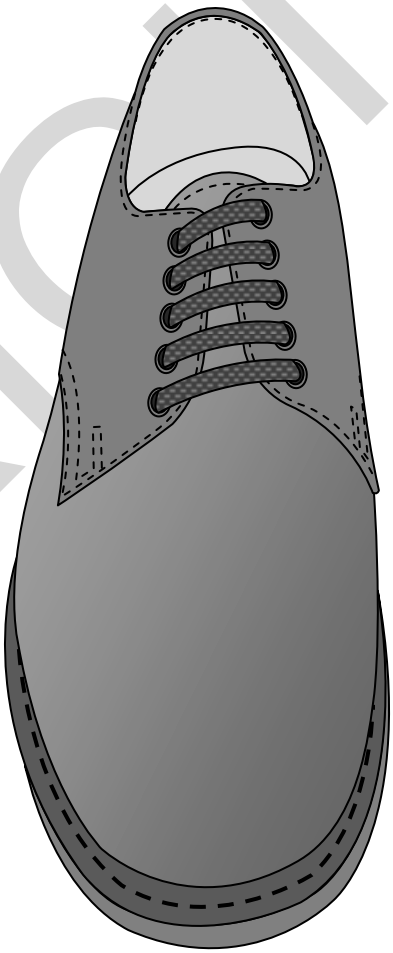
PRIVATE SPECIFICATION

Prepared for the

SOUTH AFRICAN AIR FORCE

MENS' SHOES
BLACK SERVICE TYPE



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Version 03.0/SALM 369
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1. Scope

This specification covers the design, materials, construction, packing and marking of Men's Dress Gibson type shoes with plain vamps, Corrected grain side leather uppers, leather quarter linings, fabric vamp linings, and outer soles and moulded solid heels of rubber for use by male personnel of the South African Air Force.

2. Definitions and Abbreviations

For the purpose of this specification the following definitions shall apply:

Acceptable: Acceptable to the South African Air Force and/or an organization deputed by the South African Air Force

Batch: A quantity of shoes manufactured at one time, covered by one work ticket and recorded on the product for traceability.

Defective: A pair of shoes that at inspection is judged to have a major fault that is likely to cause a shoe to fail in wear, or a pair of shoes that is unsightly to the extent that it is unsuitable for issue.

Lot: A Consignment of finished shoes presented for inspection at one time, intended for despatch to one destination.

Nominal: Subject to the tolerances normal to good manufacturing practice

Roughened: Descriptive of a material that has had its original surface removed using a sharp wire brush or an abrasive paper with a grit that avoids burning the surface of the material, and in the case of leather, has had its entire grain surface (when relevant) removed and the fibres raised without impairing the strength of the leather.

SABS (SANS) South African National Standard

Side leather: Leather from the hide of a mature bovine animal that has been cut into two sides along the backbone and that has been suitably trimmed and tanned

3. Style

The style is as follows:

Shoes, men's service dress gibson type, with plain vamps, padded quarter top-line, leather quarter linings, fabric vamp linings, padded insole with leather cover and sock, outer soles and moulded solid heels of rubber.
Shoes shall be available in two fittings, medium and wide and in the size range 220 to 322 (see section 8).

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4. Illustrations

Illustrations are not to scale and are for guidance only.

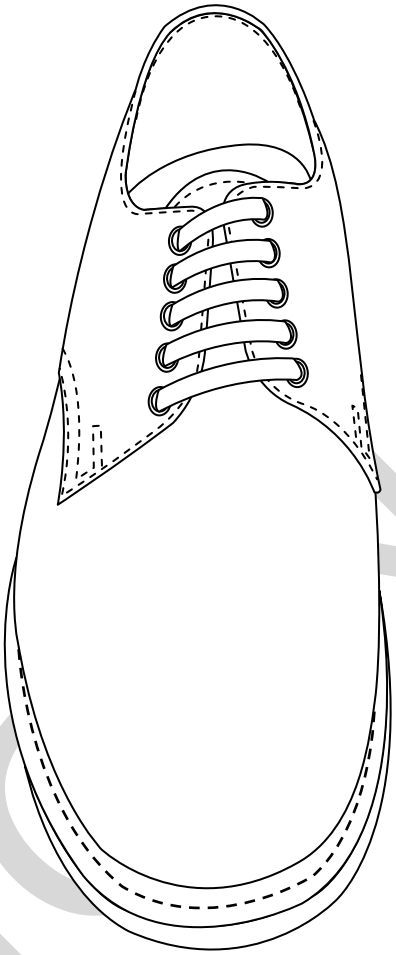

Figure 1 – Top view of shoe

Figure 2 – Side view of shoe

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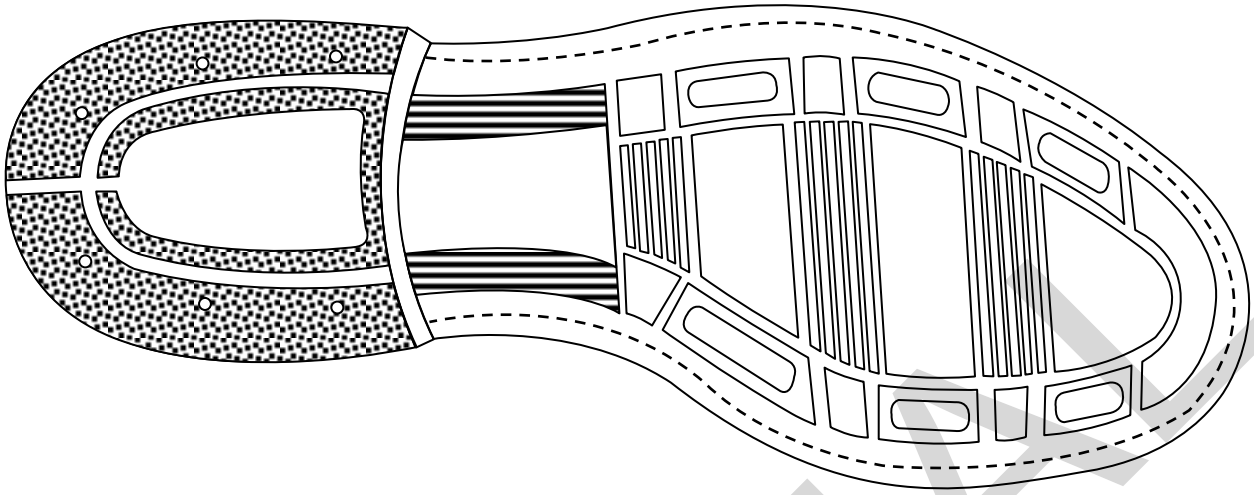

Figure 3 – Sole of shoe

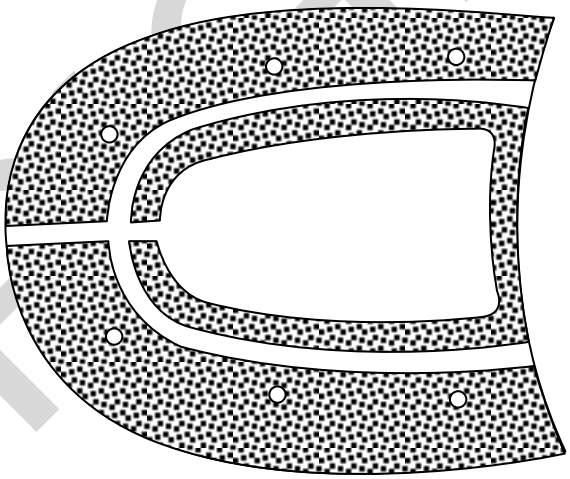

Figure 4 – Heel of shoe

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5. Client Furnished Materials

No material will be supplied by the South African Air Force.

6. Component Materials

The following materials shall be supplied and used by the manufacturer.

6.1 Upper material and components

6.1.1 Upper leather

Leather used for the uppers shall be of smooth, corrected grain, slightly buffed, chrome-tanned side leather that complies with the physical and chemical requirements of SANS 699. The leather shall be dyed to at least the depth of the grain layer and shall have a pigmented finish. The leather shall not be embossed but shall have a smooth finish. It shall have been so treated as to produce a soft, mellow feel. The uppers shall not contain any leather that is pipy, loose grained, hard or bony.

The colour of the finish and the leather to be an acceptable match to colour No. 00 E 53 “Black” of BS 5252

6.1.2 Thickness of leather upper components

The thickness of the leather for the uppers shall be 1,6 mm to 1,8 mm. The thickness of the various upper components shall be within the appropriate range given in columns 2 and 3 of table 1.

Table 1 – Thickness of Upper Components

1	2	3
Components	Thickness, mm	
	Min.	Max.
Vamps……....	1,6	1,8
Quarters……	1,6	1,8
Back straps……	1,4	1,6
Tongues……	1.4	1.6
Quarter linings…….	0.9	1.5

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6.1.3 Lining materials

6.1.3.1 Vamp Lining

Vamp linings shall be of a non-woven fabric that is a needle felt, or a laminate of stitch-bonded fabrics or heat-bonded fabrics or similar materials that, when tested in accordance with the relevant methods given in 3, complies with the requirements given in table 2.

Table 2 – Requirements for Fabric for Vamp Linings

1	2	3
Property	Requirement	Test method
Thickness, mm. min…….	1,3	Use a calibrated spring-loaded leather thickness measuring calliper gauge graduated in 0,1 mm.
Tearing strength, N, min…….	15	ISO 4674 -1
Bond strength, when laminated, N/25 mm of width, min……..	10	
Water vapour permeability, mg/cm^2.h, min……..	2,0	SANS 20344
Water vapour coefficient, mg/cm^2, min…….	30	SANS 20344
Strength at right angles to stitch perforations, N/cm of width, min……..…….	30	BS 5131-3-3.1
Abrasion resistance: After 25 600 cycles dry…….. After 12 800 cycles wet……	The wearing surface shall not develop any holes	SANS 17704

6.1.3.2 Quarter Lining

Quarter linings shall be of a natural colour, chrome-tanned syntan-retanned grain side leather that complies with the requirements of SANS 714, with the exception of the requirement for perspiration resistance.

6.1.3.3 Tongue Lining

The tongue linings shall be of felt that, when tested, complies with the relevant requirements given in table 3.

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Table 3 – Requirements for felt for tongue linings

1	2	3
Property	**Requirement**	**Test method**
Fibre composition, %		SANS 1833
Wool	50 ± 5	
Other fibres.....	50 ± 5	
Mass per unit area (free from non-fibrous materials), g/m², min.....	190	SANS 79
Non-fibrous material content, %, max.	2,0	
Thickness (mean), mm	1,1 ± 0,2	SANS 585

6.1.4 Toe-puffs and Stiffeners

Toe-puffs and Stiffeners shall be of the Thermoplastic type that when tested in accordance with the relevant methods given in column 4 of table 4, toe-puffs and stiffeners shall comply with the requirements given in columns 2 and 3 of table 3 respectively. Toe-puffs shall be thin enough to avoid a print-through effect on the finished shoe.

Table 4 – Requirements for toe-puffs and stiffeners

1	2	3	4
Property	Requirement		Test method
	Toe-puffs	Stiffeners	
First collapsing load, N, min…….	30-80	80-130	SANS 20864[1)]
Resilience, %, min…….	50	40	
Moisture resistance, %, min…….	65	60	
Area shape retention			SANS 20864
Initial, %……..	60	70	
After 10 collapses, %, min……	50	60	
Peel strength, N/cm, min…….			BS 5131-1-1-2
Dry……	5,0	6,0	
Wet……..	3,0	-	

[1)] Report the first collapsing load and the percentage resilience. Calculate the percentage resistance using formula

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6.1.5 Eyelets

The shoes shall be fitted with visible-setting brass eyelets that have japanned or cellulose painted rims. The diameter of the eyelets, measured across the inside of the barrels, shall be in the range 3 mm to 4 mm. The barrels shall be of sufficient length to ensure proper clinching on the facings. The number of eyelets used shall be as follows:

Sizes 220 to 255: four pairs on each shoe; and

Sizes 262 to 322: five pairs on each shoe.

6.1.6 Thread

The threads used for attaching the various upper components shall be polyester and cotton core-spun threads that comply with the relevant requirements of SANS 1362. (See also table 8).

The Colour of the threads shall match that of the surrounding material.

6.1.7 Forepart, Waist and Seat Socks

An inner sock extending from the toe area, of the insole to the breast of the heel area of the insole. (Forepart and Waist) and seat socks shall be of a natural colour chrome-tanned syntan-retanned side leather to have a nominal thickness of 1,2 mm and shall comply with the requirements of SANS 714.

6.1.8 Laces

Laces shall be nylon laces of length at least 660 mm. The laces shall have fused ends and shall comply with the relevant requirements for type L2 of SANS 770. They shall be of a colour that is a match to the upper leather.

6.2 Bottom materials and components

6.2.1 Inner soles

The innersole shall be of the stuck-on rib type and shall be of cellulose fibreboard material of thickness not less than 2,6mm and not more than 2,9mm, when tested in accordance with the relevant methods given in column 3 of table 5, and shall comply with the requirements given in column 2 of table 5.

A closed cell foam of thickness 2.5mm ±0,5mm shall be laminated to the innersole.

The seat of the innersole to be reinforced on the top side with firm vegetable-tanned leather of thickness at least 2,1 mm on top of the foam.

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Table 5 – Requirements of cellulose fibreboard inner sole and foam

1	2	3
Property	Requirement	Test method
PH value, min…… Difference between pH values, max……	3,5 0,7	SANS 14045[1)]
Flex endurance, cycles, min, In machine direction…….. At 90° to machine direction……..……	 10 000 7 000	SANS 5640
Wet stitch tear strength, N/mm of width, min……	0,30	SANS 22649
Water absorption, %, min… ……	35	SANS 22649
Water desorption, % of water absorbed, min……	40	SANS 22649
Abrasion resistance after 400 cycles wet…….	There shall be no surface tearing	SANS 20344
Bond strength of rib attachment per 25 mm of width N……	440	SANS 5646.
Foam		
Insole Thickness mm, …….. Quarter Thickness, mm……	2,5 ± 0,5 4,5 ±0,5	

[1)] Record the first pH value and also the difference between the two measured pH values

6.2.2 Stuck-on Rib

The stuck on rib shall comprise of a fibreboard, leather or fabric filler-piece of such thickness as to provide a total lip thickness of at least 2,0mm when the filler-piece is enclosed in the outer cover. The outer cover of a fabric that, when tested in accordance with the relevant methods given in table 6 complies with the requirements given in table 6. The cover shall extend over the filler- piece to form a raised lip and shall have a base width (measured from the bottom of the lip to the edge of the fabric) at least 3mm on the outside and at least 8mm on the inside of the raised lip.

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Table 6 – Requirements for Rib Cover Fabric

1	2	3
Property	Requirement	Test method
Composition…….……..	Polyester or an intimate blend of polyester and cotton with a maximum cotton content of 50%	Use microscopical and chemical methods.
Breaking strength Dry……. Wet % of dry value, min.....……..	 300 80	SANS 468
Mass per unit area (free from non-fibrous material), g/m^2, min……..	260	SANS 79
Non-fibrous material content %, max …….	5	SANS 5272

6.2.3 Welting

The welting shall be of vegetable-tanned leather that complies with the relevant requirements of SANS 706, shall have a thickness of at least 3 mm and shall be of the flat type. It shall be firm but flexible and shall be free from excess flesh, soft, spongy or loose-fibred leather, mechanical and hide defects and any imperfections and blemishes that affect its appearance or can affect its serviceability (or both).

6.2.4 Seat Lifts

Seat lifts shall be of firm vegetable-tanned leather and shall not contain loose-fibred leather. The thickness of the seat lift shall conform to the thickness of the welt. No skeleton seat lifts shall be used.

6.2.5 Outer Soles

Outer soles shall be of a moulded rubber that complies with the requirements of type R4 of SANS 1437. The pattern of the sole as shown in see figure 3.

Abrasion resistance of the relative volume loss shall not exceed 150mm^3

6.2.5.1 Outer Soles Thickness

Thickness of outer sole shall be at least 5mm between the cleats, and at least 8mm including the cleats from the forepart to the seat area. The seat area shall have a thickness of at least 5mm.

6.2.6 Heels

Heels shall be of a moulded rubber that complies with the requirement of type R4 of SANS 1437. The pattern of the heel to be as shown in figure 4 and shall have the same abrasion resistance as for the soles.

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The heel shall have two semi horse shoe metal holders embedded in the compound of the heel, with at least three nail receptacles in each. Fixed at 13.0mm ± 0.5mm (un-finished) 10.0mm ± 0.5mm (finished) from the edge of the heel.

There shall be a support pillar of diameter at least 15,0mm in the centre of the cavity.

The height of the heel shall be in accordance with the pitch of the last used.

6.2.7 Shanks

Shanks shall extend from the joint line to a distance of at least 25 mm under the heel, measured from the breast line towards the rear of the heel. The shanks shall conform to the bottom contour of the last. They shall be of a combination of steel and fibreboard. The steel portion of a shank shall be fluted and shall be of steel of thickness at least 1,0 mm.

The width of the steel shanks shall be at least 9,5mm and the width of the fibreboard shall be such that the backer fits between the raised lips of the inside and outside of the waist.

6.2.8 Bottom filling

The bottom filler shall be of a granulated cork filler, when tested in accordance with the relevant methods given column 3 of table 7 complies with the requirements given in column 2 of table 7.

Table 7 – Requirements for Granulated Cork for Bottom filler

1	2	3
Property	Requirement	Test method
Fatigue bending, after 3 000 cycles.....	The specimen shall not break	SANS 6134
Heat insulation, EC, min.	50	SANS 6135
Apparent density, g/m^3.....	0,45 - 0,60	SANS 2420

6.2.9 Threads

The threads used for welt sewing and for outer sole stitching shall be polyester and cotton core-spun threads that complies with the requirements of SANS 1362 and with the additional requirement when tested according to the relevant methods given in column 3 of table 8 complies with the requirements given in column 2 of table 8.

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Table 8 – Additional Requirements for Welt Sewing and Outer sole Stitching Thread

1	2	3
Property	Requirement	Test method
Composition ……	20% cotton 80% polyester	
Welt sewing thread		
Resultant linear density…….	R890 Tex	SANS 2060
Breaking strength……..	400	SANS 2062
Outer sole stitching thread		
Resultant linear density…….	R800 Tex	SANS 2060
Breaking strength……..	350	SANS 2062

6.2.10 Seat socks

Seat socks shall be a of the material specified in 6.1.7 which shall be laminated to a 2.5mm ±0.5mm closed cell foam

7. Workmanship and Finish

7.1 General

Workmanship and finish shall be of a standard at least equal to that of the pre-production samples. (See annex A.2)

7.2 Heel trimming

Heels shall be trimmed square to the heel seat. The extension at the seat shall be not less than 1,5 mm and not more than 2,5 mm.

7.3 Edge trimming

Edges shall be trimmed square.

7.4 Burnishing

The welt and seat lift shall be stained to match the upper material and their edges shall be well waxed and burnished.

7.5 Seat socks

Shoes shall be provided with seat socks (see 6.2.10).

7.6 Laces

Each pair of shoes shall be provided with one pair of laces.

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7.7 Cleaning

The shoes (both uppers and soles) shall be properly cleaned, using a clean cloth or brush. The upper leather shall be polished with a high-grade wax polish or dressing.

7.8 Freedom from defects

Inner soles shall be free from protruding grindery. The inside of the shoe shall be free from roughness and pleats. The entire bottom shall be free from cracks, bubbles, blisters, mould marks, flow marks and foreign matter.

8. Sizes and National Stock Numbers

The shoes shall be supplied in the following metric sizes: 220 - 322 (sizes 3 - 15 UK) and in Medium and Wide fittings (unless otherwise indicated) **and** the National Stock Numbers for the different sizes are as follows:

English shoe size	Mondopoint shoe size	NSN Number
3M[a]	220M[a]	18-187-2500
3W[a]	220W[a]	18-187-2501
4M	232M	18-188-0184
4W	232W	18-408-6916
5M	240M	18-401-4033
5W	240W	18-401-4034
6M	247M	18-401-4036
6W	247W	18-401-4037
7M	255M	18-401-4039
7W	255W	18-401-4040
8M	262M	18-401-4042
8W	262W	18-401-4043
9M	270M	18-401-4046
9W	270W	18-401-4045
10M	277M	18-401-4048
10W	277W	18-401-4049
11M	285M	18-401-4051
11W	285W	18-401-4052
12M	292M	18-401-4054
12W	292W	18-401-4055
13M	300M	18-401-4057
13W	300W	18-401-4058
14M	315M	18-401-4060
14W	315W	18-401-4061
15M	322M	18-187-9374
15W	322W	18-187-9375

[a] Fitting (Medium and Wide) shall be as agreed upon between the SAAF and the successful tenderer.

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9. Constructional Requirements

9.1 General

The method of construction shall be in accordance with the Goodyear welted principle and shall be such that an inner sole, a welt and an outer sole are used. The outer sole shall be secured to the welt by a lock-stitch seam. The stitching shall not extend around the seat. The seat lift shall be stuck to the lasted seat, and the outer sole shall be stuck to the welt and seat lift (before stitching).

9.2 Upper construction

9.2.1 The upper shall be of the Gibson type with plain vamp (see figure 1 and figure 2)

9.2.2 The vamp shall be a fabric-lined plain vamp.

9.2.3 The quarters shall be folded at the ankle and at the tab edge.

9.2.4 The base of the tongue shall be correctly fitted into the recessed facings of the quarter linings.

9.2.5 Back straps shall be folded over at the top edges.

9.2.6 Quarter linings shall not have a seam at the centre of the back. The quarter linings shall be so recessed at the front as to allow for proper tongue and vamp fitting.

9.2.7 Tongue linings shall be sewn to the flesh side of the tongues in such a manner as to leave a margin at the sides and the top, in the range 2 mm to 4 mm, between the edges of the tongue and of the tongue lining.

9.2.8 **The top of the quarters shall be padded with a 4,5 mm ± 0.5mm foam**.

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9.3 Closing

9.3.1 Skiving

Skiving shall be done in a manner that will prevent the formation of ridges inside the shoe.

9.3.2 Folding

Folding shall be wide enough to allow the edge stitching to pass through the folded edge. Slashes shall not extend further than the stitching line.

9.3.3 Seams

9.3.3.1 General

All upper seams shall be free from ridges and roughness. There shall be no loose, ragged or uneven seams and all loose thread ends shall have been removed. All seams shall be lock-stitch seams. Thread tensions shall be so balanced that the lock is located in the centre of the materials being stitched. The back seam shall be a zig-zag seam. The minimum requirements for the attachment of the various upper components shall be as given in table 9.

Table 9 - Requirements for attachment of upper components

1	2	3	4
Seam	**Number of rows of stitches, min.**	**Thread ticket number**	**Number of stitches per 25 mm**
Back seam	1 row, zig-zagged	Ticket No. 36	10 - 14
Back strap	1 row along edge	Ticket No. 50	10 - 14
Facing and ankle edge row	1 row along ankle and facing edge	Ticket No. 50	10 - 14
Side seam	2 close rows along edge and 1 row 3 mm away from nearer edge row	Ticket No. 36	10 - 14
Tongue to vamp	1 row along edge and 1 row 3 mm away from edge row	Ticket No. 50	9 – 14
Stay rows	2 close rows not less than 3 mm and not more than 8 mm above and parallel to top row of side stitching and not shorter than 16 mm. The stay rows shall run through to the corner of the quarters	Ticket No. 36	10 - 14
Quarter linings (overlapping seams)	1 row along edge and 1 row 3 mm away from edge row	Ticket No. 50	9 – 14
Tongue linings	1 row along edge of lining	Ticket No. 50	9 – 14

9.3.3.2 Eyeletting

The eyelets shall be securely fastened on the facings of the shoes, shall be evenly spaced and shall have a smooth roll clinch setting.

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9.3.3.3 Lacing of closed uppers

After eyeletting has been completed, the machine lacing shall provide for a 6 mm opening before lasting, with a tolerance not exceeding +3 mm after lasting.

9.4 Preparation of bottom stock

9.4.1 Inner soles

The inner soles shall be accurately cut to the correct shape of the last. The stuck-on rib shall be attached to the inner sole in a manner that provides an even, firm base for welt sewing. The seats of the inner soles shall be reinforced on the top side with firm vegetable-tanned leather of thickness at least 2,1 mm. The reinforcing leather shall be roughened and the front edge shall be so skived that the reinforcement does not produce a ridge inside the shoe. The roughened reinforcing leather and the seats of the inner soles shall be stuck together with an adhesive. The inner soles shall be fully gemmed with gemming duck (of mass per unit area at least 270 g/m^2) that has been coated with adhesive. The gemming duck shall be firmly and smoothly fitted to the base of the lip. The closed cell foam (see table 5) shall be accurately located and securely laminated on the wearing surface of the innersole (see 6.2.1). The closed cell foam shall be covered with a syntan re-tan lining material see 6.1.7. The innersoles shall conform to the bottom contour of the last.

9.4.2 Outer soles and Heels

9.4.2.1 Outer soles

The portion of the outer soles to be stuck to the welt and seat lift shall be roughened. The seat lift both the grain side and the flesh sides of the seat shall be roughened before application of the adhesive.

9.4.2.2 Heels

The inner side of the full rubber heel shall be roughened by utilizing a wire brush.

9.5 Making

9.5.1 Back-part moulding

Stiffeners of the correct size, properly activated, shall be correctly positioned in the uppers which shall be back-part moulded. Stiffeners shall be well stuck to both the lining and the upper.

9.5.2 Lasting

Toe-puffs of the correct size and properly activated shall be correctly positioned in the uppers. The quarter linings shall be properly drafted and the seats of the uppers shall be assembled in such a manner as to provide for a lasted seat that has an overlay of 13 mm to 16 mm. The shoe shall remain on the last long enough to allow the toe-puff and stiffener to dry and set thoroughly. The seat shall be tack lasted.

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9.5.3 Welt Sewing

The thread used for welt sewing shall have a linear density of at least R 890 tex (See Table 8). The thread shall be properly waxed, and there shall be an average of 3,5 stitches per 25 mm. The welt shall be sewn in such a manner that the seam, after inseam trimming and welt beating, is tight and even.

9.5.4 Shank fitting and bottom filling

The forward end of the shank shall be flush with the inner sole at the joint line. The shank shall be inserted with the fibreboard section against the inner sole and shall fit the contour of the shoe bottom properly. The bottom filler shall be so applied and pressed into the inner sole cavity that there are no gaps between the inner edge of the inner sole rib and the filler material. The filled bottom shall extend with a uniform even surface to the shank portion. Cavities at the heel and in the waist shall be filled with bottom filler.

9.5.5 Seat Lift attaching

The lasted overlay of the seat of the shoe shall be roughened. The grain side of the seat lift and the lasted overlay of the seat of the shoe shall be coated with an adhesive. The seat lift shall be properly stuck to the lasted overlay of the seat of the shoe and shall show no gaps or unevenness.

9.5.6 Sole laying

The inner side of the welt shall be roughened. The adjoining surfaces of the welt, outer sole and seat lift shall be coated with an adhesive. The outer sole shall be correctly positioned on the welted shoe bottom and so attached that there are no gaps between the welt and the outer sole edges or between the seat lift and the outer sole edges.

9.6.7 Rough Rounding

The soles and welts shall be so rough rounded as to provide for an edge extension (on the finished shoes) of 5,0 mm ± 0,5 mm at the inner joint and at the toe and of 6,5 mm ± 0,5 mm at the outer joint.

9.6.8 Outer sole stitching

The thread used for the outer sole stitching shall have a linear density of at least R 800 tex.(See Table 8). There shall be an average of not less that 5 stitches and not more than 6 stitches per 25 mm. The shuttle thread shall be well waxed (with hot wax) and the lock of the stitching shall be approximately two-thirds down the thickness of the outer sole. The stitching on the welt shall be not less than 1,5 mm and not more than 2,5 mm away from the finished sole edge.

9.6.9 Seat fastening

The seat of the outer sole shall be fastened with iron rivets of the correct length to ensure proper attachment of the seat of the outer sole to the inner sole. The spacing of the rivets shall be in the range 10 mm to 12 mm from centre to centre of rivet heads. The rivets shall be well clinched on the seat of the inner soles inside the shoes with the rivet heads indented below the surface of the rubber.

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9.6.10 Heel attaching

The outer side of the seat of the outer sole shall be roughened. The roughened portions of the seat of the outer sole and the inner side of the rubber heel shall be coated with an adhesive. The heel shall be so stuck to the seat of the outer sole that there are no gaps between the heel and sole edges. The heel shall be nailed down with heel nails of sufficient length to pass through the heel and penetrate the full thickness of the outer sole, the seat lift and the insole. Heel nails shall be so driven home that the nail heads bear on the nail-holders embedded in the rubber heel.

9.6.11 Heel pull-off strength

When a pair of shoes is tested the initial peak load shall be at least 600 N and the average load required to pull off the first 40 mm from the back of the heel shall be 300 N.

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10. Test Methods

Use the relevant methods specified in paragraph 14 " Applicable Documents".

11. Marking

11.1 Shoes

Each shoe shall bear the following information, neatly and legibly impressed on the waist of the inner sole by means of steel stamps

a) The manufacturer's name or trade mark;

b) The size and fitting (M or W) of the shoe;

c) The year of manufacture; and

d) The National Stock number (NSN).

e) The words "SA Air Force "

In addition the production batch number, the size and fitting of the shoe shall be permanently impressed on the quarter lining by means of steel stamps.

11.2 Boxes

Boxes shall bear the following information written in black, clearly and indelibly marked on the short end of the shoe box:

a) The description;

b) The size of the shoe;

c) The fitting number;

d) The manufacturer's name, trade name or trade mark;

e) The relevant NSN number;

f) Ticket/batch number; and

g) Any further information specified by the purchaser.

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11.3 Outer containers

Each outer container shall have a label securely attached to the short side. This label shall be visible when the containers are stacked and shall provide the following information in block capital letters of height 12 mm that are legible and indelible:

a) The manufacturer's name or trade mark or both;

b) The description;

c) The size and fitting (M or W) of the shoes;

d) The National Stock Number (NSN);

e) The quantity;

f) The order number;

g) The year of manufacture;

12. Care labelling

A swing label with care and use instructions that shall contain the substance of the wording in (a) to (e) to be attached through the eyelet of one shoe of each pair of shoes:

(a) Be sure your shoes fit properly.

(b) **Clean your shoes daily.** Remove all dust and dirt using a brush.

Apply a layer of good quality shoe polish with a brush paying special attention around the seams. Leave for a few minutes to dry then brush well

(c) When you return to base with wet shoes remove all mud and dirt by wiping with a damp cloth, brushing or rubbing and dry with a cloth or newspaper. Apply a thick layer of polish to the upper and seams.

(d) Place the shoes in a cool, dry, airy place until dry. Do not leave near heat as this will make the leather hard and brittle. Once dry brush well.

(e) Do not use any form of heat on your shoes. Do not bone them or use a hot iron on them.

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13. Packaging

The shoes shall be delivered in commercially clean and dry condition. Each pair of shoes shall be packed in an individual box that will protect it from damage during normal transportation, handling and storage. The boxes shall be packed in a corrugated board outer container that complies with the requirements of SALM 108, and that is then labelled and sealed. Only shoes of the same size shall be packed together in a bulk container. Shoes of different sizes may be packed together to accommodate the last part of an order or contract.

The number of pairs of shoes in each outer container shall be as follows:

Sizes 220(3) – 270(9): 15 and

Sizes 277(10) – and larger: 10

14. Applicable Documents

The following documents contain provisions which, through reference in this text, constitute provisions of this specification. All documents are subject to revision and, since any reference to a document is deemed to be a reference to the latest edition of that document, parties to agreements based on this specification are encouraged to take steps to ensure the use of the most recent editions of the documents indicated below. Information on currently valid national, international and CKS documents may be obtained from Standards South Africa* and on SALM from the South African Air Force.

BS 5131-1-1.2 *Methods of test for footwear and footwear materials – Part 1: Adhesives – Section 1.2: Resistance of adhesive joints to peeling.*

BS 5131-3-3.1 *Methods of test for footwear and footwear materials - Part 3: Uppers, textiles and threads – Section 3.1: Strength of upper materials and lining materials at right angles to stitch perforations*

BS 5252 *Framework for colour co-ordination for building purposes.*

ISO 4764-1 *Rubber or plastics – coated fabrics- Determination of tear resistance – Part 1. Constant rate of tear method*

SALM 108 *Corrugated board boxes for clothing*

SANS 79 *Textiles. Mass per unit area of conditioned textile fabric*

SANS 468 *Breaking strength and extension at break of textile fabrics: narrow strip method using constant rate of traverse*

SANS 585 *Thickness of wool fabrics*

SANS 714 *Lining leather (Chrome-tanned syntan-retanned) side*

* ***Standards South Africa: Tel. +27 (0) 12 4287911***

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SANS 699	*Side Upper leather*
SANS 706	*Leather Welting*
SANS 770	*Footwear Laces*
SANS 1362	*Sewing threads*
SANS 1833	*Quantitative analysis of textile fibres: 5% sodium hydroxide method (based on the solution of wool in binary mixtures with certain other fibres)*
SANS 2060	*Textiles – Yarns from packages – Determination of linear density (mass per unit length)*
SANS 2062	*Textiles – Yarns from packages – Determination of single-end breaking force and elongation at break using constant rate of extension (CRE) tester*
SANS 2420	*Leather – Physical and mechanical tests*
SANS 5272	*Non-fibrous material content of textiles: Hydrochloric acid method*
SANS 5637	*Determination of tearing strength*
SANS 5640	*Determination of flex resistance (leather fibreboard and cellulose fibreboard inner soles).*
SANS 5646	*Determination of bond strength of rib attachment (stuck-on rib inner soles)*
SANS 6134	*Fatigue bending of granulated cork bottom filler for footwear*
SANS 6135	*Heat insulation of granulated cork bottom filler footwear*
SANS 14045	*Leather – Chemical tests – Determination of pH*
SANS 17704	*Footwear – Test methods uppers, linings and in-socks – Abrasion resistance.*
SANS 20344	*Personal protective equipment – Test methods for footwear*
SANS 20864	*Footwear – Test methods for stiffeners and toepuffs – Mechanical characteristics*
SANS 22649	*Footwear – Test methods for insoles & insocks – Water absorption and desorption*

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ANNEX A

(Normative)

Special conditions of tender

A-1 GENERAL

A-1.1 Unless otherwise stated, the South African Bureau of Standards, shall be the inspecting authority.

A-1.2 Three pre-production sample pairs of Men's shoes shall have been inspected tested and approved by the inspecting authority before bulk production is commenced. Each one of these samples shall be accompanied by a trim chart containing a sample of each component material (as given in 6) and the relevant certificates. It shall be the duty of the manufacturer to give adequate notice to the inspecting authority of the availability of these samples.

A-1.3 The Men's shoes shall be subject to inspection during the course of manufacture. The inspector shall, during normal working hours, be given all reasonable facilities for carrying out his duties and shall have the right of entry into the contractor's factory and the factory or works of any subcontractor where work on Men's shoes supplied to this specification may be in progress

A-1.4 The contractor shall inspect the finished Men's shoes for compliance with the specification before submitting them to the inspecting authority for final inspection.

A-1.5 Before acceptance, the Men's shoes shall have been inspected and tested by the inspecting authority and found to comply with the requirements of the specification.

A-2 DOCUMENTATION

One container of each consignment shall be marked "DOCUMENTS" and in addition to the Men's shoes, shall contain the following:

a) The packaging slip or delivery note;
b) where applicable the inspection certificate(s);
c) a copy of the invoice containing the following information:
- the order number
- the financial authority number
- a full description of the consignment, i.e. National stock number, quantity, etc

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HISTORY SHEET

DOC ISSUE	DATE	AMENDMENTS/HISTORY	CHECKED	
			NAME	INIT.
1	July 2011	First release		
2	October 1996			
3	October 2011	Complete revision Shoe to be the same as New SAAF band shoe, except for the outer leather Add NSNs Add size 3 (220)		

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