

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

PA SPECIFICATION

QM SPEC NR IC-21PARSB

JUL 05 2019

Interim

PHILIPPINE ARMY RUBBER SHOES, BLACK

1. GENERAL

1.1. Scope – This document covers one (1) type of rubber shoes, black for use of military personnel of the Philippine Army.

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

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

TABLE I. SIZES

Size	Length (mm)	Overall Weight, g (maximum)	Heel Height (mm)
5	230.0 ± 3	390	61 – 75
5 ½	235.0 ± 3	420	61 – 75
6	240.0 ± 3	440	66 – 71
6 ½	245.0 ± 3	470	66 – 71
7	250.0 ± 3	490	66 – 71
7 ½	255.0 ± 3	510	72 – 78
8	260.0 ± 3	530	72 – 78
8 ½	265.0 ± 3	590	72 – 78
9	270.0 ± 3	630	72 – 78
9 ½	275.0 ± 3	680	72 – 78
10	280.0 ± 3	770	72 – 78
10 ½	285.0 ± 3	850	72 – 78
11	290.0 ± 3	920	79 – 85
11 ½	295.0 ± 3	940	79 – 85
12	300.0 ± 3	980	79 – 85
12 ½	305.0 ± 3	1,020	86 – 92
13	310.0 ± 3	1,050	86 – 92

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2. REQUIREMENTS

2.1. First Article – Two (2) samples of the finished rubber shoes 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 – The leather for the toe cap, toe cap underlay, front eyelet-stay, side guard eyelet-stay, and back tab shall be Polyester/Nylon Fiber Reinforced Synthetic Leather (PFRSL/NFRSL), the color must be black and shall conform with the following requirements:

Thickness (mm)	1.9 (maximum)
Weight (g/m ²)	900 (maximum)
Abrasion Resistance, mg (loss in weight @ 5,000 cycles)	40 (Maximum)
Tensile Strength (kg)	
Direction A	50 (minimum)
Direction B	40 (minimum)

2.2.2. Basic Material - The vamp, quarter, side guard, outside collar, back counter and tongue shall be made of breathable mesh fabric. The mesh fabric shall be two-layered laminated material. Top layer shall be made of either nylon, polyester or olefin mesh. The bottom layer shall be made of either nylon, polyester or olefin knitted fabric. The color shall be black. It shall conform with the following requirements:

Thickness (mm)	2 - 4
Weight (g/m ²)	500 (maximum)
Bursting Strength (kg/cm ²)	20.00 (minimum)

2.2.3. Back Tab Counter – The back tab counter is composed of three (3) parts: namely the gray reflectorized leather material; black mesh material made of nylon, polyester or olefin; and bordered by a black synthetic leather. The back counter must contain the brand/manufacturers logo/name.

2.2.4. Tongue Loop – The tongue loop shall be nylon, polyester or olefin webbing, black in color. The tongue loop shall have a width of 10.5 ± 2.5 mm and a thickness of 0.7 ± 0.2 mm with a minimum breaking strength of 45 kgs.

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2.2.5. Tongue Lining and Inside Collar – The tongue lining and the inside collar shall be made of three-layered laminated material. Top layer shall be made of either nylon, polyester or olefin knitted fabric. The second layer shall be made of 2mm to 4mm gray thick foam, while the third layer shall be made of either nylon, polyester or olefin knitted fabric. The tongue lining and inside collar shall conform with the following requirements:

Thickness (mm)	2 - 6
Weight (g/m ²)	600 (maximum)
Bursting Strength (kg/cm ²)	20 (minimum)

2.2.6. Eyeletstay Reinforcement – The eyeletstay reinforcement shall be made of either nylon, polyester or olefin gray non-woven material and shall conform with the following requirements:

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)

2.2.7. Eyeletstay Lining – The eyeletstay lining shall be made black woven nylon, polyester or olefin fabric and shall have a thickness of not more than 1.0mm.

2.2.8. Toe Cap Reinforcement – The toe cap reinforcement shall be made of black woven cotton/polyester fabric and shall conform with the following requirements.

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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2.2.9. Foam – The inside collar foam shall be white with 7.0 to 11.0 mm thickness. The tongue foam shall be gray with 3.0 to 6.0mm thickness.

2.2.10. Counter – The counter shall be made of pre-formed plastic or thermoplastic sheet. The counter shall have a thickness of 1.0 mm to 2.0 mm.

2.2.11. Insole – The insole shall be made of three-layered laminated material. Top layer shall be made of either nylon, polyester or olefin knitted fabric. The second layer shall be made of 3.0 to 5.0 mm white thick foam while the third layer shall be made of either nylon, polyester or olefin non-woven material. The material for the insole shall conform with the following requirements:

Thickness (mm)	4 - 7
Weight (g/m ²)	650 (maximum)
Breaking Strength, Grab Method (kg)	
Warp	150 (minimum)
Filling	110 (minimum)

2.2.12. Footbed Cushion or Sock Lining – The footbed cushion or sock lining shall be 3.0 to 8.0 mm black pre-moulded cushion material laminated with either nylon, polyester or olefin black knitted fabric. The size of footbed cushion or sock lining shall properly fit to the applicable size of rubber shoes.

2.2.13. Midsole – The midsole shall be black compressed and molded material. It shall be a (1) one-piece midsole.

2.2.14. Outersole and Heel – The rubber outersole and heel shall be molded and shaped with traction design. It shall be made of high abrasive resistant and durable rubber. The traction design must conform with the attached illustration. The outersole must be (1) one-piece black outersole. The outersole shall have the following general characteristics:

2.2.14.1. Abrasion resistance – The loss in weight due to abrasion resistance shall be not more than 100.00 milligrams.

2.2.14.2. Flex resistance – The rubber outersole and all the uppers shall not show sign of cracks or splits after a minimum of 200 hours continuous flexing.

2.2.14.3. Bond strength – The bond strength shall be 50.0 kg (minimum).

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2.2.14.4. Outersole Traction Design - The outsole traction design must follow and conform to the illustrations and drawing that this specification has prescribed.

2.2.14.5. Hardness – The durometer hardness shall be 60 ± 10 Shore A.

2.2.15. Lace – The lace shall be black, with oval shape and made of either nylon, polyester or olefin woven cord, 5.0 to 8.0 mm wide and provided with 1.8 cm (minimum) long plastic reinforced tips. The length of each lace shall be 124 cm (minimum) and shall have a breaking strength of not less than 90.0 kg.

2.2.16. Thread, Upper Fitting – The thread for sewing shall be nylon or polyester, 3-ply (maximum), 850 denier (maximum), black in color, with a minimum breaking strength of 5.0 Kgs.

2.1.1 Thread, Insole Stitching – The Insole thread shall be made of nylon or polyester, 4 ply (maximum), 2,700 denier (maximum), white/natural in color with a breaking strength of not less than 20.0 Kgs.

2.2 Construction

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

2.3.3 Eyeleting – There shall be seven (7) eyelet holes on each eyelet stay spaced evenly from blucher nose to side reinforcement. (see Figure 1)

2.3.4 Side Guard, Tongue and Back Tab Logo – The rubber shoes must have the brand/manufacturer's marking/logo sewed/stamped/laminated/printed on the shoe. The outer and inner side of the shoes must have a brand/manufacturers logo on each shoe. The tongue and the back tab must also have a marking/logo. (see Figure)

2.3.5 Outersole and Midsole Brand/Manufacturers Marking/Logo – The outersole must have a brand a brand/manufacturers logo on the bottom heel part and toe part of the outsole. (see Figure)

2.3.6 Back Tab – The back tab shall be made of black leather with gray reflective leather material and black mesh fabric, set and sewed. The back tab must have the brand or manufacturer's logo sewed/stamped/laminated. (see Figure)



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2.3.7 Tongue Size Label – The label shall be sewed or laminated on the inside top center portion of the tongue. The contents of label shall be imprinted or stenciled on a cloth with indelible ink or by heat transfer of equal fastness. The label must contain the size of the rubber shoes.

2.4 Workmanship

2.4.1 Design – The design of the finished rubber shoes shall be essentially the same with the official sample of the Philippine Army. The rubber shoes shall be a full lace closure and black mesh vamp, quarter, side guard, outside collar, back counter and tongue. The other parts made of black synthetic leather are toe cap, toe cap underlay, front eyelet-stay, side guard eyelet-stay, and the back tab will be black and reflectorized leather with black mesh material. The bottom part consists of (1) one-piece black midsole and (1) one-piece black outersole with traction design

2.4.2 Finish – The rubber shoes shall be clean, well finished and free from any defects or blemishes, which may affect its appearance or serviceability. Overall workmanship shall be the best known to the trade. Poor quality of sewing and workmanship shall be sufficient ground for rejection of the finished article.

3 VERIFICATION

3.1 First Article Inspection – The contractor shall furnish two (2) samples of the rubber shoes 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 rubber shoes 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 rubber shoes 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 rubber shoes 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

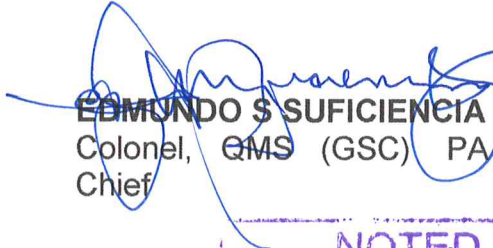
5.1. Packaging – Each pair of rubber shoes should then be placed on an individual shoe box with onion skin wrapped around each shoe for protection. The box should have the manufacturer’s logo printed on the top. It should be accompanied by label with the details of the shoe and its origin and other important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

5.2. Packing on Master Box – Twelve (12) pairs of rubber shoes 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 RUBBER SHOES, BLACK
(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

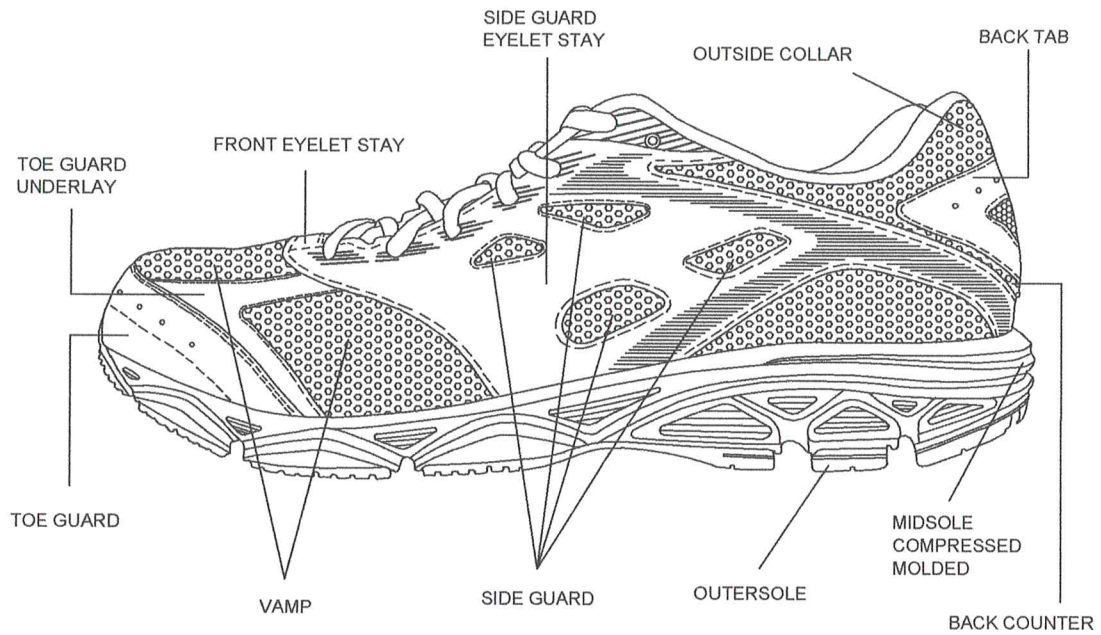
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DATE: **JUL 05 2019**



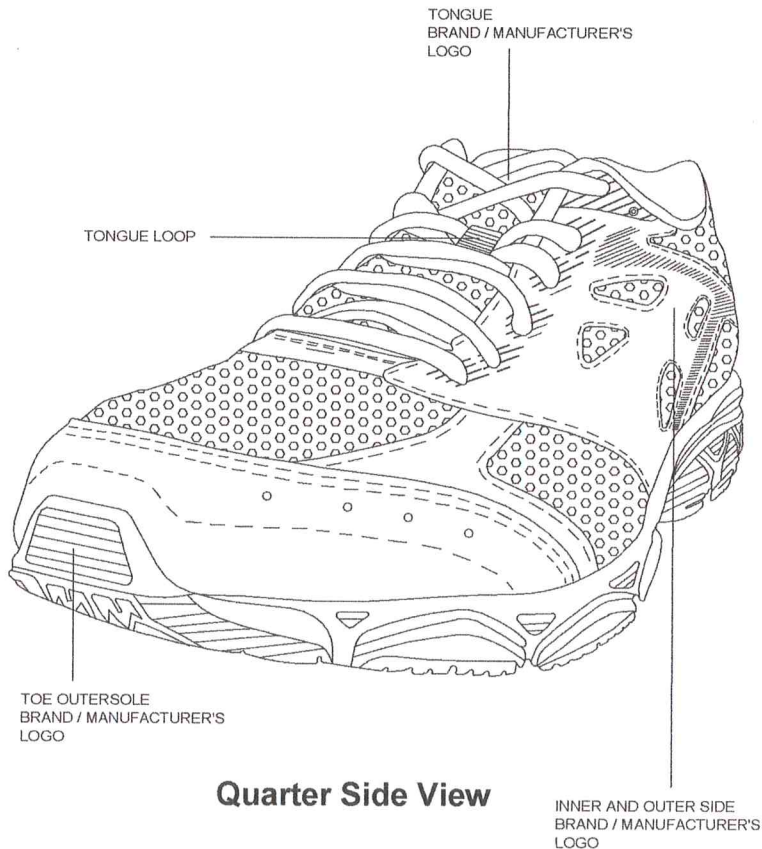
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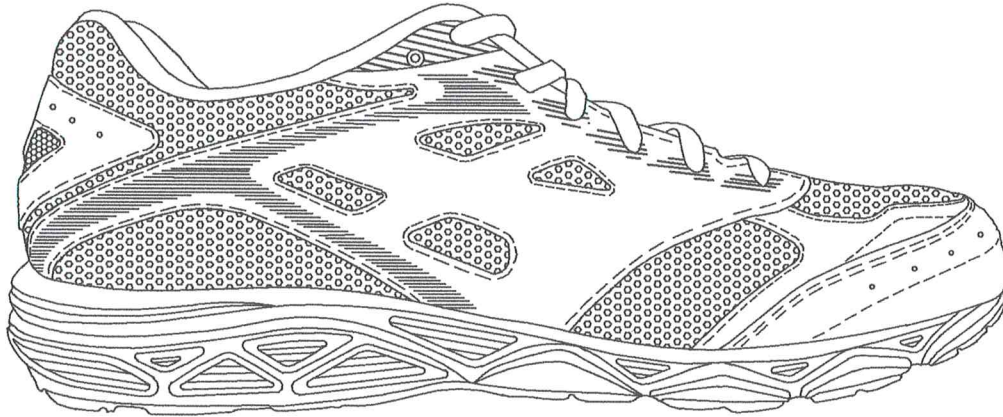


Outer Side View

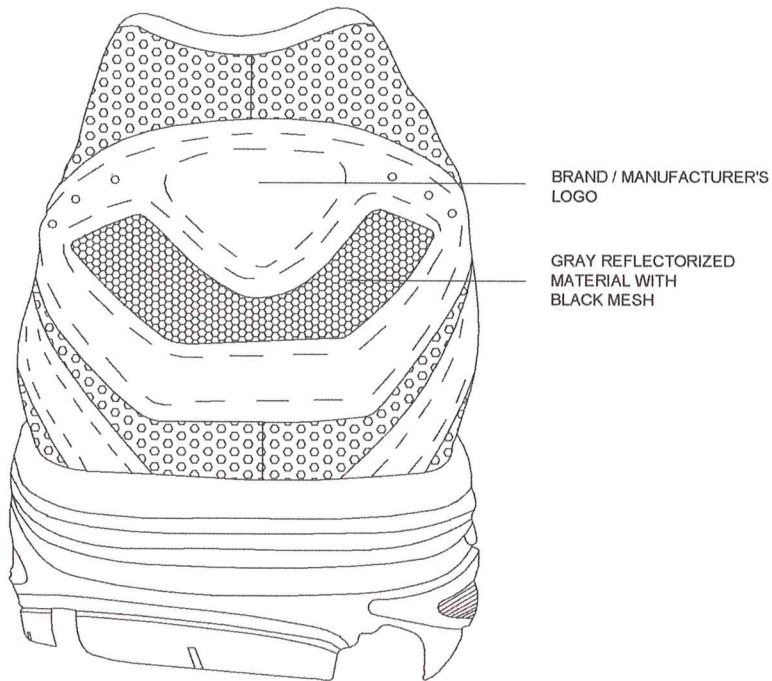


Quarter Side View

FIGURE 1



Inner Side View



Back View

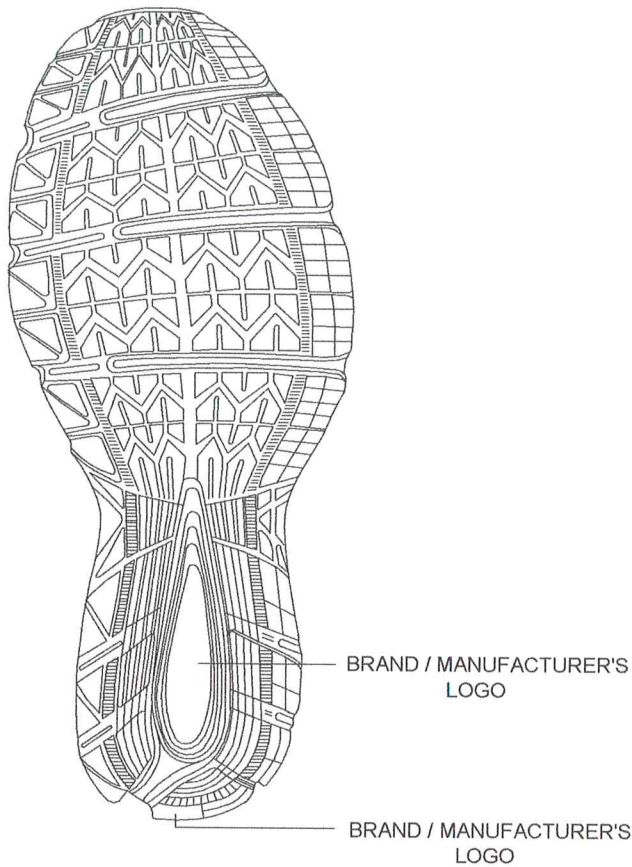
FIGURE 2

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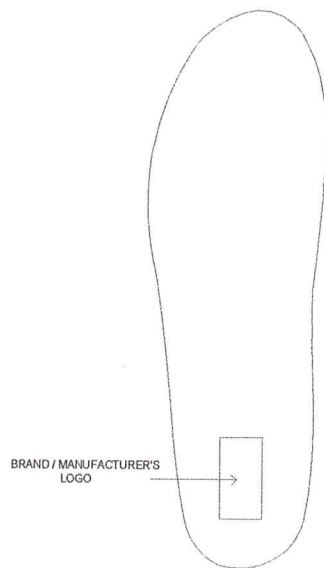
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Outer Sole View



Footbed Cushion or Sock Lining

FIGURE 3