

**HEADQUARTERS
PHILIPPINE ARMY
OFFICE OF THE ARMY QUARTERMASTER
Fort Andres Bonifacio, Metro Manila**

PA SPECIFICATION

QM SPEC NR IC-21ACBSFU

JUL 05 2019

Interim

ARMY COMBAT BOOTS, SUEDE, FIELD USE

1. GENERAL

1.1. Scope – This document covers a flesh-out/suede, Full-grain Upper Cowhide leather type of combat boots, Olive Drab in color with nylon canvas that has a direct molded sole with a puncture resistant insole.

1.2. Grade – The finished boots shall be of the grade and quality of product prescribed by this specification.

1.3. Size – The sizes of the boots shall be as specified in TABLE I, but the ordering of the tariff sizes shall be determined by the contract.

TABLE I. SIZES

SIZE	Height (cm)	Insole Length (mm)	Vamp Width (mm)			
			Regular (R)		Wide (W)	
			Min	Max	Min	Max
5	24.0 ± 1.0	255 ± 3	164.00	168.00	171.00	175.00
5 ½	24.0 ± 1.0	258 ± 3	168.00	171.00	175.00	178.00
6	24.0 ± 1.0	260 ± 3	171.00	175.00	178.00	182.00
6 ½	24.5 ± 1.0	264 ± 3	175.00	178.00	182.00	185.00
7	24.5 ± 1.0	270 ± 3	178.00	182.00	185.00	189.00
7 ½	24.5 ± 1.0	274 ± 3	182.00	185.00	189.00	192.00
8	25.0 ± 1.0	277 ± 3	185.00	189.00	192.00	196.00
8 ½	25.0 ± 1.0	282 ± 3	189.00	192.00	196.00	199.00
9	25.0 ± 1.0	287 ± 3	192.00	196.00	199.00	203.00
9 ½	25.5 ± 1.0	292 ± 3	196.00	199.00	203.00	206.00
10	25.5 ± 1.0	296 ± 3	199.00	203.00	206.00	210.00
10 ½	25.5 ± 1.0	299 ± 3	203.00	206.00	210.00	213.00
11	26.0 ± 1.0	302 ± 3	206.00	210.00	213.00	217.00
11 ½	26.0 ± 1.0	305 ± 3	210.00	213.00	217.00	220.00
12	26.0 ± 1.0	308 ± 3	213.00	217.00	220.00	224.00
12 ½	26.0 ± 1.0	311 ± 3	217.00	220.00	224.00	227.00

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2. REQUIREMENTS

2.1. First Article – Two (2) samples of the finished combat boots submitted to the Office of Army Quartermaster shall be subjected to first article inspection in accordance with para 3.1.

2.2. Materials

2.2.1. Leather

2.2.1.1. Vamp, Outer Counter Pocket, Inside Counter Lining and Outer Eyelet Stay & Inner Eyelet Stay Lining Leather – The leather shall be Flesh-out / suede, full-grain upper cowhide leather, Olive Drab in color and shall conform with the following requirements:

Thickness, mm (Cut Parts)	
Vamp	2.0 (minimum)
Outer Counter Pocket	1.8 (minimum)
Inside Counter Lining	1.0 (minimum)
Outer Eyelet Stay	1.6 (minimum)
Inner Eyelet Stay Lining	1.4 (minimum)
Color Quality (Spectrophotometer Method) A & B	2.0 (maximum)
Water Absorption, % 30 minutes	20% (maximum)

2.2.2. Counter Material – The counter material shall be cut from impregnated material and shall conform with the following requirements:

Thickness, mm	1.8 (minimum)
Weight, g/m ²	2,200 (maximum)
Tensile Strength, kg/2.54 cm (Strip Method)	95 (minimum)
Breaking Strength, Kg (Grab Method)	
Direction A	260 (minimum)
Direction B	200 (minimum)

2.2.3. Box Toes – The box toes shall be cut from impregnated material and shall conform with the following requirements:

Thickness, mm	1.8 (minimum)
Weight, g/m ²	1,800 (maximum)
Tensile Strength, kg/2.54 cm (Strip Method)	70 (minimum)
Breaking Strength, Kg (Grab Method)	
Direction A	180 (minimum)
Direction B	165 (minimum)

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2.2.4. Fabrics

2.2.4.1. Quarter and Gusset Material - The quarters and gussets shall be nylon, olive drab in color and shall conform with the following requirements:

Thickness, mm	0.40 - 0.80
Weight, g/m ²	400 (maximum)
Breaking Strength, Kg (Grab Method)	
Warp	250 (minimum)
Filling	210 (minimum)
Thread Count/ 2.54 cm	
Warp	30 (minimum)
Filling	24 (minimum)
Yarn Size, Denier	
Warp	1,000 (minimum)
Filling	1,000 (minimum)
Type of Weave	Plain
Color Quality (Spectrophotometer Method)	2.0 (maximum)

2.2.3.2 Vamp Lining - The vamp lining shall be cut from cotton or polyester canvas and shall conform with the following:

Thickness, mm	0.40 - 1.10
Weight, g/m ²	600 (maximum)
Breaking Strength, Kg (Grab Method)	
Warp	115 (minimum)
Filling	105 (minimum)
Thread Count/ 2.54 cm	
Warp	35 (minimum)
Filling	30 (minimum)
Yarn Size, Denier	
Warp	600 (minimum)
Filling	600 (minimum)
Type of Weave	Twill
Color	Black

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2.2.3.3 Eyelet Stay Reinforcement – The eyelet stay reinforcement shall be cut from non-woven polyester/nylon fiber material.

Thickness, mm	0.40 - 0.8
Weight, g/m ²	420 (maximum)
Breaking Strength, Kg (Grab Method)	
Direction A	140 (minimum)
Direction B	130 (minimum)

2.2.3.4 Binding Tape - The binding tape for the top edge of the gusset shall be nylon, dark green in color and shall conform to the following requirements:

Thickness, mm	0.30 - 0.80
Type of Weave	Plain Double
Weight, g/linear meter	8.0 (maximum)
Breaking Strength, Kg (Grab Method)	90 (minimum)
Width, cm	1.60 – 2.00
Color Quality (Spectrophotometer Method)	2.0 (maximum)

2.2.3.5 Quarter Top Facing, Backstay and Ankle Reinforcement Tapes - The quarter top facing, backstay and ankle reinforcement tapes shall be nylon webbing. The webbing shall be Olive Drab in color and shall conform with following requirements:

	Quarter Top Facing and Backstay Tape	Ankle Reinforcement Tape
Width, cm	2.30 – 2.80	4.80 – 5.20
Thickness, mm	1.10 - 1.60	1.10 - 1.60
Breaking Strength, Kg	325 (minimum)	650 (minimum)
Thread Count/ 2.54 cm		
Warp	115 (minimum)	115 (minimum)
Filling	40 (minimum)	40 (minimum)
Yarn Size, Denier		
Warp	800 (minimum)	800 (minimum)
Filling	490 (minimum)	490 (minimum)
Type of Weave	Plain Double	Plain Double
Color Quality (Spectrophotometer Method)	2.0 (maximum)	2.0 (maximum)

2.2.3.6 Footbed Cushion/Sock Lining – The footbed cushion/removable sock lining shall be made of pre-molded high-grade cushion material with Olive Drab knitted fabric with a total thickness of 3.0 - 8.0 mm from toe to heel portion. The cushion material should be black in color with an open-cell structure design, as illustrated in Figure 3A and 3B. It should have the manufacturer's name or logo imprinted on the center heel portion. It shall fit properly to the applicable size of the boot.

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2.2.3.7 Insole Construction Assembly - The insole shall be of 2-piece construction. Top layer shall be made from a multiple layered tightly non-woven polyester/nylon fabric formed from high tensile strength and puncture resistant material. The bottom layer shall be made from Split leather insole. The two materials shall then be glued and stitched together to form the insole assembly. It shall conform with the following requirements:

Top Layer - Multiple Layered non-woven polyester/nylon fabric	
Thickness, mm	3.0 - 5.0
Weight, g/m ²	4,000 (maximum)
Puncture Resistance (ISO 20344 or ASTM F2412 Test Method)	Shall withstand a resistive force of 122.5 kgf minimum without penetration
Color	Natural or White
Bottom Layer - Split Leather Insole	
Thickness, mm	1.30 - 2.00

2.2.4 Metals

2.2.4.1 Eyelet - The eyelet shall be made of brass or aluminum, enamel coated, olive drab in color. Should have a roll setting barrel and shall conform with the following finished requirements when tested:

Outside diameter	1.19 cm -1.25 cm
Inside diameter	0.50 cm - 0.65 cm

2.2.4.2 Speed Lace Loops - The speed lace loops shall be made of brass, enamel coated and olive drab in color.

2.2.4.3 Drainage Eyelet with Washers - The drainage eyelet shall be brass, mesh eyelet olive drab in color, with a diameter head of 11.0 mm \pm 1.10 mm.

2.2.5 Outersole and Heel Rubber - The bottom assembly for both rubber outersole and heel shall have the following characteristics:

2.2.5.1 Color - The color shall be Olive Drab, non-marking, producing only a slight erasable mark on white paper.

2.2.5.2 Abrasion Resistance. - The loss in weight due to abrasion resistance shall be not more than 90 mg.

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2.2.5.3 Flex Resistance - The outersole, heel rubber and leather shall not show sign of cracks or splits and shall have no separation between the upper after a minimum of 150 hours of continuous flexing.

2.2.5.4 Bond Strength - The bond strength shall be not less than 70.0 kgs.

2.2.5.5 Hardness - The durometer hardness shall be 65 ± 10 Shore A.

2.2.5.6 Bottom Design - The bottom design shall be of the Panama style with Honeycomb traction.

2.2.5.7 Markings - The outersole shall be marked by sizes and contractors identification as shown in Figure 3C.

2.2.6 Thread, Upper Fitting - The thread for all fitting operations shall be nylon or polyester, 3-ply (minimum), olive drab with a minimum breaking strength of 5.0 Kgs.

2.2.7 Thread, Insole Stitching - The thread for stitching the insole assembly shall be natural/white in color, made of nylon or polyester, 4 ply (maximum), with a minimum breaking strength of 20.0 Kgs.

2.2.8 Lace Material - The laces should be round type braided nylon/polyester, olive drab in color, shall be reinforced with plastic tips $1.8 \text{ cm} \pm 0.3 \text{ cm}$. The minimum length of the lace shall be 160.0 cm with a breaking strength of not less than 75.0 kg.

2.2.9 Miscellaneous materials.

2.2.9.1 Fiber Shank - The shank shall be made of high-grade compressed hard fiber, with thickness of 1.90 - 2.50 mm, width of 1.40 - 2.00 cm. The length of the shank shall conform to the following requirements.

Boot Size	5 to 6.5	7 to 8.5	9 to 10.5	11 to 12½	Tolerance
Shank length in cm	10.0	10.5	11.0	11.5	± 1.5

2.2.9.2 Heel Fillers - The heel fillers shall be made of wood or other suitable material that does not affect vulcanization or proper molding of the heel. The fillers shall be heel-shaped with straight edges.

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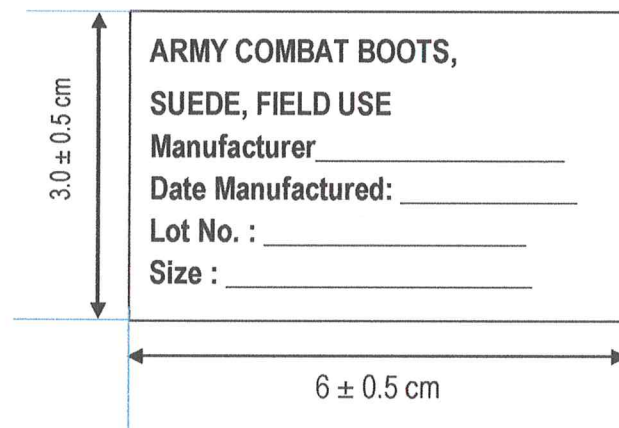
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2.2.9.3 Instruction Tag - Instruction tag, to be tied to the finished boots, shall be printed using the data provided in Illustration 1. The tag shall be printed on tag stock that is 12 cm by 16 cm and folded in the middle to form four printed pages in book form that are 12 cm by 8 cm. A punch hole shall be made in the top near the folded edge for insertion of the lace.

2.3 Construction

2.3.1 The combat boots shall be constructed using the latest technology of the manufacturer and shall conform to the design as shown in the FIGURES 1, 2, and 3.

2.3.2 Contractor's Label. - The gusset of each boot should have a contractor's label (3 ± 0.5 cm x 6 ± 0.5 cm) sewed to the inside portion and from the top center of the gussets with the correct size and width, the contractor's identification symbol, the month and year (expressed numerically) of the manufacture date, and words, "ARMY COMBAT BOOTS, SUEDE, FIELD USE". Lot number marking shall also be included. The figures and letters shall be readable and proportion. The label shall be expressed as shown in the following example; alternate formats may be used provided all the data elements are included and requirements are met:



2.3.3 Upper Stitching - The upper stitching shall be eight (8) to ten (10) stitches for every 2.54 cm.

2.3.4 The eyeletstay shall have a V-cut with a depth of 1.5 ± 0.3 cm located at the center of the eyelet and the speed lace loop as shown in Figure 3D.

2.3.5 Speed Lacing and Eyeleting – On each quarter, there shall be five (5) speed lace loops on the upper portion and three (3) eyelets at the bottom spaced evenly from blucher nose to top of quarter. There shall be two (2) drainage eyelet located just above the insole on the finished boot as illustrated in FIGURE 1.

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2.3.6 Instruction Tag – One instruction tag containing the information as shown in Illustration 1 shall be attached to each pair of boots.

2.3.7 Height – The height of the finished boot, shall be measured upward on outside from Bottom heel to top collar of boot. (see FIGURE 5)

2.3.8 Vamp Width – The vamp width of the finished boot shall be measured from sole to sole passing over the vamp at the front edge of the two eyelet stays. (see FIGURE 4)

2.4 Workmanship

2.4.1 Design – The design of the finished boots shall be essentially the same with the official sample of the Philippine Army. The boots shall be for a full lace closure boot with puncture resistant insole with a removable cushioned sock lining. The upper must be made of full grain fleshout upper leather stitched and assembled with nylon canvass quarter and gusset stitched with backstay, top and ankle reinforcement straps. The rubber outsole design shall be of the panama style with honeycomb traction.

2.4.2 Finish – The finished combat boots shall be free from defects, such as missing components, incorrect stitching patterns, unspecified materials, unmatched pairs, crooked box toe, unspecified color, wrong type or placement of hardware components, protruding points in insole, lack of puncture resistant insole, or missing instruction label. The boots shall also be free from stains or foreign matter affecting appearance.

3 VERIFICATION

3.1 First Article Inspection – The contractor shall furnish two (2) samples of the Boots for first article inspection and approval as against the bid sample. The sample shall be subjected to tests and examination to verify if the requirements in para 2.2 through 2.3 are satisfied, with referenced to the attached test parameters and classification of defects of this document.

3.2 Sampling

3.2.1 Samples of materials, components and other items entering into the manufacture of the combat boots may be taken at random from time to time by PA inspectors for the purpose of examination and test to determine compliance with the requirements of this specification.

3.2.2 Pre-production Sample – Before actual production starts, unless otherwise specified, two (2) pairs finished samples of the combat boots shall be submitted to the RDC, ASCOM, PA for verification whether the quality of the materials used conformed with the characteristics/requirements of the specification and (1) pair finished combat boots to the Office of Army Quartermaster for approval as to design, construction, workmanship, style and finish.

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4. QUALITY ASSURANCE PROVISIONS

Responsibility of Inspection – Unless otherwise specified in the contract or purchase order, the contractor is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified in the contract or purchase order, the contractor may use his own or any other facilities suitable for the performance of inspection requirements specified herein, unless disapproved by the Government. The Government reserves the right to perform any of the inspections set forth in this document where such inspections are deemed necessary to assure supplies and services conform to prescribed requirements.

5. PACKAGING AND PACKING

5.1. Packaging – Each pair of properly mated boots should then be placed on an individual shoe box with onion skin wrapped around each shoe for protection. The box should have the manufacturer's logo printed on the top. It should be accompanied by label with the details of the shoe and its origin and other important matters.

5.2. Packing on Master Box – Twelve (12) pairs of boots in the shoe box of the same size shall be packed in a corrugated carton, in suitable size. The top cover, when closed, shall be sealed with a binding tape and finally secured with nylon straps. The box shall be labeled as follows:

ARMY COMBAT BOOTS, SUEDE, FIELD USE

(Name of Contractor)

QTY: 12 pairs

SIZE: __

6. NOTES

6.1. Any point not covered by this text shall be supported by the attached illustrations as reference and guide of the contractor.

EDMUNDO S SUFICIENCIA
Colonel, QMS (GSC) PA
Chief

NOTED

CG, PA w/

DATE: JUL 05 2019

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INSTRUCTION TAG

ARMY COMBAT BOOTS, SUEDE, FIELD USE

Proper Usage, Storage and Care

- Wear with socks and footbed cushion/sock lining.
- Before wearing the boots, carefully inspect the inside of the boots for any foreign objects, insects, etc. to avoid painful and disabling bites and stings or any other injuries.
- Do not leave the shoe in a place with high temperature/humidity such as in cars or non-ventilated closets/cabinets.
- When drying the shoe, place it under the shade with high ventilation and do not force-dry it by using a machine dryer or by drying it under direct sunlight.
- Store footwear in a cool and dry place
- After use, brush away surface dirt with a soft brush, loosen laces to fully open each shoe and place in a ventilated area to dry.

Cleaning guide for natural fleshout suede upper leather

- Put small portion of water with mild detergent on a white cloth, and apply it lightly on upper to remove stains.
- Use soft white cloth to wipe extra wet surface and then air dry.
- In case of mud stains, moisten the mud stain spot with clean cold water, and apply mild and soft detergent to remove the stain. After hand wash, insert white cloth or paper in shoes, dry it under shade with high ventilation (not on direct sunlight).
- Remove all dusts in fiber neatly with a hairbrush or nylon brush.
- After drying and brush it again for finish. Enjoy the smooth supple texture on face skin.

DO NOT MACHINE WASH OR MACHINE DRY.
The shoes/footwear should
NOT BE DRIED UNDER DIRECT/EXTREME SUNLIGHT.

Instructions for use and maintenance of Boots

Illustration 1

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ARMY COMBAT BOOTS, SUEDE, FIELD USE

Inner Side View

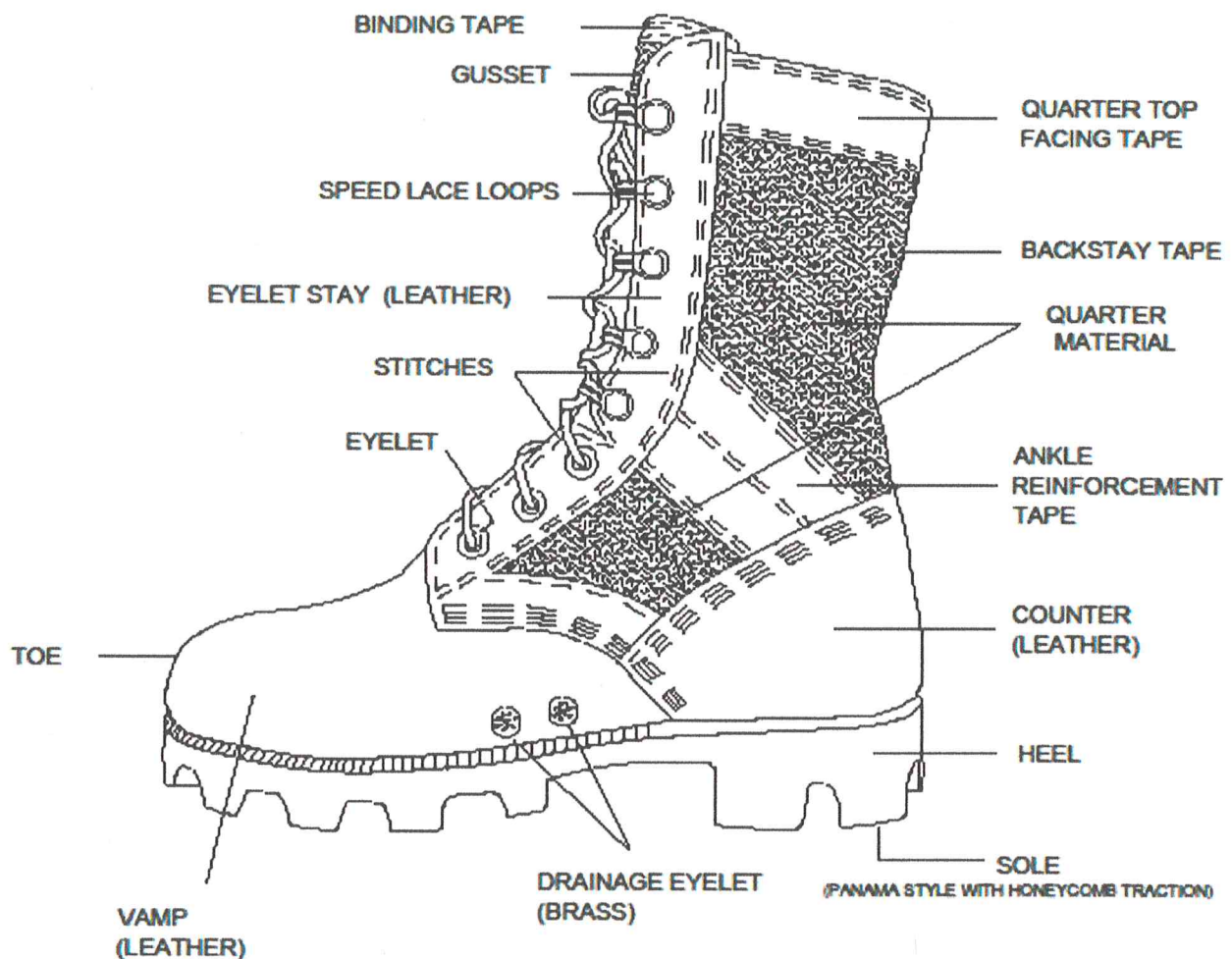


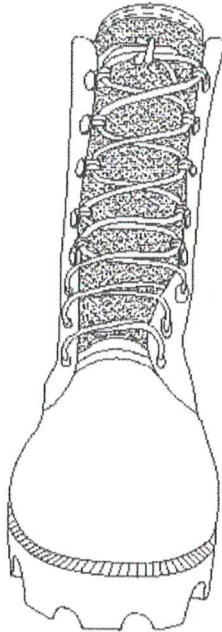
FIGURE 1

PA SPECIFICATION

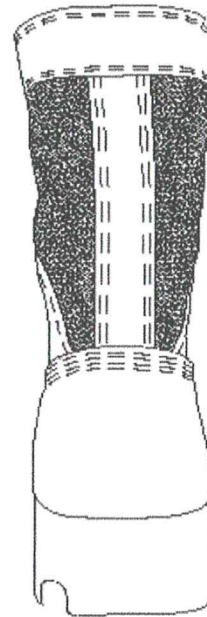
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Front View



Back View



Quarter Side View

FIGURE 2

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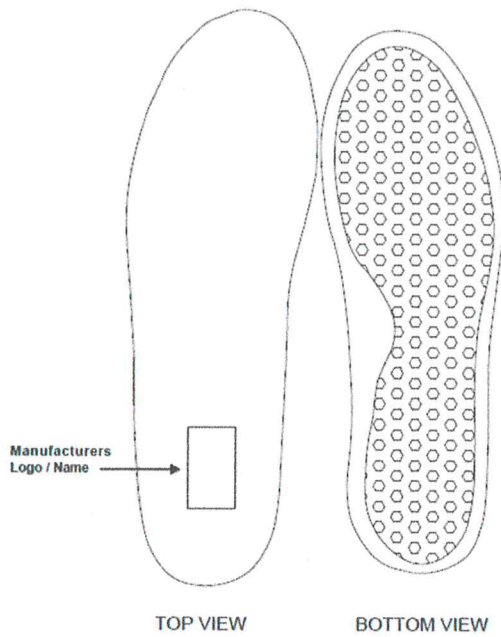
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FOOTBED CUSHION / REMOVABLE SOCK LINING

Figure 3A

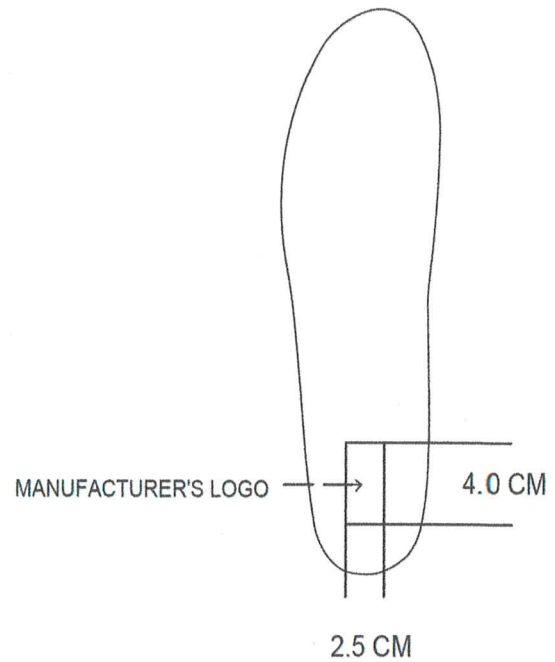
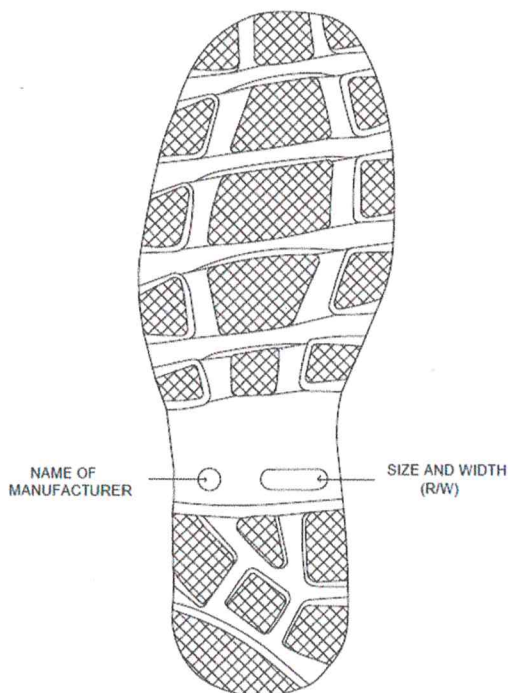


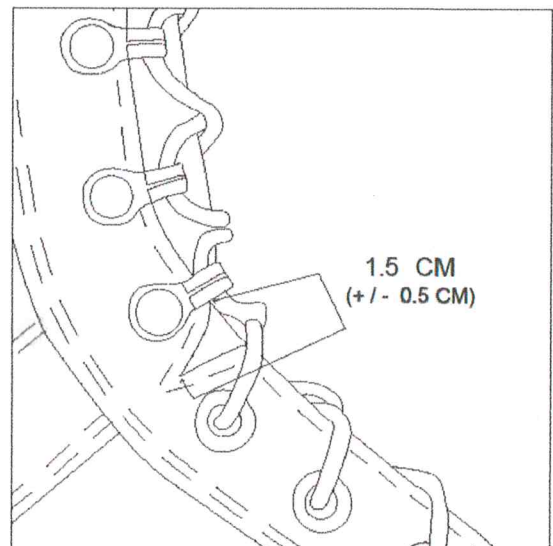
Figure 3B



PANAMA DESIGN WITH HONEYCOMB TRACTION

OUTERSOLE VIEW

Figure 3C



V-Cut Measurement

Figure 3D

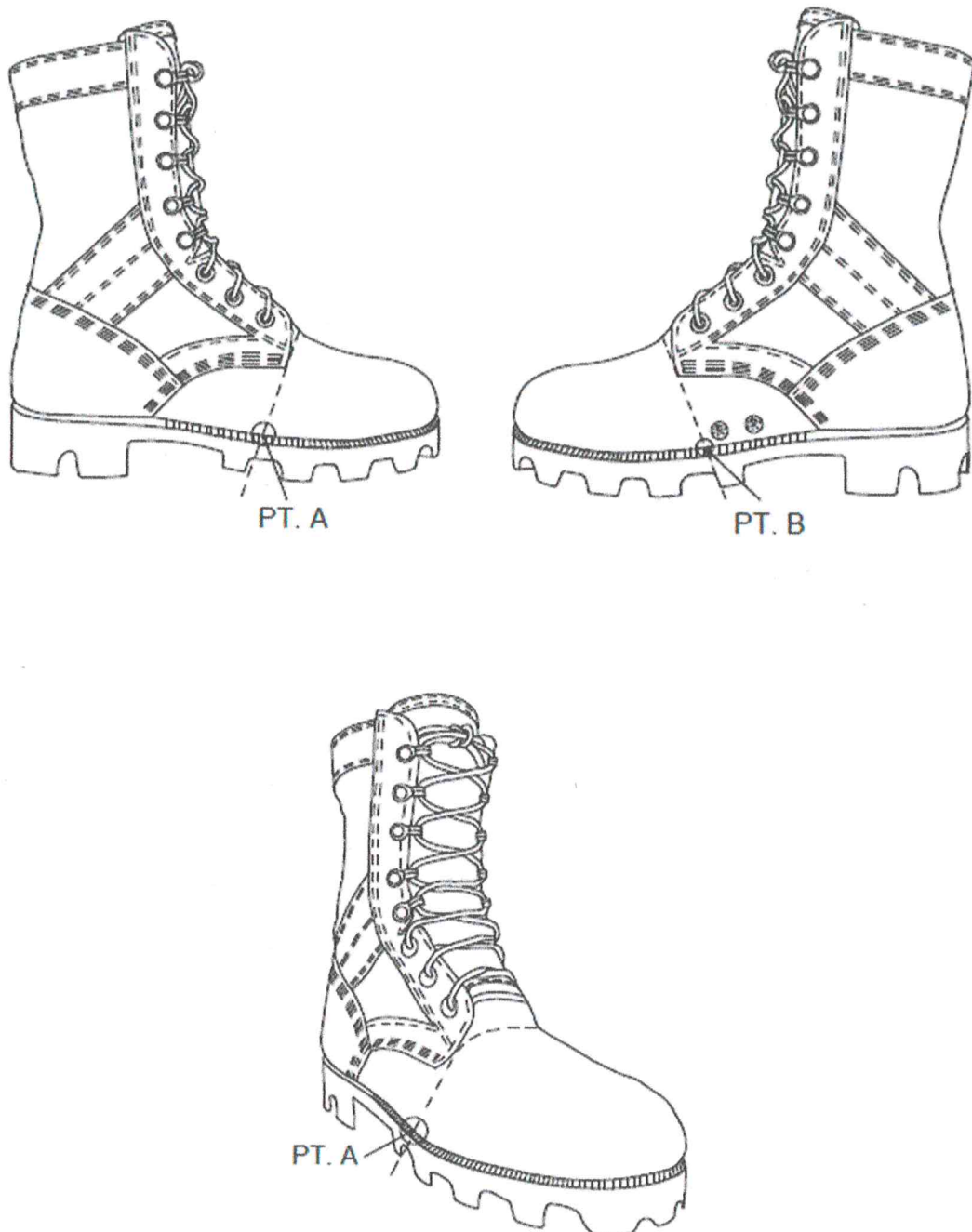
FIGURE 3

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VAMP WIDTH MEASUREMENTS
PT. A TO PT. B

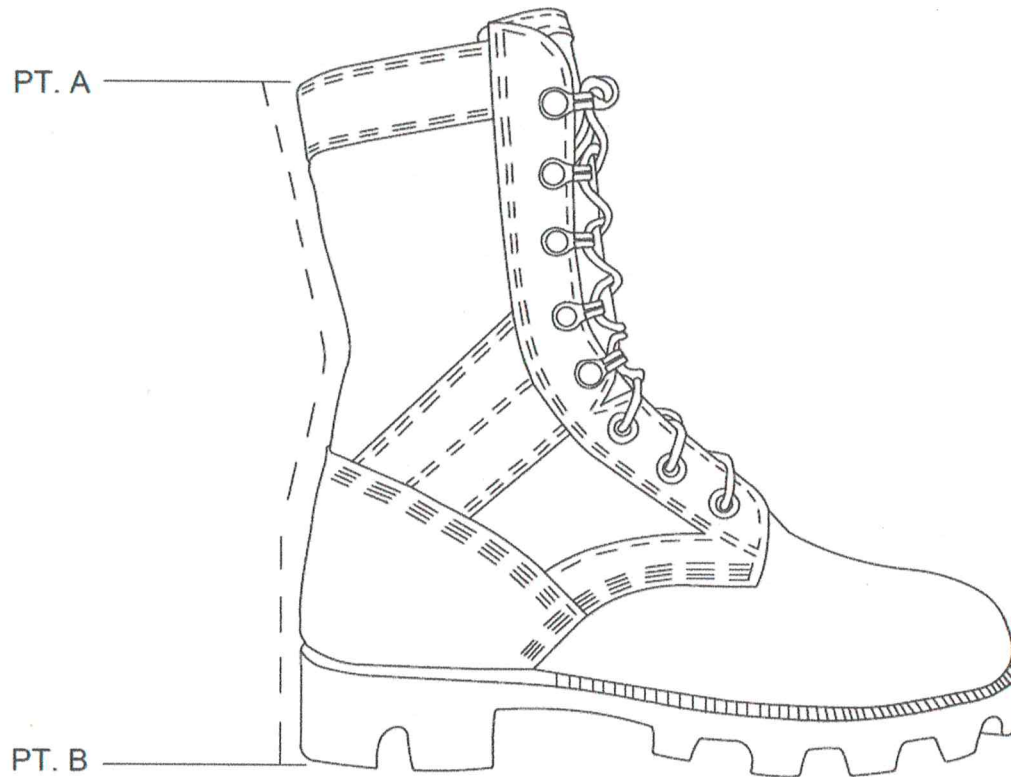
FIGURE 4

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BACK HEIGHT MEASUREMENT

FIGURE 5

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**ARMY COMBAT BOOTS, SUEDE, FIELD USE
(Actual Pictures)**



Side View



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Front View



Back View



Perspective View

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PHILIPPINE ARMY
OFFICE OF THE ARMY QUARTERMASTER
Fort Andres Bonifacio, Metro Manila**

TEST PARAMETERS

ARMY COMBAT BOOTS, SUEDE, FIELD USE

TEST PARAMETERS	QM SPEC NR IC-21ACBSFU dtd 05 July 2019	Classification of Defects	
		Major	Minor
Leather	Shall be flesh-out/Suede, full grain, upper cowhide leather	X	
Thickness.mm			
Vamp	2.0 (minimum)		X
Outer Counter Pocket	1.8 (minimum)		X
Inside Counter Lining	1.0 (minimum)		X
Outer Eyelets Stay	1.6 (minimum)		X
Inner Eyelets Stay Lining	1.4 (minimum)		X
Color	Olive Drab	X	
Color Quality (Spectrophotometric Method) A & B	2 (maximum)	X	
Water absorption, % (30 minutes)	20 (maximum)	X	
Counter Material	Shall be cut from impregnated material	X	
Thickness, mm	1.8 (minimum)		X
Weight, g/m ²	2,200 (maximum)		X
Tensile Strength, kg/2.54 cm (Strip Method)	95 (minimum)	X	
Breaking Strength, Kg (Grab Method)			
Direction A	260 (minimum)	X	
Direction B	200 (minimum)	X	
Box Toes	Shall be cut from impregnated material	X	
Thickness, mm	1.8 (minimum)		X
Weight, g/m ²	1,800 (maximum)		X
Tensile Strength, kg/2.54 cm (Strip Method)	70 (minimum)	X	
Breaking Strength, Kg (Grab Method)			
Direction A	180 (minimum)	X	
Direction B	165 (minimum)	X	
Quarter & Gusset Material	Nylon	X	
Color	Olive Drab	X	
Thickness, mm	0.40 - 0.80		X
Weight, g/m ²	400 (maximum)		X
Breaking Strength, Kg (Grab Method)			
Warp	250 (minimum)	X	
Filling	210 (minimum)	X	

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TEST PARAMETERS	QM SPEC NR IC-21ACBSFU dtd 05 July 2019	Classification of Defects	
		Major	Minor
Thread Count/ 2.54 cm			
Warp	30 (minimum)		X
Filling	24 (minimum)		X
Yarn Size, Denier			
Warp	1,000 (minimum)		X
Filling	1,000 (minimum)		X
Type of Weave	Plain		X
Color Quality (Spectrophotometer Method)	2.0 (maximum)	X	
Vamp Lining	Cut from cotton canvass or polyester canvas	X	
Thickness, mm	0.40 - 1.10		X
Weight, g/m ²	600 (maximum)		X
Breaking Strength, Kg (Grab Method)			
Warp	115 (minimum)	X	
Filling	105 (minimum)	X	
Thread Count/ 2.54 cm			
Warp	35 (minimum)		X
Filling	30 (minimum)		X
Yarn Size, Denier			
Warp	600 (minimum)		X
Filling	600 (minimum)		X
Type of Weave	Twill		X
Color	Black		X
Eyelet Stay Reinforcement	cut from non-woven polyester/nylon fiber material	X	
Thickness, mm	0.40 - 0.8		X
Weight, g/m ²	420 (maximum)		X
Breaking Strength, Kg (Grab Method)			
Direction A	140 (minimum)	X	
Direction B	130 (minimum)	X	
Binding Tape	Nylon	X	
Color	Dark Green	X	
Thickness, mm	0.30 - 0.80		X
Type of Weave	Plain Double		X
Weight, g/linear meter	8.0 (maximum)		X
Breaking Strength, Kg (Grab Method)	90 (minimum)	X	
Width, cm	1.60 – 2.00		X
Color Quality (Spectrophotometer Method)	2.0 (maximum)	X	
Quarter Top Facing and Backstay Tapes	Nylon	X	
Width, cm	2.30 - 2.80		X
Thickness, mm	1.10 – 1.60		X
Breaking Strength, kg	325 (minimum)	X	

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TEST PARAMETERS	QM SPEC NR IC-21ACBSFU dtd 05 July 2019	Classification of Defects	
		Major	Minor
Thread Count/2.54 cm			
Warp	115 (minimum)		X
Filling	40 (minimum)		X
Yarn Size, Denier			
Warp	800 (minimum)		X
Filling	490 (minimum)		X
Type of Weave	Plain Double		X
Color	Dark Green	X	
Color Quality (Spectrophotometric Method)	2.0 (maximum)	X	
Ankle Reinforcement Tape	Nylon	X	
Width, cm	4.80 – 5.20		X
Thickness, mm	1.10 – 1.60		X
Breaking Strength, kg	650 (minimum)	X	
Thread Count/2.54 cm			
Warp	115 (minimum)		X
Filling	40 (minimum)		X
Yarn Size, Denier			
Warp	800 (minimum)		X
Filling	490 (minimum)		X
Type of Weave	Plain Double		X
Color	Dark Green	X	
Color Quality (Spectrophotometric Method)	2.0 (maximum)	X	
Footbed Cushion System/Sock Lining	Shall be pre-molded high-grade cushion material with Olive Drab knitted fabric	X	
Thickness (mm)	3.0 - 8.0		X
Color	Black	X	
	The cushion material should have an open-cell structure as illustrated in Figure 3A and 3B.	X	
	Should have the manufacturer's name or logo imprinted on the center heel portion		X
	Shall be properly fit to the applicable size of the boot.	X	
Insole Construction Assembly	shall be of 2-piece construction	X	
Top Layer	Multiple Layered non-woven polyester/nylon fabric	X	
Thickness, mm	3.0 - 5.0		X
Weight, g/m ²	4,000 (maximum)		X
Puncture Resistance	Shall withstand a resistive force of 122.5 kgf minimum without penetration	X	
Color	Natural or White		X
Bottom Layer	Shall be made from Split leather insole	X	
Thickness, mm	1.30 - 2.00		X
Metals			
Eyelet	Brass or Aluminum	X	
Color	Olive Drab	X	
Outside diameter	1.19 cm – 1.25 cm		X
Inside diameter	0.50 cm – 0.65 cm		X

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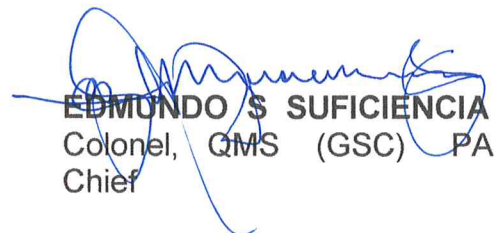
TEST PARAMETERS	QM SPEC NR IC-21ACBSFU dtd 05 July 2019	Classification of Defects	
		Major	Minor
Speed Lace Loop	Shall be made of brass and coated enamel	X	
Color	Olive Drab	X	
Drainage eyelet with washers	Brass, mesh		X
Color	Olive Drab	X	
Diameter of Head, mm	11 mm \pm 1.10 mm		X
Outsole & Heel Rubber			
Color	Olive Drab	X	
Abrasion Resistance (Loss in weight), mg	90 (maximum)	X	
Flex Resistance	Shall not show sign of cracks or splits and shall have no separation between the upper after a minimum of 150 hours continuous flexing	X	
Bond Strength, kgs	70 (minimum)	X	
Hardness, (Shore A)	Shall be 65 \pm 10	X	
Bottom Design	Shall be of the Panama style with honeycomb traction.	X	
Markings	Marked by size and contractor's identifications	X	
Thread, Upper Fitting	Nylon or Polyester	X	
No. of Ply	3 (minimum)		X
Color	Olive Drab	X	
Breaking Strength, kg	5.0 (minimum)	X	
Thread, Insole Stitching	Nylon or Polyester	X	
Color	Natural/White	X	
No. of Ply	4 (maximum)		X
Breaking Strength, kg	20.0 (minimum)	X	
Lace Material	be round type braided nylon/polyester	X	
	Shall be reinforced with plastic tips 1.8 \pm 0.3 cm		X
Color	Olive Drab	X	
Length, cm	160 (minimum)	X	
Breaking Strength, kg	75.0 (minimum)	X	
Fiber Shank	High grade compressed hard fiber	X	
Thickness, mm	1.90 – 2.50		X
Width, cm	1.40 – 2.00		X
Length, cm	Boot Size _____ (See para 2.2.9.1)		X
Heel Fillers	Shall be made of wood or other suitable material that does not affect vulcanization or proper molding of the heel		X
	Shall be heel-shaped with straight edges		X
Instruction Tag	To be tied to the finished boots		X
	Shall be printed using the data supplied in Illustration 1		
	tag shall be printed on tag stock that is 12 cm by 16 cm and folded in the middle to form four printed pages in book form that are 12 cm by 8 cm		
	A punch hole shall be made in the top near the folded edge for insertion of the lace.		
	To be tied to the finished boots		
Construction			
Insole Length, mm	Boot Size: ____ (See Table I)	X	

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TEST PARAMETERS	QM SPEC NR IC-21ACBSFU dtd 05 July 2019	Classification of Defects	
		Major	Minor
Contractor's Label	With contractor's label	X	
Dimensions, cm	$3 \pm 0.5 \times 6 \pm 0.5$		X
Contents of Label	ARMY COMBAT BOOTS, SUEDE, FIELD USE		X
	Manufacturer: _____		
	Date of Manufacture: _____		
	Lot No: _____		
	Size: _____		
Upper Stitching No. of Stitches/2.54 cm	8 – 10 stitches		X
Eyeletstay	Shall have a V-Cut	X	
	Shall have a depth of 1.5 ± 0.3 cm located at the center of the eyelet and the speed lace loop as shown in the Figure 3D		X
Speed Lacing and Eyeleting	On each quarter, there shall be five (5) speed lace loops on the upper portion and three (3) eyelets at the bottom spaced evenly from blucher nose to top of quarter	X	
Instruction Tag	Shall have One (1) Instruction Tag	X	
	Shall have two (2) drainage eyelet located just above the insole on the finished boot as illustrated in FIGURE 1	X	
Height, cm	Boot Size: _____ (See Table I) (see FIGURE 5)	X	
Vamp Width, mm	Boot Size: _____ (See Table I) (see FIGURE 4)	X	
Workmanship			
Design	Shall be for a full lace closure boot with puncture resistant insole with a removable cushioned sock lining	X	
Total Test Points		75	67


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ARMY COMBAT BOOTS, SUEDE, FIELD USE

QM SPEC NR IC-21ACBSFU dtd 05 July 2019

TEST CRITERIA

FOR POST-QUALIFICATION TEST:

Destructive Testing Criteria based on Logistic Letter Directive Number SC-07-04 dtd 25 October 2007 para 5f.

TOTAL MINOR TEST POINTS	NO. OF ALLOWABLE DEFECTS	
	MAJOR	MINOR
67	0	6

1. No major defect allowed.
2. Maximum allowable minor defect is nine & 9/10 percent (9.9%) of total minor test points **"CONDUCTED"**

FOR ACCEPTANCE TEST:

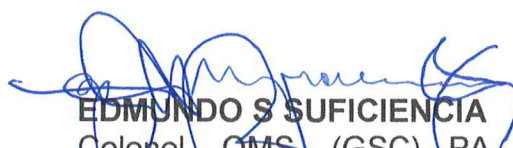
- I. Visual Inspection Criteria based on Mil Std 105E dtd 10 May 1989
 - All defects noted in 1st and 2nd sampling are cumulative.
 - In case of rejection, destructive testing will not be conducted

Classification of Defects	TABLE III-A General Inspection Level I Code Letter K Double Sampling Plan for Normal Inspection				
	Lot size 10,001 – 35,000 pcs Sample Size: 80 pcs + 80 pcs	Number of Defects			
		1 st Sampling		2 nd Sampling	
	AQL	Accept	Reject	Accept	Reject
MAJOR	6.5	7	11	18	19
MINOR	25	11	16	26	27

- II. Destructive Testing Criteria based on Logistic Letter Directive Number SC-07-04 dtd 25 October 2007 para 5f.

TOTAL MINOR TEST POINTS	NO. OF ALLOWABLE DEFECTS	
	MAJOR	MINOR
67	0	6

1. No major defect allowed.
2. Maximum allowable minor defect is nine & 9/10 percent (9.9%) of total minor test points **"CONDUCTED"**


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**ARMY COMBAT BOOTS, SUEDE, FIELD USE
QM SPEC NR IC-21ACBSFUtd 05 July 2019**

LIST OF REQUIRED PROTOTYPE SAMPLES AND SWATCH MATERIALS FOR TESTING

1. FOR POST QUALIFICATION TEST

PROTOTYPE SAMPLES

sizes RDC – Three (3) pairs, any size but the Three (3) pairs must be of same

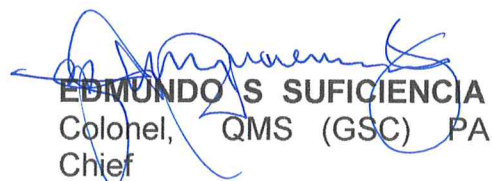
OAQM – One (1) pair

SWATCH MATERIALS (Minimum requirement)

Upper Leather	40 cm x 40 cm
Counter Material	50 cm x 50 cm
Box Toe Material	50 cm x 50 cm
Quarter and Gusset Material	1 meter full width
Vamp Lining	80 cm x 100 cm
Eyelet Stay Reinforcement	80 cm x 100 cm
Binding Tape	1.5 meters
Quarter Top Facing, Backstay	1.5 meters
Ankle Reinforcement Tapes	1.5 meters
Footbed Cushion/Sock Lining	1 pair
Insole Construction Assembly	3 pairs
Fiber shank	1 pair
Thread for Upper Fitting	10 meters
Thread for Insole Stitching	10 meters

2. FOR ACCEPTANCE TEST

Four (4) pairs – Picked at random from delivery

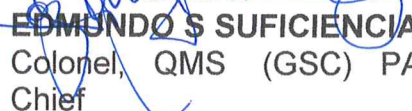

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QM SPEC NR IC-21ACBSFU dtd 05 July 2019**

VISUAL INSPECTION CHECKLIST

DESCRIPTION OF DEFECTS	CLASIFICATION OF DEFECTS
1. Packaging and Packing	
a. Each pair of boots shall be placed on an individual shoe box with onion skin wrapped around each boots for protection	Major
b. The box should have the manufacturer's logo printed on the top	Minor
c. The box label shall have the details such as size and other important matters	Minor
d. The actual boot size shall be the same from the box label	Major
e. Twelve (12) pairs of boots in the shoe box of the same size shall be packed in a corrugated carton	Major
f. Contents of the master box label shall be as specified	Major
2. Shall be Olive Drab in color	
a. Leather	Major
b. Canvas	Major
c. Webbing tapes	Major
d. Laces	Major
e. Outersole and Heel	Major
f. Thread	Major
3. Leather areas outside of the boots shall be flesh-out/suede exposed.	Major
4. Each pair shall have an instruction tag	Major
5. Each pair shall be properly matched	Major
6. Each pair of boots shall have no crooked box toes	Major
7. Each pair of boots shall have no Improper Vulcanization	Major
8. Presence of stains, foreign matter and other defects	
a. Affecting appearance	Major
b. Does not affect appearance	Minor
9. The boots design shall be the same with the official sample of the Philippine Army.	Major
10. Any component part missing	
b. Footbed Cushion/Sock Lining	Major
c. Speed lace loops	Major
d. Eyelets	Major
e. Drainage eyelets	Major
11. Missing contractor's label size	
a. Gusset portion	Major
b. Outersole marking	Minor


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