
ACT Voluntary Quality Guidelines

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Introduction

These voluntary guidelines apply to woven, knit and coated fabrics used in commercial interiors and are intended to be used as a starting point. Their purpose is to assist in conversations between buyers and sellers in reference to expectations regarding the quality and physical condition of textile goods. These guidelines are voluntary and are not intended to be used as a legal document or contract.

Creation of the ACT Voluntary Quality Guidelines began in 2017 when a task group was formed as part of the ACT Technical Work Group. The Guidelines Task Group credits key reference documents and drew from this established information to create comprehensive updated guidelines that are specific to the contract textile industry.

The resulting voluntary guidelines were approved by the ACT Technical Work Group and adopted by a vote of ACT Principal Members in January 2020. ACT continually reviews and updates all its guidelines in order to address changes in testing and marketplace requirements.

Selected Reference Documents

AATCC Test Methods

ASTM Test Methods

Association for Contract Textiles, *ACT Recommended Manufacturing Guidelines*, 1998

BIFMA International, *Standard for Woven Textile Characteristics*, BIFMA Tex4.1-2005

Chemical Fabric and Films Association, Inc., *Recommended Minimum Performance Standards for Vinyl-Coated and Other Chemical Coated Upholstery Fabrics – Indoor*, CFFA-U-201F August 2017

Joint Industry Fabrics Standards Committee, *Woven & Knit Residential Upholstery Fabric Standards & Guidelines*, 2010

**Disclaimer: These voluntary guidelines have been prepared by the Association for Contract Textiles, Inc. ("ACT") to assist in conversations between buyers and sellers in reference to expectations regarding the quality and physical condition of textile goods. The guidelines are voluntary and are intended solely for informational purposes only. While the guidelines are provided in good faith as a service to the contract textile industry, ACT does not guarantee or make any representation or warranty whatsoever regarding the effectiveness, quality or performance of any product or service by virtue of the guidelines. It is the responsibility of each user to determine whether the guidelines are suitable for their use.*

PART 1:

Woven & Knit Commercial Textile Quality Guidelines

SECTION 1.1

Master Sample

A master sample is the standard used for evaluating quality, inclusive of color, inherent characteristics, pile height and pattern repeat, and is the basis on which the decision to purchase is made. It is the essential tool for comparison and for communication between buyer and seller.

1.1.1 Establishing a Master Sample

- a. The final approval standard (master sample) should be cut from the initial production run and not from sample blankets, lab dips, test yardage, etc.
- b. The master sample should be a minimum size of 5 by 7 inches or a full repeat.
- c. The master sample should be stored in a protective sleeve away from light and any other harmful environmental conditions.
- d. When finishes are applied, master samples should be kept in both original and after-finish state.
- e. When a manufacturing change causes a deviation from the master sample, the seller should notify the buyer before shipping the order. The buyer can then determine whether to accept the product. If the product is accepted, a new master sample should be cut from this lot.

SECTION 1.2

Color Evaluation

This section is intended to address color matching of stock keeping units (SKUs) by comparing each lot to a master sample and also checking for differences within a single lot. Two methods of judging color accuracy may be used: visual and instrumental.

Definition: A “lot” is a continuous woven or knit textile manufactured using components, whether they be one or many, that are from the same yarn production lot(s) and or dye lot(s). If any component lot is replaced during manufacturing a new fabric lot number must be assigned.

1.2.1 Visual Evaluation

1.2.1.1 Light Source

The buyer and seller should agree on a primary and a secondary light source to evaluate color. Common options include:

- a. Daylight, CIE illuminant D65 of 6500 K
- b. Cool White Fluorescent, CIE illuminant F2 of 4150 K
- c. Incandescent, CIE illuminant A 150 watt of 2850 K

Other sources may be chosen to meet specific requirements.

Note: Color cannot be perfectly matched using three different light sources.

A light booth such as those manufactured by X-Rite/Gretag MacBeth is recommended for visual evaluation of color.

Light booths and all light sources should be calibrated on a regular basis.

1.2.1.2 Viewing Procedure

Proper positioning of the master sample and the production lot sample (sample) on an exam stand and proper viewing conditions are essential for evaluation consistency.

- a. Sample and master sample should be from identical areas of a given design.
- b. Both samples should be positioned in the same plane with identical warp and fill orientation, course and wale orientation, or identical pile/nap direction.
All measures must be taken to ensure that sample orientation is identical.
- c. After evaluating samples as positioned in step b., they should then be turned 90 degrees and evaluated again.
- d. Samples should be parallel and touching.
- e. Samples should be viewed under primary and secondary light sources. Color judgments should be made quickly because sensitivity of the eye to color differences decreases with time of exposure.
- f. Since the viewing area and surroundings can impact color perception, use paint formulated to match Munsell N7 Neutral Gray in accordance with ASTM D1729 Standard for Visual Appraisal of Colors and Color Differences of Diffusely-Illuminated Opaque Materials. Additionally, extraneous light and/or color from other fabrics or clothing should be avoided.
- g. Samples that are transparent/translucent should be folded or layered to minimize the effects of low opacity.

Note: It is strongly recommended that all individuals making color judgments have a normal (average as per Munsell) color vision. This can be determined by taking the Farnsworth/Munsell 100 Hue) or the HVC test or similar type of test.

1.2.2 Instrumental Evaluation

If a spectrophotometer is used for color measurements of any kind, the following specifications are recommended:

- a. Color Math CIE Lab
- b. Primary Light Source – Daylight D65
- c. Secondary Light Source – Cool White Fluorescent F02-10
- d. Tertiary Light A – Incandescent*
- e. Observer 10 Degree
- f. Specular Component Excluded
- g. Instrument Type Sphere
- h. Ultraviolet Light Included

**Other sources may be chosen as agreed by buyer and seller.*

All color evaluation equipment should be calibrated regularly.

Note: Instrumental evaluation may not be appropriate for all products such as multicolor designs, large patterns, metallic finishes. Because gloss and surface finish impact color perception, it is recommended that the observer visually compare the color to the master sample.

1.2.3 Color Within a Lot

Color of a textile should be consistent within a continuous production lot.

1.2.4 Color Variation Lot-to-Lot

Color variation from the master sample is expected from lot to lot and should be tolerated within the range agreed to between buyer and seller.

Note: Keep in mind that subjective and objective views of color, hue, shade, tint and tone will naturally be perceived uniquely by each individual. All color evaluation is subject to buyer-seller agreement.

SECTION 1.3

Defects

Definition: A defect in the face of the fabric is any visible condition that deviates beyond acceptable variation from the master sample from which the decision to purchase was made.

1.3.1 Spot Defect

A vertical (up the roll) defect that is 4 ½ inches or less, or a horizontal (across the roll or filling) defect of any length. The allowance given is ¼ yard. A seam in the roll is considered a spot defect. Two or more defects within the same lengthwise yard are considered a running defect and should be marked accordingly.

1.3.2 Running Defect

A vertical (up the roll) defect that is greater than 4 ½ inches. The allowance given is equal to the length of the defect. Running defects may be cut out; however, there should be no more than two pieces in a roll. The two pieces should be from the same dye lot; and neither piece should be less than 5 flawless yards (see 1.7.3 Roll Length Measurement). An additional ¼-yard allowance is given for the cut.

1.3.3 Back Flaw

Any irregularity or variation on the back of the fabric that would adversely impact the durability of the product or appearance of the face of the fabric. Procedures and allowances for spot and running defects apply (see 1.2.1 Spot Defect and 1.2.2 Running Defect).

1.3.4 Marking Defects

Defects should be flagged at the selvage:

- a. Red for spot defects
- b. Yellow for running defects (one flag at the beginning and one flag at the end)

1.3.5 Defects Allowed

One defect per 7 yards is the maximum allowable number of defects per roll.

1.3.6 Charge Backs

When allowances are given for marked defects, there should be no need for an additional charge back for those defects. Allowances are reflected in the difference between gross yardage shipped, and net yardage invoiced.

Note: Each customer may have needs or requirements that will dictate what they are willing to accept. For example, the demands of drapery or wallcovering installation may require larger allowances for defects, fewer defects per roll, or both. Buyer-seller agreements may override these guidelines.

SECTION 1.4

Pile Height

Definition: Pile fabrics include velvet, flock, suede and chenille.

1.4.1 Acceptable Pile Variation

Acceptable pile variation from the master sample should be by buyer-seller agreement. ASTM D1777 (Test Option 5) is the referee method for a claim.

SECTION 1.5

Pattern Repeat

Definition: Vertical and horizontal distances between the points where the pattern is identical again (repeats) as established by a master sample.

1.5.1 Method of Measurement

For Jacquard and Printed Woven Fabrics, as well as Knit Fabrics, lay the fabric on a horizontal surface without tension. Measure from a distinctive location in the pattern (e.g., edge of a motif, a repeating line, dot, etc.) to determine pattern vertical length and horizontal width. A minimum of four measurements should be made in a continuous length of 50 yards.

For Dobby Weaves, use a pick glass to count yarns per inch.

1.5.2 Jacquard and Printed Woven Fabrics

For pattern repeats 27 inches or less:

Acceptable vertical and horizontal pattern repeat variation is +/- 2% from the master sample. Acceptable variation within a lot should be no greater than 2%.

For pattern repeats greater than 27 inches:

Acceptable variation should be by buyer-seller agreement.

1.5.3 Knit Fabrics

For pattern repeats 10 inches or less:

Acceptable vertical and horizontal pattern repeat variation is +/- 5% from the master sample, roll-to-roll and within a roll.

Use a pick glass to count courses and wales on non-patterned knits.

For pattern repeats greater than 10 inches:

Acceptable variation should be by buyer-seller agreement.

1.5.4 Dobby Weaves

For patterns dependent on construction, the acceptable variation is +/- 2% for pick and end counts (example: 50 ends +/- 2% = +/- 1 end) from the master sample. For lower pick/end constructions, it is recommended to count 5 to 10 inches and use the average.

Note: Variations in width and repeat are subject to buyer-seller agreement where finish or fiber content may cause variations greater than discussed in this section.

SECTION 1.6

Bow and Skew

Definition: Bow and Skew are deviations in filling yarns, course yarns, stripes or dominant pattern lines from selvedge to selvedge. If maximum deviation occurs in the body or ground of the cloth, it is considered Bow. If maximum deviation occurs at the opposite selvedge, it is considered Skew.

Note: Pattern and style are key factors in fabrication. A linear pattern can be unforgiving when bow or skew are in excess of accepted tolerances.

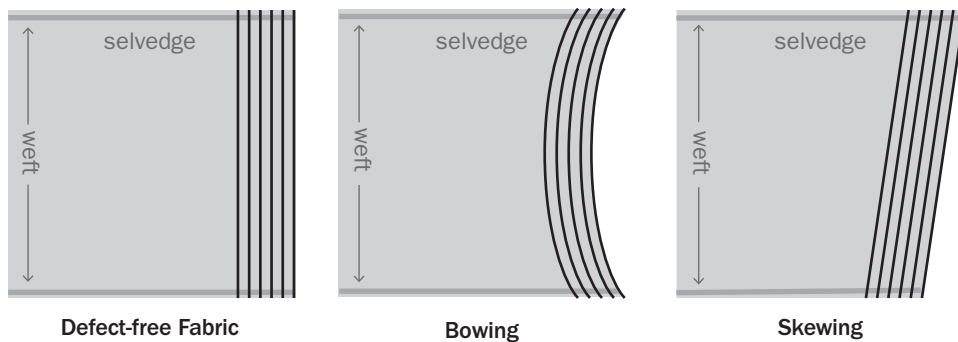
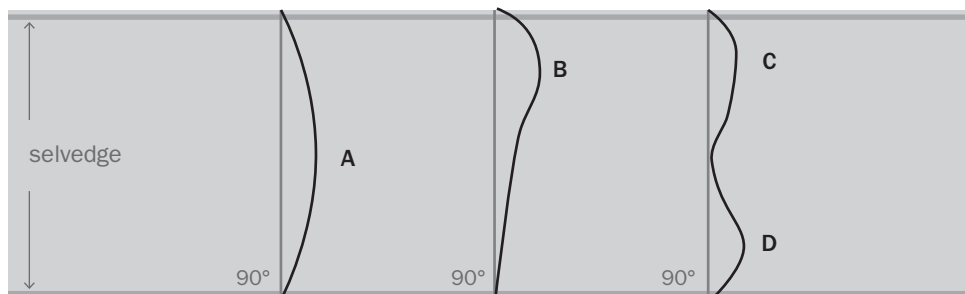


Figure 1

1.6.1 Suggested Method for Measuring Bow

- Lay three yards or more of the fabric, without tension, on a horizontal surface.
- Place a straight edge (or T-Square) across the fabric perpendicular to the selvedge at a point where a filling yarn, course yarn, stripe or dominant pattern line begins.
- Across the width of the fabric, measure the point of greatest distance between the perpendicular line and the filling line, course yarn, stripe, or dominant pattern line.
- Repeat this procedure a least three places along the length of the fabric (roll) and report the bow, as well as the location.



- Maximum distortion occurs at or near center
- Maximum distortion occurs at or near quarter width
- & D. Maximum distortion on each side at or near quarter widths

Figure 2

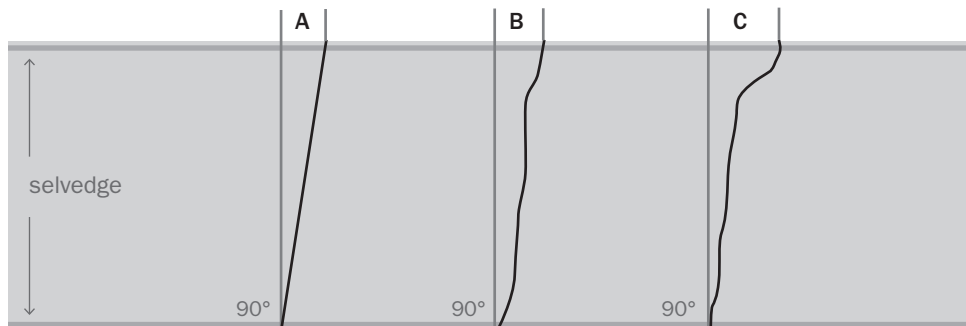
1.6.2 Bow Acceptance Level

- a. For goods up to 54 inches wide, maximum bow allowed is ½ inch.
- b. For goods wider than 54 inches, maximum bow allowed is 1% of width.
(e.g., 1% of 66 inches width is .66 inch, which is 11/16 inch)

Note: Bow acceptance level is subject to buyer-seller agreement.

1.6.3 Suggested Method for Measuring Skew

- a. Lay three yards or more of the fabric, without tension, on a horizontal surface.
- b. Place a straight edge (or T-square) across the fabric perpendicular to the selvages at a point where a filling yarn, course yarn, stripe or dominant pattern line begins.
- c. On the opposite selvage, measure the distance from the straight edge to the point at which the identified filling yarn, course yarn, stripe or dominant pattern line meets this selvage.
- d. Repeat this procedure at least three places along the length of the fabric (roll) and report the skew along with the location.



- A. Maximum distortion occurs at selvage
- B. Combination of distortions but maximum distortion occurs at selvage
- C. Combination of distortions but maximum distortion occurs at selvage

Figure 3

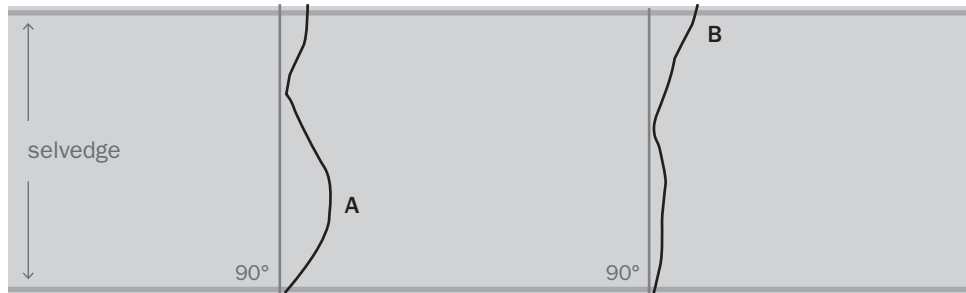
1.6.4 Skew Acceptance Level

- a. For goods up to 54 inches wide, maximum skew allowed is 1 inch.
- b. For goods wider than 54 inches, maximum skew allowed is 2% of width.
(e.g., 2% of 66 inches width is 1.32 inches, which is 1-5/16 inches)

Note: Skew acceptance level is subject to buyer-seller agreement.

1.6.5 Suggested Method for Measuring When Both Bow and Skew are Present

- a. Measure the bow. See 1.6.1
- b. Measure the skew. See 1.6.3
- c. The larger of the two measurements determines which is reported – bow or skew.



- A. Measurement of distortion that occurs at bow
- B. Measurement of distortion that occurs at selvedge skew

Figure 4

1.6.6 Acceptance Level

- a. Bow dominant: see 1.6.2
- b. Skew dominant: see 1.6.4

SECTION 1.7

Usable Width

Definition: The portion of fabric exclusive of selvages, pin holes, and any unfinished part of the width (e.g., back coating or print area) that can be used for its intended application.

1.7.1 Common Usable Widths

- a. Upholstery 54 inches
- b. Wallcovering 54 inches
- c. Panel 66 inches
- d. Cubicle 72 inches
- e. Drapery – no common width

1.7.2 Acceptable Usable Width

Acceptable usable width should be by buyer-seller agreement. ASTM D3774 is the referee method for a claim.

SECTION 1.8

Roll/Piece Length

1.8.1 Suggested Methods for Measuring

ASTM D3773 (Option C - clock method) is considered the “standard” for woven textiles. ASTM D3773 (Option A – hand method) is the recommended referee test method to resolve any accuracy dispute.

1.8.2 Suggested Methods for Calibrating Measuring Equipment

A certified portable measuring counter should be periodically used to verify the accuracy of the production counter. The same device should be used for cross-calibration of company-to-company devices.

Other calibration options include:

- a. Use a third-party ISO 17025 accredited calibration device to internally verify production devices.
- b. Use a third-party ISO 17025 accredited company to calibrate all production devices.

1.8.3 Roll Length

- a. Standard length is typically 50 yards.
- b. Minimum length is typically 15 yards or by buyer-seller agreement.
- c. Maximum length is by buyer-seller agreement and may depend on roll diameter, weight and other factors.

1.8.4 Length Variation for Woven Fabric*

For woven fabrics, the difference between the vendor's stated gross yardage and the customer's measured gross yardage should not vary by more than +/- 2% of the amount invoiced. This percentage was validated by a 1996 inter-laboratory experiment conducted by the Joint Industry Standards and Guidelines Committee. The study showed length variation may be caused by constructions, yarns, basic fibers, and fiber blends in addition to temperature and humidity, making accurate and reproducible measurement difficult.

**Length variation for knit fabric is subject to buyer seller agreement.*

1.8.5 Overage/Shortage to Ordered Length

- a. The maximum overage is 10%.
- b. Shortage should be agreed upon before shipping.
- c. Overage is subject to buyer-seller agreement.

SECTION 1.9

Roll Weight

1.9.1 Maximum Weight

Maximum weight of a roll should not exceed 50 pounds except by buyer-seller agreement.

SECTION 1.10

Roll Condition for Shipping

1.10.1 Face

The face of the fabric should always be rolled to the inside.

1.10.2 Telescoping

A cone that occurs when the fabric shifts left or right while it is being rolled onto the tube or during subsequent shipping and handling. Telescoping should not exceed more than one inch on 54 inches and never extend past the end of the tube. Ideally the tube should be the width of the fabric.

1.10.3 Identification Cord for Woven Fabrics*

Placement of the identification cord (ID cord) indicates the fabric face and the pattern or pile direction on a roll. With the ID cord on the right side of the roll, the fabric will be face up when you pull the cut edge from the bottom of the roll as indicated in Figures 5 and 6. The ID cord can be any contrasting color; should be distinct from other yarns comprising the body of the fabric; and should be woven in such a way that the floats on the fabric face (inside of roll) are substantially longer than the floats on the fabric back.

**Does not apply to knit fabrics.*

1.10.3.1 Vertical Pattern Direction (Up-the-Roll)

The top of a vertical pattern (repeat) will be closest to the cut edge as the fabric comes off the roll.

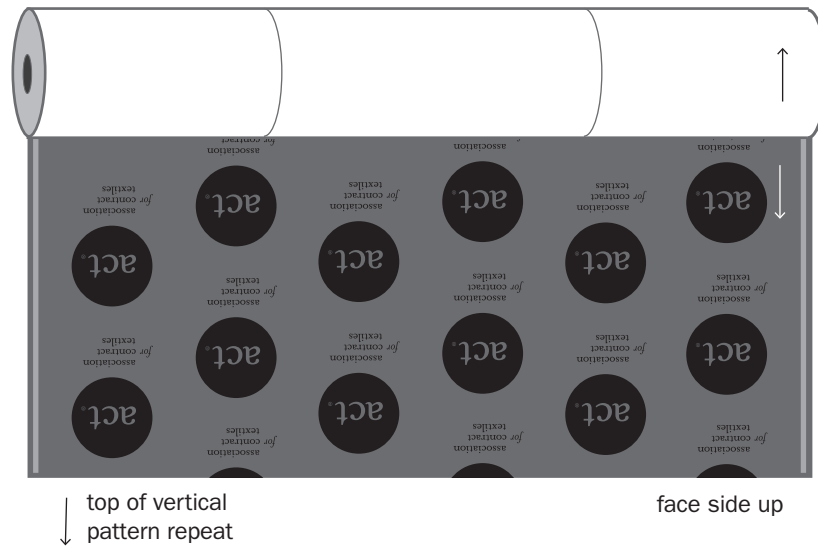


Figure 5

1.10.3.2 Horizontal Pattern Direction (Railroaded)

The top of a horizontal pattern (repeat) will be closest to the left selvage as the fabric comes off the roll.

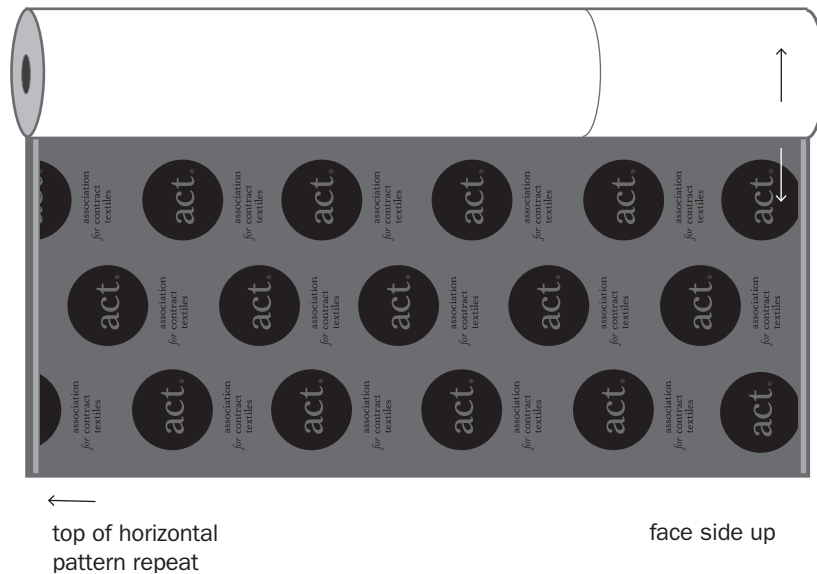


Figure 6

1.10.3.3 Pile/Nap Direction

The ID cord on the right side of the roll identifies the correct nap and pile direction in fabrics such as velvet, flock, suede and chenille. In velvet, flock and suede fabric, nap/pile should brush smooth toward the roll. In the case of a plain chenille (no defined design) fabric, nap/pile should brush smooth toward the ID cord on the right side.

Note: Alternative methods for identifying the direction of pattern, pile or nap are subject to buyer-seller agreement.

SECTION 1.11

Roll Tag Information

1.11.1 Information Included on Tag

The following information should be provided on every roll being shipped from the mill, or finisher.

- a. Vendor style and color number
- b. Roll number
- c. Lot number
- d. Gross yardage
- e. Net yardage
- f. Gross weight
- g. Treatment and/or finish
- h. Production date

PART 2:

Coated Fabrics Commercial Upholstery Quality Guidelines

SECTION 2.1

Master Sample

A master sample is the standard used for evaluating quality, color, defects, thickness and pattern repeat, and is the basis on which the decision to purchase is made. It is the essential tool for comparison and for communication between buyer and seller.

2.1.1 Establishing a Master Sample

- a. The final standard (master sample) should be cut from the initial approved production run and not from lab samples, test yardage, etc.
- b. The master sample should be a minimum size of 5 by 7 inches or a full repeat.
- c. The master sample should be stored in a protective sleeve away from light and any other harmful environmental conditions.
- d. In addition to the final master sample, manufacturers should also maintain master samples for each step of the production process.
- e. When a manufacturing change causes a deviation from the master sample, the seller should notify the buyer before shipping the order. The buyer can then determine whether or not to accept the product. If the product is accepted, a new master sample should be cut from this lot.

SECTION 2.2

Color Evaluation

This section is intended to address color matching of stock keeping units (SKUs) by comparing each lot to a master sample and also checking for differences within a single lot. Two methods of judging color accuracy may be used: visual and instrumental.

2.2.1 Visual Evaluation

2.2.1.1 Light Source

The buyer and seller should agree on a primary and a secondary light source to evaluate color. Common options include:

- a. Daylight, CIE illuminant D65 of 6500 K
- b. Cool White Fluorescent, CIE illuminant F2 of 4150 K
- c. Incandescent, CIE illuminant A 150 watt of 2850 K

Other sources may be chosen to meet specific requirements.

Note: Color cannot be perfectly matched using three different light sources.

A light booth such as those manufactured by X-Rite/Gretag MacBeth is recommended for visual evaluation of color.

Light booths and all light sources should be calibrated on a regular basis.

2.2.1.2 Viewing Procedure

Proper positioning of the master sample and the production lot sample (sample) on an exam stand and proper viewing conditions are essential for evaluation consistency.

- a. Sample and master sample should be from identical areas of a given design.
- b. Both samples should be positioned in the same plane with identical machine direction and cross direction orientation. All measures must be taken to ensure that sample orientation is identical.
- c. Samples should be viewed from the machine direction and then turned to view from the cross direction.
- d. Samples should be parallel and touching.
- e. Samples should be viewed under primary and secondary light sources. Color judgments should be made quickly because sensitivity of the eye to color differences decreases with time of exposure.
- f. Since the viewing area and surroundings can impact color perception, use paint formulated to match Munsell N7 Neutral Gray in accordance with ASTM D1729 Standard for Visual Appraisal of Colors and Color Differences of Diffusely-Illuminated Opaque Materials. Additionally, extraneous light and/or color from other fabrics or clothing should be avoided.
- g. Samples that are transparent/translucent should be folded or layered to minimize the effects of low opacity.

Note: It is strongly recommended that all individuals making color judgments have a normal (average as per Munsell) color vision. This can be determined by taking the Farnsworth/Munsell 100 Hue) or the HVC test or similar type of test.

2.2.2 Instrument Evaluation

If a spectrophotometer is used for color measurements of any kind, the following specifications are recommended:

- a. Color Math CIE Lab
- b. Primary Light Source – Daylight D65
- c. Secondary Light Source – Cool White Fluorescent F02-10
- d. Tertiary Light A – Incandescent*
- e. Observer 10 Degree
- f. Specular Component Excluded
- g. Instrument Type Sphere
- h. Ultraviolet Light Included

**Other sources may be chosen as agreed by buyer and seller.*

All color evaluation equipment should be calibrated regularly.

Note: Instrumental evaluation may not be appropriate for all products such as multicolor designs, large patterns, metallic finishes. Because gloss and surface finish impact color perception, it is recommended that the observer visually compare the color to the master sample.

2.2.3 Color Within a Lot

Color of a coated fabric should be consistent within a continuous production lot.

2.2.4 Color Variation Lot-to-Lot

Color variation from the master sample is expected from lot to lot and should be tolerated within the range agreed to between buyer and seller.

Note: Keep in mind that subjective and objective views of color, hue, shade, tint and tone will naturally be perceived uniquely by each individual. All color evaluation is subject to buyer-seller agreement.

SECTION 2.3

Defects

Definition: A defect in the surface of the coated fabric is any visible condition that deviates beyond acceptable variation from the master sample from which the decision to purchase was made.

2.3.1 Spot Defect

A defect in the machine direction that is $\frac{1}{8}$ yard or less. The allowance given is $\frac{1}{8}$ yard. Two or more defects within the same lengthwise yard are considered a running defect and should be marked accordingly.

2.3.2 Running Defect

A defect in the machine direction that is greater than $\frac{1}{8}$ yard. The allowance given is equal to the length of the defect. Defects may be cut out; however, there should be no more than two pieces in a roll. The two pieces should be from the same production lot; and neither piece should be less than 3-flawless yards (see 2.7.3). An additional $\frac{1}{8}$ -yard allowance is given for the cut.

2.3.3 Marking Defects

Spot and running defects should be flagged at the edge of the roll.

2.3.4 Defects per Roll

An average of one defect per 15 yards is the maximum allowable number of defects per roll.

2.3.5 Charge Backs

When allowances are given for marked defects, there should be no need for an additional charge back for those defects. Allowances are reflected in the difference between gross yardage shipped, and net yardage invoiced.

Note: Each customer may have needs or requirements that will dictate what they are willing to accept. For example, the demands of wallcovering installation may require larger allowances for defects, fewer defects per roll, or both. Buyer seller agreements may override these guidelines.

SECTION 2.4

Coated Fabric Thickness Measurement

2.4.1 Suggested Thickness Measuring Equipment

Various gauges can be used to measure thickness; however, the gauge used to settle any dispute has a dial graduated to 0.001 inch (1 mil) having a $\frac{3}{8}$ -inch diameter presser foot with an anvil of equal or greater diameter as specified in ASTM D751, section 9. Its presser foot and connected moving parts should apply a total weight of 6 ounces, equivalent to a force of 3.4 psi, to the specimen.

2.4.2 Method of Measurement

Place the specimen on the anvil, lower the pressure foot (without impact), wait ten seconds and observe the reading on the dial.

2.4.3 Thickness Acceptance Level

Thickness should be within +/- 10% of the specified thickness unless otherwise agreed upon by buyer and seller. ASTM D751, section 9 is the referee method for a claim.

SECTION 2.5

Pattern Repeat

Definition: Vertical and horizontal distances between where the pattern is identical again (repeats) as established by a master sample.

2.5.1 Method of Measurement

Lay the fabric on a horizontal surface without tension. Measure from a distinctive location in the pattern (e.g., edge of a motif, a repeating line, dot, etc.) to determine pattern vertical length and horizontal width. A minimum of three measurements should be made in a continuous length of 30 yards.

2.5.2 Acceptable Pattern Repeat Variation

For pattern repeats 27 inches or less:

Acceptable vertical and horizontal pattern repeat variation is +/- 2% from the master sample.
Acceptable variation within a lot should be no greater than 2%.

For pattern repeats greater than 27 inches:

Acceptable variation should be by buyer-seller agreement.

SECTION 2.6

Bow and Skew

In coated fabrics, this issue of Bow and Skew is relevant primarily for print patterns.

Definition: Bow and Skew are two types of distortions in dominant pattern lines across the width of the coated fabric from selvedge to selvedge. If maximum distortion occurs at or near the center of the width, it is considered Bow. If maximum distortion causes a diagonal shift in the pattern between the selvages, it is considered Skew.

Note: Pattern and style are key factors in fabrication. A linear pattern can be unforgiving when bow or skew are in excess of accepted tolerances.

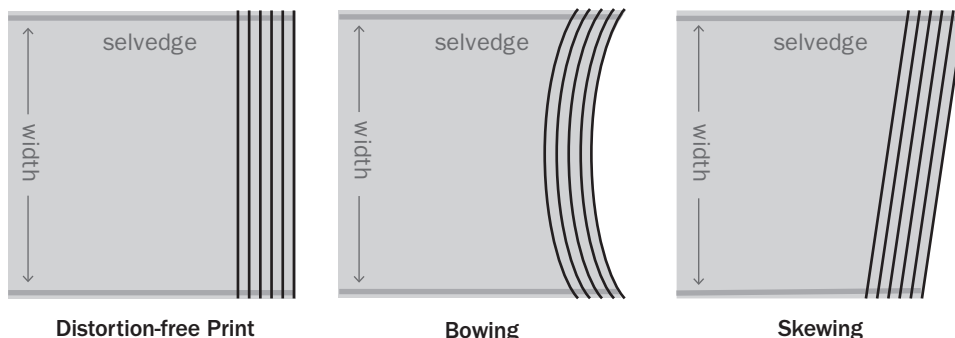


Figure 7

2.6.1 Suggested Method for Measuring Bow

- a. Lay out a yard or more of the coated fabric, without tension, on a horizontal surface.
- b. Place a straight edge (or T-Square) across the fabric perpendicular to the selvage at a selected point in the print pattern.
- c. Across the width of the coated fabric, find the point on the straight edge where the maximum print distortion occurs and measure the distance from the straight edge in inches.
- d. Repeat this procedure in at least three places along the length of the fabric (roll) and report the bow, as well as the location.

2.6.2 Bow Acceptance Level

- a. For 54-inch wide goods, the maximum allowable distortion is one inch.
- b. For goods wider than 54 inches, the maximum is 2% of width.
(e.g., 2% of 66 inches is 1.32 inches or 1-5/16 inches)

Note: Bow acceptance level is subject to buyer-seller agreement.

2.6.3 Suggested Method for Measuring Skew

- a. Lay out a yard or more of the coated fabric, without tension, on a horizontal surface.
- b. Place a straight edge (or T-Square) across the fabric, perpendicular to the selvage, at a selected point in the print pattern.
- c. On the opposite selvage, measure the distance from the straight edge to that same point in the pattern.
- d. Repeat this procedure in at least three places along the length of the fabric and report Skew.

2.6.4 Skew Acceptance Level

- a. For 54-inch wide goods, the maximum allowable distortion is one inch.
- b. For goods wider than 54 inches, the maximum is 2% of width.
(e.g., 2% of 66 inches width is 1.32 inches, which is 1-5/16 inches)

Note: Skew acceptance level is subject to buyer-seller agreement.

SECTION 2.7

Width

2.7.1 Common Width

- a. Upholstery 54 inches
- b. Wallcovering 54 inches

2.7.2 Acceptable Width

Acceptable width should be by buyer-seller agreement. ASTM D751, Section 8.1 is the referee method for a claim.

It is important that the buyer and seller agree on the standard by which the goods are measured and the acceptable range of variation.



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SECTION 2.8

Roll/Piece Length

2.8.1 Method for Measuring

The recommended test method is ASTM D751, section 7.2.

2.8.2 Suggested Methods for Calibrating Measuring Equipment

A certified portable measuring counter should be periodically used to verify the accuracy of the production counter. The same device should be used for cross-calibration of company-to-company devices.

Other calibration options include:

- a. Use a third-party ISO 17025 accredited calibration device to internally verify production devices.
- b. Use a third-party ISO 17025 accredited company to calibrate all production devices.

2.8.3 Roll Length for Coated Fabrics

- a. Coated fabric roll length is dependent on weight, gauge, roll diameter or by buyer-seller agreement and shipped in amounts of 15 yards or more.
- b. Minimum length is typically 15 yards or by buyer-sell agreement.

2.8.4 Length Variation

For coated fabrics, the difference between the vendor's stated gross yardage and the customer's measured gross yardage should not vary by more than +/- 2% of the amount invoiced.

2.8.5 Overage/Shortage to Ordered Length

- a. The maximum overage is 10%.
- b. Shortage should be agreed upon before shipping.
- c. Overage is subject to buyer-seller agreement.

SECTION 2.9

Roll Weight

2.9.1 Maximum Roll Weight

Maximum weight of a roll should not exceed 50 pounds except by buyer-seller agreement.

SECTION 2.10

Roll Condition for Shipping

2.10.1 Face

The face of the fabric should always be rolled to the inside.

2.10.2 Telescoping

A cone that occurs when the fabric shifts left or right while it is being rolled onto the tube or during subsequent shipping and handling. Telescoping should not exceed more than one inch on 54 inches and never extend past the end of the tube. Ideally the tube should be the width of the fabric.



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SECTION 2.11

Roll Tag Information

2.11.1 Information included on Tag

The following information should be provided on every roll being shipped from the manufacturer, or if repackaged, from the distributor.

- a. Vendor style and color/part number
- b. Roll number
- c. Lot number
- d. Net yardage
- e. Gross Weight
- f. Production date