

INCH-POUND

A-A-50186

November 18, 1988

## COMMERCIAL ITEM DESCRIPTION

## CLOTH, BUCKRAM, WOVEN AND NONWOVEN

The General Services Administration has authorized the use of this commercial item description in preference to CCC-C-438.

## 1. CLASSIFICATION

1.1 Types. The cloth shall be of the following types as specified (see 5.5).

- Type I - Resin finish
- Type II - Non-chlorine retentive resin finish
- Type III - Starch finish (3.5 - 7.5 ounces per square yard)
- Type IV - Starch finish (12.0 - 18.0 ounces per square yard)
- Type V - Nonwoven

## 2. SALIENT CHARACTERISTICS

2.1 General. The woven buckram cloth shall be made from cotton which has been carded, drawn, and spun into singles yarns for both warp and filling. The nonwoven cloth shall be all polyester or a blend of polyester and cellulose. No less than 80 percent polyester shall be used when blended with cellulose. The nonwoven web shall be saturation bonded with an acrylic type binder. The color shall be natural, bleached, or dyed as specified. Use of reused or dyed fibers is allowed. The use of dyes or substances containing elementary sulfur compounds capable of oxidation to sulfuric acid is prohibited. The dyed and finished materials shall show colorfastness to laundering, perspiration, and wet drycleaning equal to or better than the standard sample or equal to or better than a rating of "good". The finished cloth shall show colorfastness to crocking equal to or better than the standard sample or shall have an AATCC Chromatic Transference Scale rating of 3.0. Dyed and finished type V material shall also show good colorfastness to dry heat. The width of the cloth shall be as specified. The finish shall be as specified. All finished cloths shall conform to shrinkage requirements specified in table I.

2.2 Physical requirements. The finished cloth shall conform to the requirements listed in tables I and II.

AMSC N/A

FSC 8305

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

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TABLE 1. Physical requirements (woven)

Characteristics	Type I	Type II	Type III	Type IV	Type V	Test Method 1/
	Resin	Non-chlorine retentive resin	Starch	Starch	Starch	
Material:						
Cotton	--	--	--	--	--	1200
Polyester	--	--	--	--	--	1600
Weight oz/sq yd	5.5 - 7.5	4.5 - 7.5	3.5 - 7.5	12.0 - 18.0	--	5041
Yarns per inch (min.):						
Warp	40	45	40	45	--	5050
Filling	20	40	35	20	--	5050
Breaking strength						
lbs:						
Warp	75	55	45	130	--	5100
Filling	50	45	35	110	--	5100
Shrinkage (percent) max.:						
Warp	3.0	2.0	3.0	4.0	--	4.4
Filling	3.0	2.0	3.0	4.0	--	4.4
Weave	Plain	Plain	Plain	Herringbone twill	--	Visual
Colorfastness to:						
Laundrying (types I, II and V only)	Good	Good	--	--	Good	5610
Wet drycleaning	Good	Good	Good	Good	Good	5622
Perspiration	Good	Good	Good	Good	Good	5680
Crocking	3.0	3.0	3.0	3.0	3.0	5651
Dry heat (type V only)	--	--	--	--	Good	5642 2/

1/ Refers to FED-STD-191 Textile Test Methods.

2/ At 351° + 60F.

TABLE II. Physical requirements (Nonwoven)

Characteristics	Type V
Weight oz/sq yd (min.)	3.0
Breaking strength, lbs:	
Machine direction	55
Cross machine direction	40
Shrinkage (percent), max.:	
Machine direction	3.0
Cross machine direction	3.0
Construction	Wet-laid

2.3 Put-up. Unless otherwise specified (see 5.5), the cloth shall be furnished in continuous lengths of not less than 40 yards. The cloth shall be put-up in rolls.

### 3. QUALITY ASSURANCE

3.1 Certification. The contractor shall certify that the product offered meets the salient characteristics of the description and conforms to the producer's own drawings, specifications, standards and quality assurance practices. When specific quality assurance provisions are specified for any commercial characteristic, the contractor shall furnish data resulting from inspection conducted in accordance with the specific quality assurance provisions. The Government reserves the right to require proof of such conformance prior to first delivery and thereafter as may be otherwise provided for under the provisions of the contract.

3.2 Finish. Types I and II shall have an approved resin finish that provides appropriate characteristics and stiffness (see 5.2).

3.3 Laundering test procedure: The following apparatus and material are required for laundering:

- a. Automatic washing machine (see 5.3).
- b. Automatic dryer (see 5.3).
- c. AATCC Standard Detergent 124 or equivalent (see 5.4).
- d. Sufficient yardage to equal a 4-pound load.

Specimen preparation and shrinkage evaluation shall be in accordance with Method 5556 of FED-STD-191. A 4-pound load shall be washed in a machine set for high water level, warm water temperature ( $140^{\circ} \pm 5^{\circ}\text{F}$ ), and a 12-minute wash on the wash and wear cycle. The water used shall have a hardness of not greater than 50 parts per million (PPM). When the washer has filled, add 140 g of detergent. Allow the washer to operate automatically through the final

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spin cycle. Remove the specimens immediately at the end of the final spin and separate the specimens if tangled. Place the complete washed load in the dryer and dry at normal setting which generates an exhaust temperature of 140° to 160°F. Operate the dryer until the load is dry and continue tumbling for 5 minutes without heat (cool-down cycle). Remove the load immediately after the machine stops. Repeat the procedure until the load has completed five full cycles.

#### 4. PACKAGING

4.1 Packaging. The cloth shall be rolled on a convolute or spiral-wound chipboard tube. The tube shall have a smooth finish surface that will prevent the fibers of the chipboard from transferring to the cloth. Each roll of cloth, put-up as specified, shall be wrapped with 60-pound minimum basis weight kraft paper in such a way that the roll shall be wrapped so that the paper shall encircle the roll at least once with a minimum overlap of 3 inches, and the width of the paper shall be sufficient to fold over and protect the ends of the roll. Gummed paper tape, with a minimum width of 2-1/2 inches shall be applied to the overlap seam the full length of the roll and across each end.

4.2 Packing. Each wrapped roll shall be enclosed in a close-fitting polyethylene film tube with a minimum thickness of 0.004 inches or each wrapped roll shall be enclosed in bias-sewn tubing made from woven polypropylene cloth. The tube shall be secured by heat-sealing, by means of a mechanical tie, or by plastic ties with a lock-end. Alternatively, a maximum of four rolls of kraft-wrapped cloth shall be packed in a snug-fitting double-walled fiberboard container known as a double cover, and shall consist of a body or joined liner and two covers. Corrugated fiberboard with a minimum bursting strength of 500 pounds shall be used. The container shall be strapped with metallic straps not less than 1/2 by 0.020 inch or non-metallic straps not less than 7/16 by 0.030 inch.

4.3 Marking. In addition to any special marking required by the contract or purchase order, rolls and shipping containers shall be marked in accordance with MIL-STD-129. Each roll shall have a piece ticket (identification tag) affixed with a 5-ply minimum cotton string or a plastic tag hanger. The tag shall have a reinforced eyelet and shall be legibly printed, using water insoluble ink, with the following information:

Procurement Agency	Contract or Purchase Order Number
National Stock Number	Finish or Greige Mill
Item Description	Roll Number
Contractor	Lot Number
Width	Piece Number
Fiber Content	Yardage

## 5. NOTES

5.1 Intended use. The type I cloth is used as interlining in uniforms, coats, overcoats, and belts; type II is used in shirt collars; types III and IV are used in coveralls, overalls, and equipage items; and type V is used in hats, caps, coats, shirts, and waistbands.

5.2 Resin treatment. Only those resin treatments already approve by the appropriate medical service and so listed in the invitation for bids or request for proposal shall be considered acceptable for the related procurement.

5.3 Recommended apparatus. The recommended laundering and dryer apparatus for paragraph 4.4 are as follows:

a. Kenmore Automatic Washer Model 600 or similar machine. In case of dispute, the Kenmore Model 600 shall be used.

b. Kenmore Automatic Dryer Model 600 or equivalent.

5.4 Source of AATCC standard detergent. The AATCC standard detergent is available from AATCC, P.O. Box 12215, Research Triangle Park, NC 27709.

5.5 Ordering data. Acquisition documents should specify the following:

- a. Title, number and date of this document.
- b. Type of cloth required (see 2.1).
- c. Color of cloth required (see 2.1).
- d. Width of cloth required (see 2.1).
- e. When put-up is other than specified (see 2.3).

5.6 Sources of documents.

5.6.1 Source of government documents. Copies of military and Federal documents are available from:

Naval Publications and Forms Center  
5801 Tabor Avenue  
Philadelphia, PA 19120

5.6.2 Source of nongovernment association documents. Copies of non-governmental association documents are available from:

American Association of Textile Chemists and Colorists (AATCC)  
P.O. Box 12215  
Research Triangle Park, North Carolina 27709

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MILITARY INTERESTS:

Custodians

Army - GL  
Navy - NU  
Air Force - 11

Review Activities

Army - MD  
Navy - MC  
Air Force - 82, 99  
DLA - CT

CIVIL AGENCY COORDINATING ACTIVITY:

GSA - FSS

PREPARING ACTIVITY:

Army - GL

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