.4 Dry items following care label instructions or as directed in AATCC TM135.

9.1.5 When ironing is to be done, follow the method indicated on the care label or as directed in AATCC TM135.

9.1.6 Repeat the complete cycle four more times or as agreed upon by purchaser and supplier.

9.2 *Drycleaning:*

9.2.1 Dryclean soft window coverings as directed in AATCC TM158 or in the permanently attached care label instructions.

9.2.2 Repeat the procedure two or more times as agreed upon by purchaser and supplier.

10. Soft Window Coverings Performance Characteristics After Refurbishing

10.1 Remeasure as directed in Section **11**. Record measurements and calculate dimensional change using measurements previously obtained in **8.2**. Dimensional change may be expressed as a percentage using the following equation:

$$D = 100(A - B)/B$$

where:

D = dimensional change, %,

B = measurement before refurbishing, mm (in.), and

A = measurement of same dimension after refurbishing, mm (in.).

NOTE 3—A negative dimensional change indicates shrinkage and positive dimensional change indicates growth.

10.2 Examine soft window coverings for unacceptable shade difference from part to part, as directed in **8.3** and for any other pertinent defects after refurbishing as directed in **8.4**.