

INCH-POUND

A- A-59709
December 11, 2001
Supercedes
CCC-C-476H
January 29, 1990

COMMERCIAL ITEM DESCRIPTION

CLOTH, BUNTING, NYLON; AND NYLON AND WOOL

The General Services Administration has authorized the use of this commercial item description as a replacement for CCC-C-476 CLOTH BUNTING, NYLON; AND NYLON AND WOOL for all Federal agencies.

1. **SCOPE** This specification covers nylon and nylon-and-wool cloth
2. **CLASSIFICATION**. The cloth shall be in the following types and classes:

Type I-100 percent nylon filament

Class A — Lightweight

Class B — Heavyweight

Type II —75 percent nylon (staple) and 25 percent wool

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.

AMSC N/A

DISTRIBUTION STATEMENT A

Approved for public release distribution is unlimited.

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3. SALIENT CHARACTERISTICS

3.1 Materials

3.1.1 Nylon (type I only) For type I bunting the material shall be bright, high tenacity, and continuous nylon filament.

3.1.2 Nylon (type II only). For type II bunting the material shall be bright staple nylon. The material shall not contain waste, reused, nor reclaimed nylon fiber.

3.1.3 Wool (type II only). The wool top for the type II bunting shall be fleece wool, pulled wool, or any combination thereof not lower in grade than 44s U.S. Standard when tested in accordance with AATCC 20, Fiber Analysis: Qualitative. In the event of a dispute the wool grade shall be determined by the width (wedge) method. The use of noils, laps, or any other manufacturing by-product is prohibited

3.2 Standard sample. The finished cloth shall match the standard sample for shade and appearance and shall be equal to the standard sample with respect to all characteristics for which the sample is referenced when a standard sample is available.

3.3 Yarn.

3.3.1 Type I bunting.

3.3.1.1 Class A. The warp yarn for class A cloth shall be single end 70 nominal denier. The filling yarn shall be two-ply 70 nominal denier or 140 nominal denier singles.

3.3.1.2 Class B. The yarn for class B cloth shall be either 200 or 210 nominal denier single yarns in both the warp and filling.

3.3.2 Type II bunting. Yarns for type II bunting shall be a blend of 75 percent nylon staple and 25 percent wool when tested in accordance with AATCC 20, Fiber Analysis: Qualitative. A variation of plus or minus 5 percent content for either fiber will be permitted. The yarns shall be spun from combed top on the Bradford, French, or American System. The yarn shall be two-ply for both warp and filling.

3.4 Physical requirements. The bunting shall meet to the physical requirements specified in Table I when tested in accordance with the following methods. For weight the test shall be ASTM-D-3776 Mass per Unit Area (weight) of Fabric, Option A. For yarns per inch the method shall be ASTM-D-3775 Fabric Count of Woven Fabric. For Breaking Strength the method shall be ASTM-D-5034 Breaking Force and Elongation of Textile Fabrics (Grab Test), G-E or G-T.

Table I. Physical Requirements

Type	Class	Weight per sq. yard (minimum) ounces	Yarns per Inch (minimum)		Breaking Strength pounds (minimum)	
			warp	filling	warp	filling
I	A	2.5	106	76	125	155
	B	3.6	72	56	225	152
II	-	4.8	32	30	115	100

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3.4.1 Width. The width of the cloth shall be as specified in the contract or purchase order and shall be the minimum acceptable width, inclusive of selvages when woven on the fly shuttle looms and exclusive of selvages when woven on shuttleless looms. The selva for type I cloth shall be not more than 1/4 inch wide and for type II cloth the selva shall be $1/4 \pm 1/8$ inch wide

3.4.2 Weave. The body of the cloth shall be plain weave. The selvages shall be an oxford weave with two ends weaving as one. When shuttleless looms are used, the requirement for selva shall not apply.

3.5 Color. The color shall be as specified in the contract or purchase order, and either by cable numbers or names, they shall match the applicable color card or standard sample.

3.5.1 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 $2300^\circ \pm 200^\circ$ K.

3.5.2 Colorfastness. The finished cloth shall show fastness to light, fresh water, and salt water equal to the standard sample or a rating of 3-4 on the AATCC Gray Scale for change in color when tested in accordance with AATCC 16 Colorfastness to Light, OPT A, AATCC 107 Colorfastness to Water (except the time shall be one hour), and AATCC 106 Colorfastness to Water, Sea. The finished cloth shall show fastness to crocking equal to the standard sample or shall have an AATCC Chromatic Transference Scale rating of not lower than 3.5. when tested in accordance with AATCC 8 Colorfastness to Crocking, AATCC Crockmeter Method

3.6 Finish

3.6.1 Type I. The finished cloth shall have a hand equal to the standard sample.

3.6.2 Type II. The cloth shall be crabbed and sheared on both sides and have a hand equal to or better than the standard sample.

3.7 pH. The pH value of the water extract for type I cloth shall be no less than 5.0 nor more than 8.5 and the value for type II shall be no less than 4.0 nor more than 8.0 when tested in accordance with ASTM-D-2165 pH of Aqueous Extracts of Wool and Similar Animal Fibers.

3.8 Length and put-up. Unless otherwise specified in the contact or purchase order the cloth shall be furnished in continuous lengths of not less than 40 yards each. When procurement is made by the Government each length shall be put-up on full width rolls as follows. Fabrics shall be put-up in roll form only. A piece shall be considered as a continuous length, free of splices. Unless otherwise specified in the contract order, the ends of each piece shall be stamped on the back side with the word "BACK". Unless otherwise specified in the material specification, the weight of each roll shall not exceed 125 pounds except when the weight of the specified yardage in one continuous piece exceeds 125 pounds. Unless otherwise specified in the material specification, more than one piece may be put-up on a roll.

3.9 Labels. A commercial-type label is acceptable, provided that an additional printed cloth label containing the contractor's name, contract number, size and National Stock Number (NSN) is caught on the stitching of the commercial label. The commercial label shall include fiber and laundering information.

3.10 Fiber identification. Each roll shall be labeled and ticketed for fiber content in accordance with the Rules and Regulations Under the Textile Fiber Products Identification Act.

3.10.1 Wool content label (type II only). Cloth manufactured under this specification shall be labeled in accordance with the Wool Products Labeling Act.

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3.11 Workmanship. The finished cloth shall conform to the quality established by this specification.

3.12 Toxicity. The finished cloth shall not present a dermal health hazard when used as intended. The contractor must furnish information which certifies that the finished product is composed of materials which have been safely used commercially or provide sufficient toxicity data to show compatibility with prolonged, direct skin contact. At a minimum, toxicity data should include results from a primary dermal irritation study in laboratory animals and a repeated insult human patch test (Modified Draize Procedure). The latter must be conducted under the supervision of a qualified dermatologist using at least 100 free-living individuals.

4. REGULATORY REQUIREMENTS

4.1 Recycled, recovered, or environmentally preferable materials. Recycled, recovered, or environmentally preferable materials should be used to the maximum extent possible 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 Visual examination. Each roll in the sample shall be examined on the face side only. When the total yardage in the roll does not exceed 100 yards, the entire yardage in the roll shall be examined. When the total yardage in the roll exceeds 100 yards, only 100 yards shall be examined. The sample size shall be in accordance with the following:

<u>Lot size (yards)</u>	<u>Sample Size (sample unit) 1/</u>
3200 or less	10
3201 up to and including 10,000	15
10,001 and over	25

The sample shall be examined for the defects listed below.

Defects. Any hole, cut, or tear; broken or missing yarn; smash; float, mispick, harness skip, or other misweave; hitchback, stripback; open or thin place, crack (warp or filling); knot or slub; loose, slack, or tight yarns; reed mark, wrong draw; abrasion mark, bruise, tender or weak spot; embedded crease or wrinkle; selvage cut, torn, folded, rolled, slack, or tight; filling bar, coarse filling, or mixed filling; spot, stain, streak, or dirty yarn; foreign matter; shade not as specified; shading defects – side to side, side to center, or end to end; Moiré condition; finish not equal to or better than standard; offshade or uneven shading throughout piece; mottled, cloudy, streaky, or barre; overall uncleanness or soiled; baggy, ridgy, wavy, or unevenly woven; width not within established tolerances; not evenly or closely sheared on both sides (type II only); net length less than indicated on the ticket; fiber identification marking omitted; bar code omitted or not readable by scanner; human-readable interpretation (HRI) omitted or illegible; bar code not

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visible on roll; bar code causes damage to the item; any items not packaged in accordance with the contract or purchase order. Each defect shall be marked with a 1-1/2 inch long string; the string shall be inserted into the selvage opposite the defect.

1/ Not more than one roll shall be taken from any shipping container unless the number of shipping containers in the lot is less than the required number of rolls in which case all shipping containers shall be present in the sample.

5.3 Acceptance criteria. Acceptance criteria shall be as specified in the contract or purchase order with the following exception: a certificate of compliance may be acceptable as evidence that the cloth conforms to the requirements specified in paragraphs 3.1.1, 3.1.2, 3.1.3, 3.3.1.1, 3.3.1.2, 3.3.2.

6. PACKAGING

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

7. NOTES

7.1 Source of Government documents. Copies of military and Federal documents are available from:

Standardization Documents Order Desk
Bldg. 4D
700 Robbins Avenue
Philadelphia, PA 19111-5094

7.1.1 Other Government Documents

FEDERAL TRADE COMMISSION

Rules and Regulations Under The Textile Fiber Products Identification Act

(Copies may be obtained without charge from the Federal Trade Commission, Washington, DC 20580-0001).

CODE OF FEDERAL REGULATIONS

16 CFR Part 1500 - Federal Hazardous Substances Act Regulations
29 CFR Part 1910 - Occupational Safety and Health Standards
(Applications for copies of referenced documents should be addressed to U. S. Government Printing Office, Superintendent of Documents, Mail Stop: SSOP, Washington, DC 20402-9328.)

CODE OF FEDERAL REGULATIONS

Title 40, part 798.4470 (Primary Dermal Irritation)

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(This reference may be found on the Internet at www.access.gpo.gov/nara/cfr/cfr-table-search.html.)

U.S. Department Of Agriculture

Methods of Test for Grades of Wool

(Application for copies should be addresses to the U.S. department of Agriculture, Agricultural Marketing Service, Washington, DC 20402.)

Rules and Regulations Under the Wool Products Labeling Act

(Application for copies should be addressed to the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.)

7.2 Source of non-Government documents

ASTM Test Methods

(Applications for copies should be addressed to American Society For Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428.)”

AATCC Test Methods

(Applications for copies should be addressed to American Association of Textile Chemists and Colorists (AATCC), P.O. Box 12215, Research Triangle Park, NC 27709-2215.)

Principles and Methods of Toxicology, A. Wallace Hayes (editor), 1989, pp 394-396.

(Applications for copies of referenced documents should be addressed to Raven Press, 1185 Avenue of the Americas, New York, NY 10036)

7.3 Titles of non-Government Documents.

ASTM-D-2165	pH of Aqueous Extracts of Wool and Similar Animal Fibers
ASTM-D-3775	Standard Test Method for Fiber Count of Woven Fabric.
ASTM-D-3776	Mass per Unit Area (weight) of Fabric.
ASTM-D-5034	Standard Test method for Breaking Strength and Elongation of textile methods.
AATCC-8	Crocking; AATCC Crockmeter Method
AATCC-16	Colorfastness to Light
AATCC-20	Fiber Analysis: Qualitative
AATCC-106	Colorfastness to Water, Salt
AATCC-107	Colorfastness to Water

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7.4 Sources of Supply. Sources that could be used but not limited to are as follows:

Fox Rich Textiles Inc
54 Danbury RD Suite 228
Ridgefield CT 06877

Brookwood Companies INC.
Sub of the Hallwood Group INC
10 E 39 th ST
New York, New York 10016

MILITARY INTERESTS:

Custodians

Army-GL
Navy-NU
Air Force – 99

CIVIL AGENCY COORDINATING

JUS-FPI
GSA - FSS
VA-OSS
HSS - NIH

Review Activities

Army - IH
Navy – MC, SH, OS
Air –Force – 82, 11

PREPARING ACTIVITY:

DLA - CT

Project Number 8305-0795