

**INCH-POUND****A-A-50013E****March 12, 1998****SUPERSEDING****A-A-50013D****April 13, 1992****COMMERCIAL ITEM DESCRIPTION****UNDERSHIRT (QUARTER-SLEEVE)**

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 cotton, quarter sleeve undershirt worn by military personnel of the Department of Defense.

**2. CLASSIFICATION.** The undershirt shall be provided in following types, colors, and sizes:

Type I	Crew neck, cotton
Type II	"V" neck, cotton
Colors	White Brown 436 Olive Green 109
Sizes	XX-Small, X-Small, Small, Medium, Large, XX-Large, XXX-Large

**3. SALIENT CHARACTERISTICS**

**3.1 Description.** The undershirts shall have hemmed quarter-sleeves, a crew neck (Type I) or "V" neck (Type II) collarete, and a hemmed bottom (see Figures 1 and 2). The collarete shall be made of a double thick, 1x1 ribbed knit cloth to finish  $7/8 \pm 1/8$  inch wide. The back of the neckline and shoulders shall be reinforced. The white undershirt shall be bleached white, while the Brown 436 and Olive Green 109 undershirts shall match the standard sample for shade and appearance.

**Beneficial comments (recommendations, additions, deletions) and any pertinent data which may of use in improving this document should be addressed to: Defense Supply Center Philadelphia, Clothing and Textiles Directorate, Attn: DSCP-FNS, 2800 South 20th Street, Philadelphia, PA 19145-5099.**

AMSC N/A

FSC 8420

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

**A-A-50013E****3.2 Materials**

**3.2.1 Basic material.** The body cloth shall be made of single or 2-ply 100 percent combed cotton yarn, knitted on a circular machine with a jersey stitch. The collarette cloth shall be made of 100 percent combed cotton yarn. Both cloths shall be preshrunk and shall conform to the requirements specified in Table I.

**TABLE I. Material requirements**

<b>Characteristic</b>	<b>Requirement</b>	<b>Test method</b>
Fabric count - body cloth	30 wales per inch 36 courses per inch	ASTM-D-3887 ASTM-D-3887
Fabric count - collarette cloth	24 wales per inch 32 courses per inch	ASTM-D-3887 ASTM-D-3887
Bursting strength - body cloth	60 pounds	ASTM-D-3787
<b><u>Body and collarette cloth</u></b>		
Colorfastness to:		
Laundering	3.5 <u>1/</u> <u>5</u>	AATCC 61, 3A
Crocking	3.5 <u>2/</u>	AATCC 8
Perspiration	3.5 <u>1/</u>	AATCC 15
Light	3.5 <u>1/</u> <u>3/</u>	AATCC 16, Opt. A
<b><u>End item</u></b>		
Shrinkage (percent, max.)	12 (warp or filling)	AATCC 135 4/
Presence of labile sulfur	no more than a slight trace	FED-STD-191, TM 2020
pH	5.5 - 8.5	AATCC 81
Non-fibrous material content (max.)	6.0	ASTM-D-629
Finish	<u>6/</u>	<u>7/</u>

1/ AATCC Grey Scale for Color Change

2/ AATCC Chromatic Transference Scale

3/ Exposure period of 40 hours

4/ Washing and drying conditions, 1/IV/Aiii., 5 cycles

5/ Using 10 steel balls and 3 laundering cycles with drying after each cycle. Evaluation of the multifiber cloth for color transfer shall be made only on the cotton fiber float.

6/ No materials having a tendency to cause latent tendering or yellowing of the cloth shall be used in any of the dyeing or finishing operations. Resin finishes are prohibited.

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

**3.2.2 Thread.** The thread shall be 100 percent cotton, No. 70, 2 or 3 ply, or No. 30, 3 ply. As an alternate, a 2-ply cotton or staple polyester-covered, polyester core thread, No. 100, 2-ply may be used. The color of the thread shall be as follows:

White	Bleached white
Olive Green 109	Olive Drab, S-1, C.A. 66022 or equal
Brown 436	Khaki P-1, C.A. 66019 or equal.

The threads shall conform to the requirements specified in Table II.

**A-A-50013E****TABLE II - Thread requirements**

<b>Characteristic</b>	<b>Requirement</b>	<b>Test method</b>
<b>100 percent cotton</b>		
Weight (yds./lbs.) No. 30 No. 70	7,000 to 8,2000 14,2000 to 16,500	ASTM-D-1907 ASTM-D-1907
Breaking strength (lbs., min.) No. 30 No. 70	3.0 1.2	ASTM-D-1578 ASTM-D-1578
Colorfastness to laundering No. 30 No. 70	Class 4 <u>1/</u> <u>2/</u> Class 4 <u>1/</u> <u>2/</u>	AATCC 61 AATCC 61
<b>Cotton or staple polyester-covered, polyester core</b>		
Weight (yds./lbs.)	15,750 (min.)	ASTM-D-1907
Breaking strength (lbs., min.)	2.2	ASTM-D-1378
Colorfastness to laundering	Class 4 <u>1/</u> <u>2/</u>	AATCC 61

1/ AATCC Gray Scale for Color Change

2/ The test specimen shall consist of 2 to 6 grams of the applicable material, so held together as to form a unit for testing. The laundering cycle shall be 30 minutes with the container and contents maintaining a temperature of  $158^{\circ}\text{F} \pm 4^{\circ}\text{F}$  ( $70^{\circ} \pm 2^{\circ}\text{C}$ ).

3/ The test specimen shall consist of 2 to 6 grams of the applicable material, so held together as to form a unit for testing. The laundering cycle shall be 30 minutes with the container and contents maintaining a temperature of  $100^{\circ}\text{F} \pm 4^{\circ}\text{F}$  ( $38^{\circ} \pm 2^{\circ}\text{C}$ ).

3.3 Labels. Each undershirt shall have a commercially acceptable combination size and care label. As an alternate, the size and identification information may be on the side facing the wearer, and the care instructions on the opposite side. The label shall be placed on the inside center back just below the collarete and shall contain the following information:

Size  
Contract Number  
NSN  
100 Percent Combed Cotton  
Supplier's Name

Laundry using permanent press cycle or hand wash/warm water. Tumble dry using permanent press cycle or drip dry on rustproof hanger.

For Brown 436 and Olive Green 109 undershirts, the following information shall be included in the label:

Do not use bleach.  
Use of acne medication containing benzoyl peroxide will cause discoloration.  
Do not remove this label.

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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 and shall be attached to each item by a fastener, 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 to high code density and shall be located so that it is completely visible on the item when it is folded and/or packaged as specified and so that it causes no damage to the item.

3.4 Sizes, measurements, and weights. The minimum measurements and weight per dozen undershirts shall be as specified in Table III.

**TABLE III. Sizes, measurements, and weights**

Sizes (Chest-inches)	Min. Weight (oz./dz.) <u>1/</u>	Length (inches) <u>2/</u>	Width (inches) <u>3/</u>	Neck opening (circumference) (in.) Type I <u>4/</u>	Neck opening (circumference) (in.) Type II <u>4/</u>
XX-Small(26-28)	32	27	14	16	23-1/2
X-Small(30-32)	40	29	16	16-1/2	24
Small(34-36)	44	30	18	17-1/2	25
Medium(38-40)	50	31	20	18-1/2	26
Large(42-44)	57	33	22	19-1/2	27
X-Large(46-48)	62	33	24	20-1/4	27-3/4
XX-Large(50-52)	69	34	26	20-3/4	28-1/4
XXX-Large(54-56)	76	34	28	21-1/4	28-3/6
Tolerance		$\pm 1$	$\pm 1/2$	$\pm 1$	$\pm 1$

1/ Unpacked undershirts only

2/ Length measurement "B" shall be taken as shown on Figures 1 and 2.

3/ Width measurement "A" shall be taken as shown on Figures 1 and 2.

4/ Neck opening shall be measured by grasping collarette at center back and center front and forming a straight edge; measure and multiply by two.

**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, run or dropped stitch color not as specified; needle chew, mend, or thin area; slubby yarn; any loose knitting causing sleaziness, pulled or snagged stitches; any spot or stain (outside); foreign matter, or objectionable odor; thread ends not removed; any seam twisted, puckered or pulled; loose or tight tension; any part caught in any unrelated seam or stitching; any open seam, raw edge, runoff, skipped stitches, or broken thread resulting in any open seam; design and construction not as described; any component part missing; dimensional requirements not as specified; label missing, incorrect, or illegible; 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 (ASTM), 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:

Army - GL  
Navy - NU  
Air Force - 99

Review Activities:

Navy - MC  
Air Force - 45, 82

**CIVIL AGENCY COORDINATING ACTIVITY:**

GSA - FSS

**PREPARING ACTIVITY:**

DLA - CT

Project Number  
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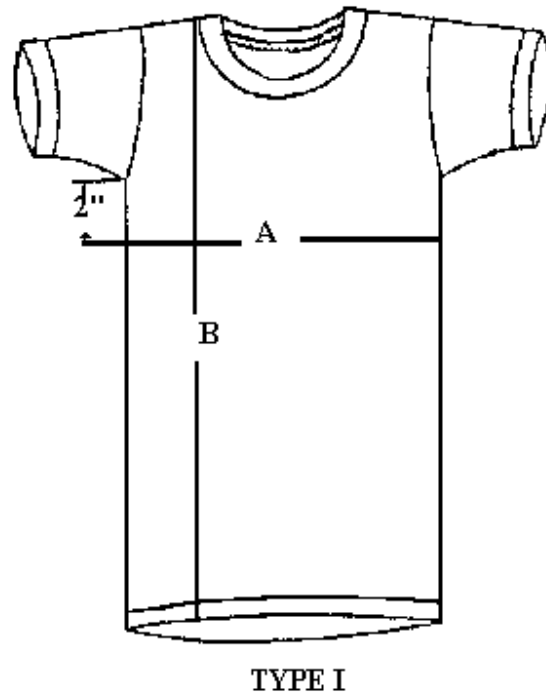


FIGURE 1. UNDERSHIRT (Quarter Sleeve)

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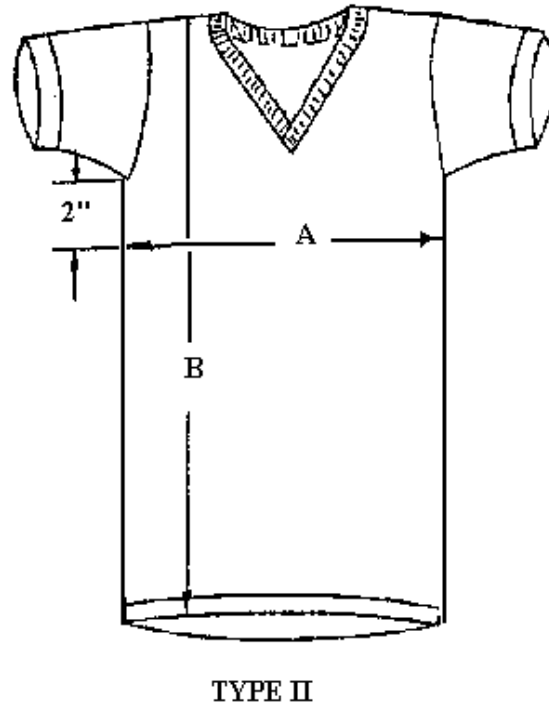


FIGURE 2. UNDERSHIRT (Quarter Sleeve)