

INCH-POUND

A-A-50383A

March 23, 1998

SUPERSEDING

A-A-50383

November 9, 1990

COMMERCIAL ITEM DESCRIPTION

UNDERSHIRT, EXTREME COLD WEATHER, MAN'S AND WOMAN'S

The General Services Administration has authorized the use of this commercial item description for all Federal agencies.

1. **SCOPE.** This commercial item description covers the requirements for a cold weather cotton knitted undershirt for wear by both men and women personnel as part of a cold weather outfit.
2. **CLASSIFICATION.** The undershirt shall be provided in the following sizes:

X-Small (XS)	Small (S)	Medium (M)	Large (L)	X-Large (XL)	XX-Large (XXL)
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3. SALIENT CHARACTERISTICS

3.1 **Description.** The undershirt shall be a pullover type having long sleeves, wristlets, and a collarette, made with a flat seam construction (see Figure 1). When circular knit cloth is used, one or both sides may be seamless.

3.2 Material.

3.2.1 **Basic material.** The material for the undershirt shall be knitted waffle-type cloth, either circular or flat knit. The cloth shall be natural color cotton yarn with a series of broken ridges in the length and width directions and on both fabric sides thus producing a dead air pocket construction. The finished cloth shall be scoured, thoroughly rinsed to produce a soft, lofty hand, and conform to the requirements specified in Table I.

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: DPSC-FNS, 2800 South 20th Street, Philadelphia, PA 19145-5099.

AMSC N/A

FSC 8415

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

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TABLE I. Physical requirements

Characteristic	Requirements	Test method
Fiber identification	100 percent cotton	1/
Yarn size	10-14/1 c.c. (weft knit) 18-22/1 c.c. (Raschel)	1/ 2/
<u>Knit stitch (Raschel)</u>		
Weight	11.1 ± 1.0 oz./sq. yd.	ASTM-D-3776, Option C 5/
Fabric thickness	At 0.1 psi 0.08" minimum At 1.1 psi 0.06" minimum	ASTM-D-1777 3/ ASTM-D-1777 3/
Pattern repeats per 10 inches	18-22 (wale direction) 65-85 (course direction)	Visual 1/ Visual 1/
Bursting strength	100 pounds	ASTM-D-3787
Dimensional change	± 12 percent (max.) Wale/course direction	AATCC 96
Non-fibrous material	4/	ASTM-D-629, Section 9
pH	5.0 to 8.5	ATM-D-2165

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

2/ Chain setting for links:

Front Guide Bar: 4-0/2-6 (x5); 10-6/4-8 (x5)

Back Guide Bar: 10-6/4-8 (x5); 4-0/2-6 (x5)

3/ See 3.2.1.1

4/ Not to exceed 3.0 percent starch and protein content including chloroform soluble material.

5/ Samples shall be conditioned as described in ASTM-D-1776, Practice for Conditioning Textiles for Testing.

3.2.1.1 Thickness. A thickness gauge of the dead weight type equipped with a dial graduated to read directly to 0.001 inch shall be used. The presser foot shall be circular with a diameter of 1.129 ± 0.001 inches and with moving parts weighted to apply a total load of 0.60 ± 0.03 pounds per square inch to the specimen. The anvil shall be not less than 1.129 inches in diameter. The presser foot and the anvil surface shall be planed to within 0.0001 inches and shall be parallel to each other to within 0.0001 inches.

3.2 Material.

3.2.1 Wristlets and Collarete. The wristlets and collarete shall be knitted from unbleached cotton, 1x1 rib knit fabric, 20 wales and 35 courses per inch minimum, yarn size 18/1, with a minimum bursting strength of 95 pounds when tested in accordance with ASTM-D-3787.

3.2.2 Thread. The thread shall be cotton machine thread, soft finish Tex 35. The color shall be of a natural color and shall be a good match to the base cloth of the end item. The thread shall have a minimum breaking strength of 1.5 to 1.8 pounds when tested in accordance with ASTM-D-2256 with 5 determinations per sample unit. The finished thread shall have no chemical finishes or treatments other than those used on commercial threads and no finish or treatment shall be applied for the purpose of increasing breaking strength. The direction of the final twist shall be "Z". Colorfastness shall be consistent with the end item. The thread shall average not more than one full thread knit or splice in 1000 yards. Any suitable textured polyester thread may be used in place of the cotton for all sewing operations. A certificate of compliance shall be submitted for all requirements and the Government reserves the right to inspect such items to determine the validity of the certification.

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3.3 Label. 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 care instructions and fiber content.

3.3.1 Label/tag. Each item shall be individually bar-coded with a paper tag for personal clothing items. The paper tag shall be standard bleached sulfate having a basis weight of 100 pounds. The paper used for the tags shall have a smooth finish to accept thermal transfer and direct printing. The tags shall have a hole, be attached to each item by a fastener, and clearly legible and readable by a scanner. The bar coding element shall be a 13 digit national stock number (NSN). The bar code type shall be a medium/high code density, located so that it is completely visible on the item when it is folded/packaged as specified, and that it causes no damage to the item.

3.4 Measurements. The finished undershirt shall conform to the measurements in Table II.

TABLE II. Finished measurements (in inches) 1/

Size	Chest (A)	Length (B)	Sleeve length (C)	Shoulder length (D)	Wristlet length (E)	Wristlet width (F)
X-Small	12-1/2	26	23-1/4	2-3/4	3-1/2	3-3/4
Small	14-1/2	27	23-1/2	3-1/4	3-1/2	3-3/4
Medium	16-1/2	28	23-1/2	3-3/4	3-1/2	3-3/4
Large	18-1/2	29	23-3/4	4-1/4	3-1/2	3-3/4
X-Large	20-1/2	30	23-3/4	4-3/4	3-1/2	3-3/4
XX-Large	22-1/2	31	24	5	3-1/2	3-3/4
Tolerance	+ 1	+ 1	+1	+ 1/2	+ 1/4	+ 1/4

1/ For the location of A-F, refer to Figure 1.

4. REGULATORY REQUIREMENTS. The offeror/contractor is encouraged to use recovered materials to the maximum extent practicable, in accordance with paragraph 23.403 of the Federal Acquisition Regulation (FAR).

5. QUALITY ASSURANCE PROVISIONS

5.1 Product conformance. The products offered shall meet the salient characteristics of this commercial item description, conform to the producer's own drawings, specifications, standards and quality assurance practices, and be a similar product that is offered for sale in the commercial market. The Government reserves the right to require proof of such conformance.

5.2 Market acceptance criteria. The item offered, or a generic equivalent, must have been sold to the commercial market or to the Government.

5.3 Visual examination. Each undershirt shall be examined for the defects listed below.

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5.3.1 Defects. Any hole, cut, or tear; color not as specified; any part shaded; any spot or stain (outside); raw edges, open seams, thread ends not removed, or loose tension resulting in loose seams; any material defects, distorted parts or poor workmanship; any component part omitted; label missing, incorrect, or illegible; measurement of item not as specified; bar code omitted or not readable by scanner; human-readable interpretation (HRI) omitted or illegible; bar code not visible on folded, packaged item; bar code causes damage to the item; any items not packaged in accordance with the contract or purchase order.

5.4 Acceptance criteria. Acceptance criteria shall be as specified in the contract or purchase order.

6. PACKAGING

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

7.2 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 19428-2959.)

AATCC Test Methods

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

MILITARY INTERESTS:

Custodians:

Navy - NU
Air Force - 99

Review Activities:

Navy - YD, CG
Air Force - 45, 82

CIVIL AGENCY COORDINATING ACTIVITY:

GSA - FSS

PREPARING ACTIVITY:

DLA - CT

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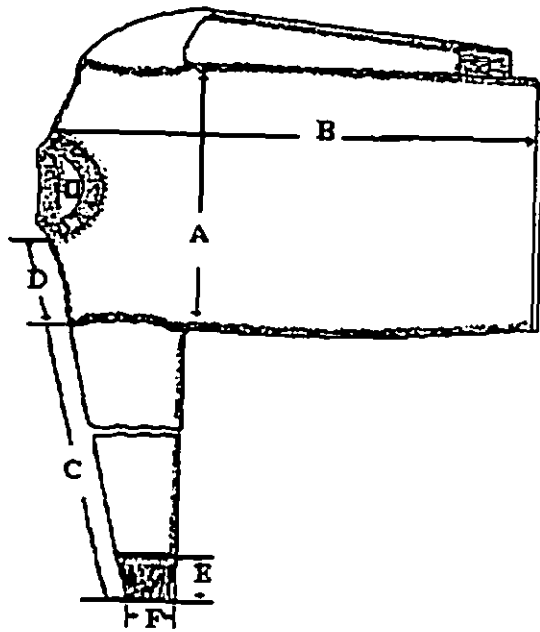


FIGURE 1

UNDERSHIRT, EXTREME COLD WEATHER, MAN'S AND WOMAN'S