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

TEST PARAMETERS

ARMY COMBAT BOOTS, SUEDE, URBAN USE

JUL 05 2019

TEST PARAMETERS	QM SPEC NR IC-21ACBSUU 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/m²	2,200 (maximum)		X
Tensile Strength, kg/2.54 cm (Strip Method)	95 (minimum)	X	
Breaking Strength, Kg			
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/m²	1,800 (maximum)		X
Tensile Strength, kg/2.54 cm (Strip Method)	70 (minimum)	X	
Breaking Strength, Kg			
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/m²	400 (maximum)		X
Breaking Strength, Kg			
Warp	250 (minimum)	X	
Filling	210 (minimum)	X	

TEST PARAMETERS	QM SPEC NR IC-21ACBSUU 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/m²	600 (maximum)		X
Breaking Strength, Kg			
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/m²	420 (maximum)		X
Breaking Strength, Kg			
Direction A	140 (minimum)	X	
Direction B	150 (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	
Thread Count/2.54 cm			
Warp	115 (minimum)		X
Filling	40 (minimum)		X
Yarn Size, Denier			
Warp	800 (minimum)		X
Filling	490 (minimum)		X

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		Major	Minor
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 (3) three-piece/layered construction	X	
First/Top Layer	Shall be black rubber cushion heat bonded with a white non-woven polyester or nylon fiber material	X	
Thickness, mm	3.0 - 7.0		X
Breaking Strength, Kg			
Direction A	170 (Minimum)	X	
Direction B	145 (Minimum)	X	
Weight, g/m²	1,200 (maximum)		X
Second Layer	Shall be made of natural or white multi-layered polyester or nylon fabric	X	
Thickness, mm	3.0 - 5.0		X
Weight, g/m²	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 of a white non-woven fiber material made of polyester or nylon	X	
Thickness, mm	0.50 - 1.20		X
Breaking Strength, Kg			
Direction A	150 Kg (Minimum)	X	
Direction B	110 Kg (Minimum)	X	
Weight, g/m²	400 (Max)		X

TEST PARAMETERS	QM SPEC NR IC-21ACBSUU dtd 05 July 2019	Classification of Defects	
		Major	Minor
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
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 ± 1.10 mm		X
Outsole & Midsole Assembly	Shall be made of two (2) piece material. Outersole shall be made of high-grade rubber and the midsole shall be made of compressed and molded ethylene-vinyl acetate (EVA)	X	
Color	Light Green	X	
Abrasion Resistance, 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	40 (minimum)	X	
Hardness, (Shore A)	65 ± 10	X	
Midsole Hardness (Tecklock)	65 ± 10		X
Bottom Design	Shall be of the Panama style with honeycomb traction.	X	
	With toe and heel stitch provisions		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	
Thread, Outersole Lock Stitching	Nylon or Polyester	X	
Color	Olive Drab	X	
No. of Ply	2 (minimum)		X
Breaking Strength, kg	20.0 (minimum)	X	
Thread, Double Outersole Lock Stitching	Nylon or Polyester	X	
Color	Olive Drab	X	
No. of Ply	2 (minimum)		X
Yarn Size, Denier	1,500 (minimum)		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 ± 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

TEST PARAMETERS	QM SPEC NR IC-21ACBSUU dtd 05 July 2019	Classification of Defects	
		Major	Minor
Length, cm	Boot Size _____(See para 2.2.9.1)		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	
Contractor's Label	With contractor's label	X	
Dimensions, cm	3 ± 0.5 x 6 ± 0.5		X
Contents of Label	ARMY COMBAT BOOTS, SUEDE, URBAN 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	
	Shall have two (2) drainage eyelet located just above the insole on the finished boot as illustrated in FIGURE 1	X	
Instruction Tag	Shall have One (1) Instruction Tag	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	The design of the finished boots shall be essentially the same with the official sample of the Philippine Army	X	
Total Test Points		**87**	**73**

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