

## PURCHASE DESCRIPTION

## SOCKS, COMBAT BOOT

The General Services Administration has authorized the use of this purchase description by all federal agencies.

1. **SCOPE.** This purchase description covers a combat boot sock intended for wear by personnel of the Department of Defense.

2. **CLASSIFICATION.** The socks are available in one type in the following classes and sizes.

2.1 Classes.

Class 1 – Marine olive drab (OD) Green

Class 2 – Black

Class 3 – Coyote 498

Class 4 – Undyed/natural

2.2 Sizes. Socks are sized according to the wearer's normal shoe size, as shown in [table I](#).

TABLE I. Sock sizes.

| Unisex sock size | National Association of<br>Hosiery Manufactures<br>(NAHM) sock size | Men's shoe size | Women's shoe size |
|------------------|---------------------------------------------------------------------|-----------------|-------------------|
| Small (SM)       | 9 to 9.5                                                            | 4 to 5.5        | 4 to 6.5          |
| Medium (MD)      | 10 to 11                                                            | 6 to 8.5        | 7 to 10           |
| Large (LG)       | 11 to 12.5                                                          | 9 to 11.5       | 10.5 to 13        |
| Extra Large (XL) | 13 to 14                                                            | 12 to 14        | N/A               |

3. **SALIENT CHARACTERISTICS.**

3.1 Description. The socks are over-the-calf length with cushioning comfort to protect the wearer from hot spots, pressure points, and blisters when wearing combat boots, and they provide graduated compression to promote blood flow from the foot with a non-slip top cuff opening. The foot of each sock includes contouring for the sock to stay in place without bunching, arch support, a gore heel and toe for improved fit, and nylon reinforcement at the heel and toe for durability. A seamless toe closure or a recessed closure with equivalent low profile is used for comfort and durability.

3.2 Basic materials. The finished socks shall contain wool at a minimum grade not coarser than US 60s (25 microns or finer), nylon, and spandex and shall not contain cotton or rayon fiber (see 3.5).

Beneficial comments, recommendations, additions, deletions, clarifications, and any other data that may improve this document should be sent to: Marine Corps Systems Command, 2200 Lester Street, Quantico, VA 22134. Since contact information can change, verify the currency of this address information using the ASSIST Online database at <https://assist.dla.mil>.

3.3 Shade. When tested in accordance with 3.4, the color shall be as specified for the class specified in 2.1. Class 4 sock shade shall be as specified in the contract or order (see 7.9).

3.4 Visual shade matching. The color and appearance of the sock shall match the standard sample when viewed using AATCC EP9, option C (see 7.4), with a primary light source simulating the spectral quality of average daylight, CIE Illuminant D65, with a color temperature of  $6,500 \pm 200$  Kelvin (K) illumination of  $100 \pm 20$  foot candles. Alternatively, the color and appearance of the sock shall match the standard sample with a primary light source simulating artificial daylight, CIE Illuminant D75, with a color temperature of  $7,500 \pm 200$  K illumination of  $100 \pm 20$  foot candles in lieu of D65. The sock shall also be a good match to the standard sample with a secondary source simulating the spectral quality of incandescent lamplight, CIE Illuminant A, with a color temperature of  $2,856 \pm 200$  K.

3.5 Performance requirements. The finished socks shall conform to the requirements specified in [table II](#) when tested as specified.

TABLE II. Sock performance requirements.

| Characteristic                                                               | Requirement  | Test method                                                                                                 |
|------------------------------------------------------------------------------|--------------|-------------------------------------------------------------------------------------------------------------|
| Fiber analysis, percent <sup>1/, 2/</sup>                                    |              |                                                                                                             |
| Wool (minimum) (see 3.2)                                                     | 52           | AATCC TM20                                                                                                  |
| Nylon (minimum)                                                              | 20           |                                                                                                             |
| Spandex (minimum)                                                            | 1            |                                                                                                             |
| Thickness, sole area (single ply), inch at 0.15 pounds per square inch (psi) | 0.16 to 0.20 | ASTM D1777                                                                                                  |
| Bursting strength, sock heel, pounds force (lbf) (minimum)                   | 85           | ASTM D6797                                                                                                  |
| Dimensional stability, percent (maximum)                                     |              | See 3.5.1                                                                                                   |
| Length: foot and leg; each                                                   | 7            |                                                                                                             |
| Width: foot and calf; each                                                   | 7            |                                                                                                             |
| Elastic recovery, top cuff opening, percent after one hour (minimum)         | 85           | See 3.5.2                                                                                                   |
| Graduated compression, millimeters of mercury (mmHg)                         |              |                                                                                                             |
| Graduated compression at ankle, average                                      | 8 to 15      | See 3.5.3                                                                                                   |
| Graduated compression at calf, percent <sup>3/</sup>                         | 65 to 85     | See 3.5.3                                                                                                   |
| Vertical wicking, inches, after 30 minutes, after 3 launderings (minimum)    | 2            | Launder per AATCC TM150, 1, IV, Ai, three cycles, where no detergent is added to the 3rd cycle (see 3.5.4). |

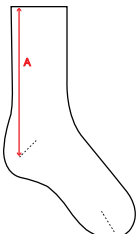
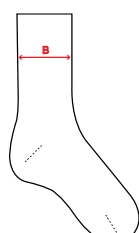
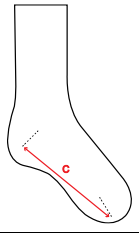
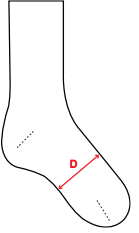
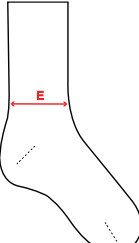
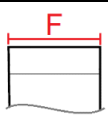
TABLE II. Sock performance requirements – Continued.

| Characteristic                                                                                       | Requirement                  |       | Test method                                                                                                                      |
|------------------------------------------------------------------------------------------------------|------------------------------|-------|----------------------------------------------------------------------------------------------------------------------------------|
| Colorfastness, rating (minimum)                                                                      | All except black             | Black |                                                                                                                                  |
| Laundering, accelerated                                                                              |                              |       | AATCC TM61, 1A, five cycles                                                                                                      |
| Shade change                                                                                         | 4                            | 3     | AATCC EP1                                                                                                                        |
| Staining                                                                                             | 4                            | 3     | AATCC EP2                                                                                                                        |
| Perspiration                                                                                         |                              |       | AATCC TM15                                                                                                                       |
| Shade change                                                                                         | 4                            | 3     | AATCC EP1                                                                                                                        |
| Crocking, dry and wet                                                                                | 4                            | 3     | AATCC TM8<br>AATCC EP8                                                                                                           |
| Appearance after repeated launderings                                                                |                              |       |                                                                                                                                  |
| Color change                                                                                         |                              |       | Launder per AATCC 150, 1, IV, Ai, 25 and 50 cycles, where no detergent is added at each 5th cycle.<br>Color change per AATCC EP9 |
| After 25 cycles (minimum)                                                                            | Rating 4, no color streaking |       |                                                                                                                                  |
| After 50 cycles (minimum)                                                                            | Rating 3, no color streaking |       |                                                                                                                                  |
| Pilling, rating (minimum)                                                                            |                              |       | ASTM D3512/D3512M                                                                                                                |
| After 25 cycles (minimum)                                                                            | 3                            | 3     |                                                                                                                                  |
| After 50 cycles, (minimum)                                                                           | 3                            | 3     |                                                                                                                                  |
| FOOTNOTES:                                                                                           |                              |       |                                                                                                                                  |
| 1/ The final fiber content shall add up to 100 percent and consist of only wool, nylon, and spandex. |                              |       |                                                                                                                                  |
| 2/ Cotton and rayon shall not be used in the sock.                                                   |                              |       |                                                                                                                                  |
| 3/ Percent of the actual measured average ankle compression.                                         |                              |       |                                                                                                                                  |
| 4/ Pilling testing shall be performed on the heel gore and toe sections only.                        |                              |       |                                                                                                                                  |

3.5.1 Dimensional stability, sock stretch method. Measure and record initial dimensions as specified below prior to laundering. [Table III](#) illustrates and describes the locations for stretching socks for dimensional stability at leg length (A), calf width (B), foot length (C), and foot width (D) with the location for measuring the sock. Measurements require recording distances at 0- and 10-pound tension before and after laundering where the difference is used to calculate dimensional stability. Socks shall be conditioned at 70±2 °F and 65±2 percent relative humidity in a relaxed condition before the dimensional measurements are taken, initially and after three launderings per AATCC TM150, options 1, IV, Ai. Calculation of the shrinkage percentage change after laundering is in accordance with the equation below:

$$\text{Percentage change} = \frac{(\text{Laundered dimension} - \text{Initial dimension})}{\text{Initial dimension}} \times 100$$

TABLE III. Methods of measurement.<sup>1/</sup>

| Location                                                                                                                                                         | Measurements                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Method Guidance                                                                                                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| Leg length (A)                                                                                                                                                   | Two leg length measurements will be taken. Both start at the last hole at the bottom of the gore line and follow a perpendicular straight line to the top of the cuff. These end points (gore line and the last course of the knit at the cuff) will be the anchor points that are secured before stretching the leg length for the dimensional stability sock stretch method (see 3.5.1). On new specimens, these end points will be also used to measure the relaxed sock length on the NAHM forms. |                                |
| Calf width (B)                                                                                                                                                   | Two measurements will be taken at the calf, which is the horizontal plane measured 30 centimeters from the center of the heel gore line. When the sock lies flat, the last wale at each side fold will be the anchor points that are secured before stretching the calf for the dimensional stability sock stretch method. The second calf measurement, on new specimens in the same location, will be the graduated compression test (see 3.5.2).                                                    |                                |
| Foot length (C)                                                                                                                                                  | The last hole at the bottom of the heel gore and last hole at the outside end of the toe gore will be the anchor points that are secured before stretching the foot length for the dimensional stability sock stretch method (see 3.5.1).                                                                                                                                                                                                                                                             |                               |
| Foot width (D)                                                                                                                                                   | The middle of the foot length will be determined by folding the toe tip over to align with the back heel edge such that it folds along a course at the foot width. The fold shall be marked and where the last wale at the top and bottom of the fold will be the anchor points that are secured before stretching the foot width for the dimensional stability sock stretch method (see 3.5.2).                                                                                                      |                              |
| Ankle compression test location (E)                                                                                                                              | The ankle test location is the horizontal plane measured 10 centimeters from the center of the heel gore line and is the plane where ankle compression is measured (see 3.5.3).                                                                                                                                                                                                                                                                                                                       |                              |
| Cuff width (F)                                                                                                                                                   | The cuff shall be flattened and the width measured with a ruler in the course direction from the fold-to-fold edges.                                                                                                                                                                                                                                                                                                                                                                                  | <br>Note: Only cuff is shown |
| FOOTNOTE:<br><sup>1/</sup> If a Y gore is used in the heel or toe construction, then the end point in each area shall be at the midway point between the Y ends. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                   |

3.5.2 Cuff stretch and elastic recovery. The sock cuff shall be tested intact on the sock in its original state to measure the cuff cross stretch and percent elastic recovery requirements specified in [table IV](#). The cuff shall be tested in accordance with MSC method 117, which utilizes ASTM D2594/D2594M, except that HIFOMACO LCS 4800 stretch device, or equal, shall be used in place of the hanger assembly. Alternately, cuff cross stretch may be measured with HIFOMACO scissor device, or equal (see 7.6). For the elastic recovery test, each cycle shall start at the unloaded opening and then be extended to 10-pound tension. At the fifth stretch cycle, the cuff shall be held extended for 10 seconds before unloading tension, then allowed to relax for 1 hour before measuring the cuff width again without tension.

TABLE IV. Cuff measurements.

| Property                                                                                                                                                                      | Measurement recorded                                | Requirement      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|------------------|
| Cuff cross stretch, centimeter                                                                                                                                                |                                                     |                  |
| Initial                                                                                                                                                                       | Initial cuff width recorded before stretch cycling  | 9.0±0.5          |
| Cuff elastic recovery, percent (minimum)                                                                                                                                      | Initial cuff width measured after 1 hour relaxation | 85 <sup>1/</sup> |
| FOOTNOTE:<br><sup>1/</sup> Calculation:<br>$\frac{\text{Initial width} - (\text{stretched width at 5th cycle} - \text{Initial width})}{\text{Initial width}} \times 100 = \%$ |                                                     |                  |

3.5.3 Graduated sock compression. The over-the-calf socks shall provide mild graduated compression measured in mmHg. Compression measurements shall comply with BS 661210, Graduated Compression Hosiery, Anti-Embolism Hosiery and Graduated Support Hosiery, using NAHM profile plates on Hosiery and Allied Trades Research Association type equipment (see 7.5). The compression measurements shall be read at the two circumference locations listed in [table II](#), using the appropriately sized socks for the profile plate used (see [table V](#)). The compression shall be reported as an average and shall meet the requirement specified in [table II](#) when tested at the circumferences specified in [table V](#), where the individual determinations shall not vary more than ±20 percent from the average.

TABLE V. Circumference measurements for compression measurements.

| Compression measurement location                                                                                                       | NAHM profile plate 11 (female size 9.5 to 10.5) | NAHM profile plate 13 (male size 12.0 to 12.5) |
|----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|------------------------------------------------|
| Ankle circumference (centimeters) <sup>1/</sup>                                                                                        | 23.2±0.5                                        | 25.0±0.5                                       |
| Widest calf circumference (centimeters) <sup>2/</sup>                                                                                  | 36.0±0.5                                        | 37.2±0.5                                       |
| FOOTNOTES:<br><sup>1/</sup> See <a href="#">table III</a> , dimension E.<br><sup>2/</sup> See <a href="#">table III</a> , dimension B. |                                                 |                                                |

3.5.4 Wicking test procedure. The wicking test procedure is used to determine the rate at which water will wick on test specimens suspended in water.

#### 3.5.4.1 Apparatus.

3.5.4.1.1 Flask. A 500-milliliter (ml) Erlenmeyer flask shall be used.

3.5.4.1.2 Straight pins. Straight pins in a length that fully spans the neck of the flask with additional length on both ends shall be used.

3.5.4.1.3 Food coloring. A food color should be used to facilitate locating the upper edge of the water level during testing.

3.5.4.2 Test procedure. Two hundred milliliters of distilled water shall be poured into Erlenmeyer flasks (prepare as many flasks as specimens to be tested). A 6- x 1-inch strip of specimens shall be cut to be tested (the 6 inch length shall be cut in the wales direction). The top edge of the strip shall be pierced (approximately 1/8 to 1/4 inch from top) with a long straight pin. The strip shall be suspended from the pin in the flask so that at least 1/2 inch is submerged. If necessary, a paperclip or other item may be attached to the bottom edge to ensure that the end of the sample remains submerged. The strip shall be removed from the flask after 30 minutes have elapsed. The water level on the strip shall be measured in inches and recorded.

3.6 Fit and finished measurements. The socks shall fit the specified NAHM board sizes and the finished measurements listed in [table VI](#). The socks shall be unpackaged, placed flat, and relaxed while conditioning for 1 hour prior at 70±2 °F and 65±2 percent relative humidity. The socks shall be measured in accordance with [table VI](#) measurement method and guidance.

TABLE VI. Finished measurements.

| Sock Characteristic                |                                         | Small  | Medium | Large  | Extra Large | Tolerance          |
|------------------------------------|-----------------------------------------|--------|--------|--------|-------------|--------------------|
| Visual fit assessment              |                                         |        |        |        |             |                    |
| NAHM board sizes – male and female |                                         | 9      | 10     | 11     | 13          | Pass <sup>1/</sup> |
|                                    |                                         | 9.5    | 10.5   | 11.5   | 14          | Pass <sup>1/</sup> |
|                                    |                                         | --     | 11     | 12     | --          | Pass <sup>1/</sup> |
|                                    |                                         | --     | --     | 12.5   | --          | Pass <sup>1/</sup> |
| Finished measurement, inches       |                                         |        |        |        |             |                    |
| A                                  | Stretched leg length; min <sup>2/</sup> | 13-1/2 | 16     | 17-1/4 | 18-3/4      | N/A                |
| B                                  | Cuff cross width; inch; initial         | 3-1/2  | 3-1/2  | 3-1/2  | 3-1/2       | ±1/4               |
| FOOTNOTES:                         |                                         |        |        |        |             |                    |
| <sup>1/</sup> See 3.6.1.           |                                         |        |        |        |             |                    |
| <sup>2/</sup> See 3.6.2.           |                                         |        |        |        |             |                    |

3.6.1 Fit assessment. Each size sock will be placed on the NAHM boards as specified. The sock shall easily slip on each form aligning the heel and toe, and fully extending the sock leg toward the knee. The sock shall be smoothed in place where the sock wales and courses run straight and perpendicular. A pass rating requires no difficulty in slipping the sock on the leg form nor visual observation of excess material or bagginess from being too big or the knit straining from being too tight. A pass requires the evaluator to be able to pinch one inch of the sock knit at the foot and leg while the sock is on the form and rate that the knit snaps back in place.

3.6.2 Leg length. After completing the visual fit assessment on each NAHM form, the stretched leg length shall be measured from the bottom of the heel gore to the top edge of the cuff opening ([table III](#), A) before removing the sock from the form. Sock length is measured when the sock leg is extended to its full length toward the knee without overstretching. The sock is overstretched if the sock leg creeps down the leg form on its own; if this happens, 10 seconds of rest shall be allotted to allow the overstretched sock length to reach a relaxed state where the sock leg does not move on the form.

3.7 Finish and pairing. The socks shall be scoured in finishing and boarded and matched in a pair where there shall be no greater than 1/2 inch difference in overall foot length and leg length between socks in a pair.

3.8 Label/markings. Sock sizes shall be small, medium, large, and extra-large and may be abbreviated as SM, MD, LG, and XL (see [table I](#)). Medium may also be abbreviated MED. The sock size shall be permanently knitted on the exterior of the cuff opening in a contrasting color that is legible at 3 feet. Two of the same sized socks from the same production lot shall be packaged as a pair with a commercial type of label containing the contractor's name, style, size, fiber content breakdown, wash/care instructions, and UPC number (see 7.9). The UPC shall be in human-readable and machine-readable formats. Laundering instructions shall state the socks can be machine washed in the normal cycle with hot water and tumble dried with hot setting.

3.8.1 Washing instructions. The socks shall maintain physical properties performance as specified in [table II](#) when washed in normal wash cycle with hot water (120±10 °F) and tumble dried hot (exhaust 155±10 °F). The socks are expected to withstand up to 50 launderings with no significant degradation in serviceability or durability.

3.9 End item dimensional examination. The socks shall be examined to verify conformance to fit and finished measurements as specified in [table VI](#). Any fit or dimension not within the specified tolerance shall be classified as a defect. The lot size shall be expressed in units of socks. The sample unit shall be one pair of finished socks. The acceptance quality limits (AQL) shall be as specified in the contract or purchase order (see 7.9).

3.10 Toxicity test. When tested as specified herein, the finished socks shall not present a health hazard and shall show compatibility with prolonged direct skin contact. Chemicals recognized by the Environmental Protection Agency as human carcinogens shall not be used. When the toxicity requirement can be demonstrated with historical use data, toxicity testing may not be required on the finishing treatments used. If dermal toxicity testing is required (see 7.9), it should be conducted in accordance with 40 CFR § 798.2250, Dermal Toxicity, and 40 CFR § 798.4100, Dermal Sensitization, which are consistent with Organisation for Economic Co-operation and Development (OECD) Guidelines for the Testing of Chemicals, Section 4, Test Nos. 404, Acute Dermal Irritation/Corrosion, and 406, Skin Sensitisation (see 7.7).

3.11 Workmanship. The socks shall conform to the quality of product established by this purchase description. The occurrence of defects shall not exceed the AQL (see 7.9).

#### 4. REGULATORY REQUIREMENTS.

4.1 Recycled, recovered, environmentally preferable, or biobased materials. Recycled, recovered, environmentally preferable, or biobased 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. PRODUCT CONFORMANCE PROVISIONS.

5.1 Product conformance. The finished socks provided shall meet the salient characteristics of this purchase description, conform to the producer's own drawings, specifications, standards, and quality assurance practices, and be the same product offered for sale in the commercial marketplace. The wool content, dimensional stability, sock stretch, and the graduated compression specified in [table III](#) may be addressed by a certificate of compliance. The government reserves the right to require proof of such conformance.

5.2 Market acceptability. The finished socks shall have been sold to the commercial market or the government. Features such as markings may be added to comply with government acquisition requirements.

5.3 Visual examination. The finished socks shall be examined for the defects listed below as defined in ASTM D3990. Sampling for inspection shall be in accordance with ASQ/ANSI Z1.4. Socks with defects in excess of the acceptance criteria (see 5.4) shall be rejected, and excessive defects in a production lot may be cause for rejection of the lot.

5.3.1 Defects.

- a. Any hole, runs, dropped stitch (including holes looping or seaming), cut, or tear
- b. Color not as specified
- c. Any part shaded, noticeable variation in size, or variation in cross stretch
- d. Non-uniform in overall appearance
- e. Not well-shaped
- f. Skew
- g. Slubby yarn
- h. Stain
- i. Shade bar or spot
- j. Rancid or bad odor
- k. Any burn or scorch
- l. Skipped stitches
- m. Bulky thread
- n. Run-offs or broken thread
- o. Any dimension not as specified
- p. Label missing, incorrect, misplaced, or illegible
- q. Measurement of item not as specified
- r. Barcode or UPC code omitted or not readable by a scanner, human readable interpretation omitted or illegible
- s. Barcode incorrect
- t. Barcode not visible on packaged item
- u. Barcode causes damage to the item
- v. Not packaged in accordance with contract or purchase order

5.4 Acceptance criteria. Acceptance criteria shall be as specified in the contract or purchase order (see 7.9).

6. PACKAGING. Preservation, packing, and marking shall be as specified in the contract or order (see 7.9).

7. NOTES.

7.1 Intended use. The socks are intended for wear with a combat boot by male and female military personnel of the Department of Defense operating in conditions above 20 °F.

7.2 Source of documents.

7.2.1 AATCC test methods. AATCC test methods are available from [www.aatcc.org](http://www.aatcc.org).

7.2.2 ASQ standards. ASQ standards are available from [www.asq.org](http://www.asq.org).

7.2.3 ASTM International standards. ASTM standards are available from [www.astm.org](http://www.astm.org).

7.2.4 Code of Federal Regulations (CFR). The CFR is available from [www.ecfr.gov](http://www.ecfr.gov).

7.2.5 NAHM sizing standard, sizing boards, and compression profile plates. The NAHM sizing standard is available from [www.legsource.com](http://www.legsource.com). NAHM sock sizing boards and compression profile plates are available from [www.manufacturingsolutioncenter.org](http://www.manufacturingsolutioncenter.org).

7.2.6 OECD guidelines. OECD guidelines are available from [www.oecd-ilibrary.org](http://www.oecd-ilibrary.org).

7.2.7 SAE standards. AMS-STD-595 is available from [www.sae.org](http://www.sae.org).

7.3 Standard samples. For access to standard samples, address the contracting activity issuing the invitation for bids or request for proposal.

7.4 Visual shade matching. In 2017, option A of AATCC EP 9 was changed to option C. NOTE: In case of confusion, the viewing geometry should be, “The specimen plane and illumination source will be parallel to each other and aligned so that the light flux is incident at the center of the specimen plane, which is set at a  $35\pm 5$ -degree angle relative to the horizontal. The observer will view the specimens at a 90-degree angle, relative to the plane of the specimens.”

7.4.1 D65 illuminant. In 2022, the U.S. Military (all services) accepted D65 as the new preferred light source for visual shade matching.

7.4.2 Shade criticality. Some items may be deemed “non-shade-critical” by the contracting agency, and alternative shade standards or information regarding shade may be specified in the contract or order (see 7.9). It is recommended that manufacturers refer to the contract or order to determine the criticality of the shade matching or alternate shade standards that are acceptable.

7.5 Sock compression testing. Compression testing follows BS 661210 Section 4 with MSC 117 modification. The following location is a known testing source:

Manufacturing Solutions Center  
301 Conover Station SE  
Conover, NC 28613.

If a supplier prefers an alternate test using BS 661210 without MSC 117 modification, the supplier should identify the circumference settings used to measure compression, which includes specifying the two circumferences used when measuring compression. The circumferences required are the ankle circumference 10 centimeters above the center gore heel and the circumference at the widest part of the calf, which requires identifying this location based upon a donned sock with proper fit.

7.6 Alternate method for cuff width. For an alternate method for cuff width, see [www.legsource.com/Hosiery\\_Consortium\\_Testing/hifomaco-scissor.html](http://www.legsource.com/Hosiery_Consortium_Testing/hifomaco-scissor.html).

7.7 Toxicity testing. OECD Guidelines for the Testing of Chemicals, Section 4, Test Nos. 404 and 406 are suggested to assess the requirement in 3.10, but other methods may be used.

7.8 Certificate of compliance. The contracting activity may select to accept a certificate of compliance for a stated requirement beyond the minimum wool content and graduated compression specified in 5.1 and [table V](#).

7.9 Ordering data. The contract or order should specify the following:

- a. Title, number, and date of this purchase description.
- b. Shade standard information (see 2.1, 3.3 and 7.4.2).
- c. Size required (see 2.2).
- d. Acceptance criteria, including AQLs (see 3.9 and 5.4).
- e. When toxicity testing is required (see 3.10).
- f. Regulatory requirements (see 4).
- g. Product conformance provisions (see 5).
- h. Marking information and UPC (see 6).
- i. Packaging requirement (see 6).

7.10 Known suppliers. An alphabetical listing of sock suppliers is provided below. Please note that this listing is representative of companies that have been evaluated, but it is not intended to be all inclusive of companies that can produce socks that could meet the requirements of this purchase description. It should also be noted that not all items available from footwear companies are Berry Amendment compliant, and compliance should be verified before ordering.

Crescent Sock Company, [www.crescent-inc.com](http://www.crescent-inc.com)

Ellsworth, [www.ellsworthsocks.com](http://www.ellsworthsocks.com)

Fox River, [www.foxsox.com/collections/tactical](http://www.foxsox.com/collections/tactical)

Legend Socks, [www.legendcompressiontactical.com](http://www.legendcompressiontactical.com)

Nester Hosiery (Farm to Feet), [www.nesterhosiery.com](http://www.nesterhosiery.com)

Serket, [www.serketUSA.com](http://www.serketUSA.com)

7.11 Use of equivalent items. Prior to using equivalent test items, fixtures, or materials, vendors should verify with the contracting agency the acceptability of the equivalent item.

7.12 Key words.

Footwear

Graduated compression

NAHM

Wool

## CONCLUDING MATERIAL

### MILITARY INTERESTS:

Custodians:

Navy – MC

Review activities:

Army – GL

Navy –CG1, NU

Air Force – 11

DLA – CT

### CIVIL AGENCY COORDINATING ACTIVITY:

GSA – FAS

Preparing activity:

Navy – MC