ACT Voluntary Performance Guidelines for Knit Fabrics


To give architects, designers, and end-users a vast amount of performance information in a succinct visual way, ACT developed icons to indicate that a fabric meets or exceeds guideline requirements. Look for these Registered Certification Marks on ACT Member Company sampling to assure that the fabrics you specify perform up to contract standards and pass all applicable testing.

All ACT Voluntary Performance Guidelines cover woven, coated and knit fabrics for indoor use. “Knit Fabrics” are made by interlocking loops of one or more yarns.

Test methods included in the Guidelines measure fabric performance under standard laboratory conditions and are intended to represent the most current test version. Note: Individual ACT Member product information may represent a different version of a test method depending on the date the product was introduced to market.

Important: These tests represent minimum requirements, which are subject to change without notice and may not reflect requirements or laws in all locations.

### Flammability

The measurement of a fabric’s performance when it is exposed to specific sources of ignition.

Note: ACT guidelines specify different flammability tests dictated by the intended end use for the fabric.

#### ACT GUIDELINES

**Upholstery**
California Technical Bulletin 117-2013 Section 1 – Pass

**Direct Glue Wallcoverings and Adhered Panels**
ASTM E84 (Adhered Mounting Method) – Class A or Class 1

**Wrapped Wall Panels and Upholstered Walls**
ASTM E84 (Unadhered Mounting Method) – Class A or Class 1

**Panel System Furniture**
Any one or combination of the following: UL recognized component under Office Panel Fabrics category, UL 1286 Listed, ASTM E84 (Adhered or Unadhered Mounting Method) – Class A or Class 1

**Drapery**
NFPA 701 Method 1 or 2 as appropriate – Pass
Wet & Dry Crocking

Transfer of dye from the surface of a dyed or printed fabric onto another surface by rubbing.

**ACT GUIDELINES**

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<th>Category</th>
<th>AATCC 8 Dry Crocking</th>
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<td>Drapery</td>
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<td>AATCC 116 Dry Crocking</td>
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### Colorfastness to Light

A material’s degree of resistance to the fading effect of light.

**ACT GUIDELINES**

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<th>Test Method</th>
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<td>Grade 4 minimum at 40 hours*</td>
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<td>AATCC 16 Option 1 or 3</td>
<td>Grade 4 minimum at 60 hours*</td>
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*Note: There is no direct correlation between the numbers of testing hours and hours of service in the field.*
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for Knit Fabrics

Physical Properties

Key factors in assessing overall durability of a fabric vary depending on the fabric construction.

ACT GUIDELINES

Upholstery
Pilling
ASTM D3511 (Brush Pill), Class 3 minimum Or ASTM D4970, (Martindale Tester), Class 3 minimum
Pilling is the formation of fuzzy balls of fiber on the surface of a fabric that remain attached to the fabric.

Aesthetic issues of pilling and fuzzing that sometimes occur on textile products do not impact the durability or functionality of the material. Laboratory testing provides some insight into the propensity for a textile to pill or fuzz; however, lab tests alone cannot predict field performance since they do not consider variables (e.g., care and maintenance, misuse, environment) encountered in the actual end-use application.

Breaking Strength
ASTM D5034 (Grab Test), 50 lbs. minimum both directions
Breaking Strength is the measurement of stress exerted to pull a fabric apart under tension.

Tear Strength
ASTM D2261 6.0 lbs. minimum both directions
Tear Strength is the measurement of stress exerted to rip the fabric under tension.

Snag Testing
ASTM D3939 (Mace Snap), Class 3 minimum
Snagging is the formation of yarn pulls on the surface of a fabric.

Stretch & Set
ACT has chosen not to establish a minimum requirement for this performance characteristic since the ability of a fabric to return to its initial state is strongly impacted by factors that are attributed to furniture construction and fabrication such as the density of foam. The SAE J855 test can be used to evaluate the stretch and set of a knit fabric; however, ACT suggests that you consult with both your fabric supplier and furniture manufacturer to determine if there are any potential issues.

Wrapped Panels and Upholstered Walls
Breaking Strength
ASTM D5034 (Grab Test), 35 lbs. minimum both directions
Abrasión

The surface wear of a fabric caused by friction.

**ACT GUIDELINES**

**Low Traffic / Private Spaces – Knit Upholstery Fabrics**

ASTM D4157 (ACT approved #10 Cotton Duck) 15,000 double rubs Wyzenbeek method

ASTM D4966 (12 KPa pressure) 20,000 cycles Martindale method

**High Traffic / Public Spaces – Knit Upholstery Fabrics**

ASTM D4157 (ACT approved #10 Cotton Duck) 30,000 double rubs Wyzenbeek method

ASTM D4966 (12 KPa pressure) 40,000 cycles Martindale method

**Disclaimer:**

Abrasion test results are not necessarily a reliable indicator of fabric lifespan. Comparative laboratory testing results on the same textiles frequently differ and testing methods do not necessarily correlate well with the variables encountered in actual use by the end-user. Licensees using the ACT performance certification marks and publishing test results exceeding the ACT high-traffic abrasion guideline are required to provide the following statement on their samples, digital media, marketing materials, social media posts, direct and third-party websites:

Abrasion test results exceeding ACT Performance Guidelines are not an indicator of product lifespan. Multiple factors affect fabric durability and appearance retention.

**Notes:**

ACT studies indicate that results of multiple abrasion tests performed on some fabric structures may vary significantly – as much as 60 percent or more. There is no correlation between Wyzenbeek and Martindale results. For more information please refer to abrasion white papers on the ACT website:

http://www.contracttextiles.org/index.php?page=research
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Whenever appropriate, specifiers and end users should seek the advice of professionals or other knowledgeable persons to ascertain whether a product will in fact comply with applicable Laws.

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It is the responsibility of the contract textile vendor and/or the manufacturer (not ACT) to determine in all instances whether or not a textile meets each of the Standards to which a particular Mark is referenced.

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