

INCH-POUND

A-A-59591

May 24, 2000**Supersedes**

CCC-C-439G

May 15, 1990

COMMERCIAL ITEM DESCRIPTION

CLOTH, BUNTING, COTTON, MERCERIZED

The General Services Administration has authorized the use of this commercial item description in preference to Federal Specification CCC-C-439

1. SCOPE

1.1 This specification covers cotton bunting, which is primarily used in the manufacture of signal, semaphore, ensign (including U.S. flag), and other types of flags.

CLASSIFICATION

This specification covers one type of cotton bunting.

SALIENT CHARACTERISTICS

3.1 Yarn. The yarn shall be made from cotton which has been carded, drawn, spun and twisted into two—ply yarn for both warp and filling.

3.2 Color. The color of the finished cloth shall be as specified (see 6.2)

3.2.1 Matching. The color of the finished cloth, shall match the standard sample when viewed under filtered tungsten lamps that approximate artificial daylight and that have a correlated color temperature of 7500 ± 200 K, with illumination of 100 ± 20 foot candles, and shall be a good match to the standard sample under incandescent lamplight at 2300 ± 200 K. When no standard sample available the finished cloth shall match the applicable color card (see 6.2), either by cable number or names.

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Defense Supply Center Philadelphia, Clothing and Textiles Directorate, Attn.: DSCP-COCT, 700 Robbins Ave., Philadelphia PA., 19111-5092.
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AMSC N/A

FSC 8305

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

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3.2.2 Colorfastness. The finished cloth shall show fastness to light, water and salt water and soap equal to or better than the standard sample or equal to or better than a rating of 3.5, on the AATCC Gray Scale for Change in Color. The finished cloth shall show fastness to crocking equal to or better than the standard sample or shall have an AATCC Chromatic Transference Scale rating not lower than 3.5. Testing shall be as specified in 5.3.

3.2.3 Labile sulfur. The use of dyes and compounds containing elementary sulfur capable of oxidation to sulfuric acid is prohibited. The dyestuff shall be chosen and applied so that the dyed and finished cloth shall contain no more labile sulfur than shown by the standard sample when tested as specified in 5.3. When no standard sample is available, the finished cloth shall show no more than a slight trace of labile sulfur when tested as specified in 5.3.

3.3 Physical requirements. The finished cloth shall conform to the requirements specified in table I when tested as specified in 5.3.

TABLE I. Physical requirements

Weight, ounces per square yard (minimum)	Yarns per inch (minimum)		Breaking Strength Pounds (minimum)	
	Warp	Filling	Warp	Filling
4.5	31	30	50	50

3.3.1 Weave. The weave shall be plain.

3.3.2 Width. The minimum width exclusive of selvages shall be 37—1/2 inches for the Military services and 35—3/4 inches for Civil agencies (see 6.1).

3.4 Finish. The cloth shall be mercerized.

3.5 pH. The pH value of the water extract of the dyed and finished cloth shall be not less than 5.0 and not greater than 8.5 when tested as specified in 5.3.

3.6 Length and put—up. Unless otherwise specified (see 6.1), the cloth shall be furnished in continuous pieces of not less than 35 yards and shall be put—up in rolls or flat folded—pieces (bolts) as specified in 5.2.

3.7 Fiber identification. Each roll or folded piece shall be labeled, ticketed, or invoiced for fiber content in accordance with the Textile Fiber Products Identification Act.

REGULATORY REQUIREMENTS.

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4.1 Recycled, recovered, or environmentally preferable materials. Recycled, recovered, or environmentally preferable materials should be used to the maximum extent possible in accordance with paragraph 23.403 of the Federal Acquisition Regulation Act (FAR), provided that the material meets or exceeds the operational and maintenance requirements and promotes economically advantageous life cycle costs.

5. QUALITY ASSURANCE PROVISIONS

5.1 Product conformance. The products provided shall meet the salient characteristics of this commercial item description and conform to the producer's own drawings, specifications, standards and quality assurance practices. The Government reserves the right to require proof of such conformance.

5.2 Preservation, packing and marking. The preservation, packing and marking shall be as specified in the contract or order.

5.3 End item testing. The cloth shall be tested for the characteristics listed in table II. The physical and chemical values specified in section 3, except where otherwise specified, apply to the results of the determinations made on a sample unit for test purposes as specified in the applicable test method. All test reports shall contain the individual values utilized in expressing the final result. The sample unit for test purposes shall be 1—1/2 continuous yards full width of the finished cloth. The lot shall be unacceptable if one or more units fail to meet any requirement specified. The sample size shall be as follows:

<u>Lot size (yards)</u>	<u>Sample size</u>
800 or less	2
801 up to and including 22,000	3
22,001 and over	5

TABLE II. End item tests

Requirement	Characteristic paragraph	Test method
Identification of cotton	3.1	AATCC 20 1/
Yarn ply	3.1	Visual 2/
Colorfastness to:		
Croaking	3.2.2	AATCC 8

TABLE II. End item tests (cont'd)

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Characteristic	Requirement paragraph	Test method
Light	3.2.2	AATCC-16 OPT A
Water	3.2.2	AATCC-107 3/
Salt water and soap	3.2.2	AATCC-106
Weight	3.3	ASTM-D-3776 OPT
C		
Yarns per inch:		
Warp	3.3	ASTM-D-3775
Filling	3.3	ASTM-D-3775
Breaking strength:		
Warp	3.3	ASTM-D-5034
Filling	3.3	ASTM-D-5034
Weave	3.3.1	Visual 2/
Mercerization	3.4	Microscopic 1/
examination for swelling of cotton fibers		
Labile sulfur	3.2.3	5.3.1
pH	3.5	AATCC-81

1/ Unless otherwise specified, a certificate of compliance shall be submitted and will be acceptable for the stated requirement.

2/ One determination shall be made from each sample unit and results reported as “pass” or “fail.”

3/ Except the time shall be one hour

5.3.1 Presence of Labile sulfur In the determination of presence of labile sulfur in textile materials with lead acetate, two 1.50 ± 0.01 gram samples from each material submitted for evaluation shall be tested. Each of the two samples shall be cut into very small pieces and placed into separate test tubes. The samples shall be submersed in a stannous chloride solution that contains 100 grams of stannous chloride crystals ACS in 100 milliliters of hydrochloric acid ACS (35 percent concentration) and 50 milliliters of distilled water. A filter paper wet out with a 5.0 percent lead acetate solution shall be placed over top of the test tube. The lead acetate solution contains 5.0 grams of lead acetate CP reagent grade and enough distilled water to make up a 100 milliliter solution; if the solution is not clear, add a few drops (one at a time) of glacial acetic acid until the solution is clear. The test tube containing the textile sample, stannous chloride and wet filter paper shall be heated over a low flame until the solution is boiling. The solution should not be heated for more than 15 seconds. A brown to black stain on the filter paper should be

evaluated as follows:

Free - The filter paper shows no discoloration or staining of any kind.

Slight - The filter paper shows a light tan to light brown discoloration stain.

Moderate - The filter paper shows a dark brown discoloration stain.

Severe - The filter paper shows a black color stain.

5.3.2 Yard—by—yard examination. Each roll or flat—folded piece in the sample shall be examined on one side only. When the total yardage in the roll or flat—folded piece does not exceed 100 yards, the entire yardage in the roll or flat—folded piece shall be examined. When the total yardage in the roll or flat—folded piece exceeds 100 yards, only 100 yards shall be examined. The cloth shall be examined for the following defects:

Any hole, cut tear, mend, burn, smash, misweave, missing yarn, or weakening defect such as smash, loose slub, shade part/bar, stamping marks, or color not as specified. Poor dye penetration, mottled, streaky, or cloudy. Objectionable odor, baggy, ridgy, or wavy cloth. Width less than specified, uneven weaving, multiple floats or skips ½ inch or more in either the warp or the filling direction of the fabric. fabric edges rolled, folded, doubled scalloped or wavy., any spot or stain fabric not clean

5.3.3 Length examination. During the yard—by—yard examination, each roll or flat—folded piece in the sample shall be examined for length. Any length found to be less than the minimum specified or more than 2 yards less than the Length marked on the ticket shall be considered a defect with respect to length

5.3.4 Shade examination. During the yard—by—yard examinations, each roll or flat—folded piece in the sample shall be examined for shade. Any roll or flat—folded piece in the sample off shade or shaded side to side, side to center, or end to end shall be cause for rejection of the entire lot represented by the sample.

5.3.5 Marking examination. During the yard—by—yard examination, each roll or flat—folded piece shall be examined for marking. The lot shall be unacceptable if two or more rolls or flat—folded pieces in the sample are not labeled, ticketed, or invoiced in accordance with the Textile Fiber Products Identification Act.

6. NOTES

(This section contains information of a general or explanatory nature that may be helpful, but is not mandatory.)

6.1 Acquisition requirements. Acquisition documents must specify the following:

- a. Title, number, and date of this specification.
- b. Color required (see 3.2).
- c. Width required (see 3.3.2).
- d. Length required if other than specified (see 3.9).
- e. Levels of put—up, preservation and packing (see 5.2).

6.2 Sample. For access to samples, address the contracting activity issuing the invitation for bids or request for proposal.

6.3 Sources of Nongovernment Documents. The following documents form a part of this specification to the extent specified herein. Unless a specific issue is identified, the issue in effect on date of invitation for bids or request for proposal shall apply.

Federal Regulations

Federal Trade Commission

Rules and Regulations Under the Textile Fiber Products Identification Act

(Application for copies should be addressed to the Federal Trade Commission, Washington, DC 20580.)

Color Association of the United States

Standard Color Card of America

(Color cards may be available from the Color Association of the United States Inc., 343 Lexington Avenue, New York, NY 10016. If color cards are not available from the Color Association, individual color samples may be obtained from the contracting activity or as directed by the contracting activity.)

American Association of Textile Chemists and Colorists (AATCC)

Chromatic Transference scale

AATCC – 8	-	Colorfastness to Crocking
AATCC – 16	-	Colorfastness to Light
AATCC – 20	-	Fiber Analysis, Qualitative
AATCC – 61	-	Colorfastness to Laundry, Home and Commercial: Accelerated
AATCC – 81	-	pH of the Water- Extract from Bleached Textiles
AATCC – 106	-	Colorfastness to Water:Sea
AATCC – 107	-	Colorfastness to Water

(Application for copies should be addressed to the American Association of Textile Chemists and Colorists, 1 Davis Dr., P.O. Box 12215, Research Triangle Park NC 27709—2215.)

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM) PUBLICATION

ASTM -D-3775	-	Fabric Count of Woven Fabrics
ASTM-D-3776	-	Mass Per Unit Area (Weight) of Fabric
ASTM-D-5034	-	Breaking Force, and Elongation of Textile Fabrics

(Application for copies should be addressed to American Society for Testing and Materials, 100 Barr Harbour Drive, West Conshohocken, PA 19428)

6.4 Sources of Supply. Manufactures Whose Products are know to meet the requirements of this CID are listed below, but these manufactures may not produce all types; however, competition is not limited to these companies.

ATD –America CO
135 Greenwood Ave.
Wyncote Pa 19095-1396

Fordham Textile Corp.
3 Terrace Circle

Great Neck NY 11021-4161

West Point-Pepperell INC
4th AVE. and 10th ST.
P.O. Box 71
West Point GA 31833

MILITARY INTERESTS:
ACTIVITIES:

Custodians:

Army- GL
Navy- NU
Air Force - 99

Review activities:

Army - IH, MD
Navy - MC
Air Force — 11, 82

CIVIL AGENCY COORDINATING

COM- NIST
GSA -FSS
JUS -FPI
VA - OSS

PREPARING ACTIVITY:

DLA - CT

(Project 8305-0791)