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0.1 Circulation List

NO.	COPY HOLDER
1	Research & Development Manager
2	Procurement Manager
3	Staff Benefits & Relations Manager
4	Safety, Health & Environment Manager
5	Kenya Electrical Trade & Allied Workers Union
Electronic copy (pdf) on Kenya Power Server (currently: Network→stima-fprnt-001→techstd&specs)	

0.2 Amendment Record

Rev No.	Date (YYYY-MM-DD)	Description of Change	Prepared by (Name & Signature)	Approved by (Name & Signature)
KP1/3CB/TSP/01/003-2 Issue 1 Rev 0	2012-12-14	Cancels and replaces KP1/3CB/TSP/01/003 Issue 3 Rev 0 dated 2011-08-08 and all previous issues.	S. Kimitei	G. Owuor

FOREWORD

This specification has been prepared by the Research and Development Department in collaboration with the Benefits & Staff Relations Department, Distribution Division and Safety, Health & Environment Department all of The Kenya Power and Lighting Company Ltd (Kenya Power) and The Kenya Electrical Trade & Allied Workers Union. The specification lays down requirements for Footwear. It is intended for use by Kenya Power in purchasing the items.

The supplier shall submit information which confirms satisfactory service experience with products which fall within the scope of this specification.

1.0 SCOPE

1.1 This specification is for Footwear for use in Industrial Work (Electrical and Mechanical) by company employees.

1.2 The specification covers the following types of footwear:

- Safety Boots
- Safety Shoes
- Army Boots
- Gumboots
- Canvass Shoes

1.3 The specification stipulates the minimum requirements for Footwear acceptable for use in the company and it shall be the responsibility of the Supplier to ensure adequacy of the design, adherence to applicable standards, good workmanship and good engineering practice in the manufacture of the footwear for The Kenya Power & Lighting Company Ltd.

2.0 REFERENCES

The following standards contain provisions which, through reference in this text constitute provisions of this specification. Unless otherwise stated, the latest editions (including amendments) apply.

ISO 20345: Personal protective equipment – Safety footwear.

BS EN 344: British Standard Specification for Safety, Protective and Occupational Footwear for Professional use.

3.0 TERMS AND DEFINITIONS

3.1 The definitions given in the reference standard shall apply.

3.2 Kenya Power Logo – As per sample available with Human Resource & Administration Division, Kenya Power.

4.0 REQUIREMENTS

4.1 Operating Conditions

The Footwear shall be suitable for use in Electrical and Mechanical Work, outdoors in Tropical Climate with temperatures between -1 to +45 degrees Centigrade.

4.2 Design and Construction

4.2.1 Safety Boots

4.2.1.1 The safety boot shall be designed and manufactured to ISO 20345 and the requirements of this specification. It shall be ankle boot design.

4.2.1.2 The safety boot shall incorporate protective features to protect the wearer from injuries that could arise through accidents in Industrial Work (Electrical and Mechanical). It shall be suitable for use in regular working conditions in workshop, areas with oil and in the field.

4.2.1.3 The boot shall be fitted with toecaps designed to give protection against impact when tested at an energy level of at least 200 joules and against compression when tested at a compression load of 15kN.

4.2.1.4 The safety boot shall consist of leather upper of good quality for durability and industrial use. It shall resist water penetration.

4.2.1.5 The tongue shall be soft leather with water-resistant treatment. The inner lining shall be rot resistant and high quality for comfort.

4.2.1.6 The sole shall be made of rubber directly molded to the upper leather and shall be made of materials resistant to acids, alkalis, oils and solvents.

4.2.1.7 The sole shall be slip resistant. It shall be patterned for grip and maximum floor contact. It shall have penetration resistant insert (steel midsole insert).

4.2.1.8 The Safety boots shall be in sizes 4, 5, 6, 7, 8, 9, 10, 11 & 12 in accordance with Kenya Standards and shall be supplied in pairs (left and right).

4.2.1.9 The following information shall be stamped legibly and indelibly on the inside at the top:

- Size;
- Manufacturer's name and code;
- Standard to which the safety boot complies;
- The letters "Kenya Power";
- Electrical insulation/voltage.

The following information shall be embossed legibly and indelibly in a visible position on the sole:

- Size
- The words "oil resistant, acid resistant, antistatic"

4.2.2 Safety Shoes

4.2.2.1 The safety shoe shall be designed and manufactured in accordance with BS EN 345.

The safety shoe shall be in two designs; one design for ladies and the other for men. *(the quantities required of each type shall be specified in the tender)*

4.2.2.2 The safety shoe shall incorporate protective features to protect the wearer from injuries that could arise through accidents in Industrial Work (Electrical and Mechanical). It shall be suitable for use in regular working conditions in workshop, areas with oil and in the field.

4.2.2.3 The shoe shall be fitted with toecaps designed to give protection against impact of not less than 200 joules.

4.2.2.4 The safety shoe shall consist of leather upper of good quality for durability and industrial use. It shall resist water penetration.

4.2.2.5 The tongue shall be soft leather with water-resistant treatment. The inner lining shall be rot resistant and high quality for comfort. The inner lining shall not be padded.

4.2.2.6 The sole shall be directly molded to the upper leather and shall be made of rubber resistant to acids, alkalis, oils and solvents.

4.2.2.7 The sole shall be slip resistant. It shall be patterned for grip and maximum floor contact.

4.2.2.8 The Safety Shoes shall be in sizes 4, 5, 6, 7, 8, 9, 10, 11 & 12 in accordance with Kenya Standards and shall be supplied in pairs (left and right). .

4.2.2.9 The following information shall be stamped legibly and indelibly on the inside at the top:

- Size;
- Manufacturer's name and code;
- Standard to which the safety boot complies;
- Electrical insulation/voltage.

The following information shall be embossed legibly and indelibly in a visible position on the sole:

- Size
- The words "oil resistant, acid resistant, antistatic"

4.2.3 Army Boots

4.2.3.1 The Army boot shall be of ankle boot design.

4.2.3.2 It shall incorporate protective features to protect the wearer from injuries that could arise through accident in general industrial work. The boot shall give protection against impact of not less than 100 joules.

4.2.3.3 The height of the boot shall be 190-200 mm from the bottom of heel to the top. The upper leather shall be at least 3mm thick, black and chemically treated to resist water ingress.

4.2.3.4 The boot shall have 8 eyelets on each side and the eyelets shall be of corrosion resistant metal.

4.2.3.5 All visible seams shall be sewn in double lines.

4.2.3.6 The tongue shall be soft dressed black leather and be water-resistant. The inner lining shall be rot resistant, high quality for comfort but not padded. The insole shall be made of leather.

4.2.3.7 The sole shall be vulcanized rubber and directly molded to the upper leather. It shall be resistant to abrasion and sharp objects and be patterned to enhance grip.

4.2.3.8 The total thickness of heel shall be not less than 35mm with non-patterned areas of the sole being at least 12.5mm thick and patterned areas being not less than 17.5mm thick.

4.2.3.9 The Army boots shall be in sizes 4, 5, 6, 7, 8, 9, 10, 11, & 12 in accordance with Kenya Standards and shall be supplied in pairs (left and right).

4.2.3.10 The following information shall be stamped legibly and indelibly on the inside of the boot at the top:

- Size
- Manufacturer's name and code
- The letters "Kenya Power"

The following information shall be embossed legibly and indelibly in a visible position on the sole:

- Size

4.2.4 Gumboots

4.2.4.1 The Gumboots shall be made to the pattern, shape, design, materials and components all in accordance with Kenya Standard for Gumboots for Industrial use.

4.2.4.2 All rubber components of the gumboot shall be properly and uniformly vulcanized.

4.2.4.3 Rot-proof strong fabric shall be used inside.

4.2.4.4 The minimum height of the boot when measured on the inside at the back of the boot from the insole to the top shall be 300mm±2mm.

4.2.4.5 The Gumboots shall be in sizes 5, 6, 7, 8, 9, 10, 11 & 12 in accordance with Kenya Standards and shall be supplied in pairs (left and right).

4.2.4.6 The following information shall be stamped legibly and indelibly on the inside of the leg at the top:

- Size
- Manufacturer's name and code
- The letters "Kenya Power"

The following information shall be embossed legibly and indelibly in a visible position on the sole:

- Size

4.2.5 Canvass Shoes

4.2.5.1 The canvass shall be made to the pattern, shape, design, materials and components all in accordance with Kenya Standard for canvass shoes for cooks, waiters, waitresses, telephone operators and similar applications.

4.2.5.2 The uppers shall be canvass while the sole shall be rubber, directly molded onto the uppers.

4.2.5.3 All rubber components of the shoes shall be properly and uniformly vulcanized.

4.2.5.4 Eyelets of corrosion resistant material.

4.2.5.5 The canvass shoes shall be white in colour.

4.2.5.6 The design shall be as per approved sample.

4.2.5.7 The shoes shall be in sizes 4, 5, 6, 7, 8, 9, 10, 11 & 12 in accordance with Kenya Standards and shall be supplied in pairs (left and right).

4.2.5.8 The following information shall be stamped legibly and indelibly on the inside of the shoe at the top:

- Size
- Manufacturer's name and code
- The letters "Kenya Power"

The following information shall be embossed legibly and indelibly in a visible position on the sole:

- Size

5.0 TESTS AND INSPECTION

5.1 Tests and inspection for the materials used and standard of manufacture shall be done in accordance to ISO 20345, BS EN 344 and applicable Kenya Standards and the requirements of this specification for each type of footwear. It shall be the responsibility of the supplier to perform or to have performed all the tests specified.

5.2 Copies of previous Test Reports issued by a third party laboratory that is accredited to ISO/IEC 17025 shall be submitted with the tender for the purpose of technical evaluation. The accreditation certificate for laboratory shall also be submitted with the tender.

5.3 Every batch of Footwear shall be subject to inspection by Kenya Power staff at the place of manufacture and tests/inspection carried out on samples picked at random in their presence. Test reports shall be completed (by the manufacturer) and made available by the supplier to Kenya Power for approval before delivery of the items.

5.4 On receipt of the Footwear, Kenya Power will inspect them and may perform or have performed any of the relevant tests in order to verify compliance with the specification. The supplier shall replace without charge to Kenya Power, Footwear which upon examination, test or use fail to meet any or all of the requirements in the specification.

6.0 MARKING, LABELLING AND PACKING

6.1 The footwear shall be supplied in pairs and parked in such a manner as to avoid damage in transport and storage.

6.2 Each item shall be marked with the information specified for each type of footwear in clauses 4.2.1 to 4.2.5 of this specification. All the marking shall be done at the factory during manufacture and shall be permanent, legible and indelible.

6.3 Instructions for care shall accompany each item in English language.

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ANNEX A: **Guaranteed Technical Particulars** *(to be filled and signed by the Supplier and submitted together with copies of the manufacturer's catalogues, brochures, drawings, technical data, copies of previous test reports, list of customers and reference letters from four previous customers for tender evaluation)*

TENDER NO. .....

REQUIREMENT	BIDDER'S OFFER *(indicate full details of offered item)*
Name & address of manufacturer	
Country of manufacture	
Manufacturer's letter of authorization	
Clause Number as per specification	
1.1	
1.2	
1.3	
2.0	
3.0	
4.1	
4.2.1 **Safety Boots**	
4.2.1.1	
4.2.1.2	
4.2.1.3	
4.2.1.4	
4.2.1.5	
4.2.1.6	
4.2.1.7	
4.2.1.8	
4.2.1.9	
4.2.2 **Safety Shoes**	
4.2.2.1	
4.2.2.2	
4.2.2.3	
4.2.2.4	
4.2.2.5	
4.2.2.6	
4.2.2.7	
4.2.2.9	
4.2.3 **Army Boots**	
4.2.3.1	
4.2.3.2	
4.2.3.3	

REQUIREMENT	BIDDER'S OFFER *(indicate full details of offered item)*
4.2.3.4	
4.2.3.5	
4.2.3.6	
4.2.3.7	
4.2.3.8	
4.2.3.9	
4.2.3.10	
4.2.4 **Gumboots**	
4.2.4.1	
4.2.4.2	
4.2.4.3	
4.2.4.4	
4.2.4.5	
4.2.4.6	
4.2.5 **Canvass Shoes**	
4.2.5.1	
4.2.5.2	
4.2.5.3	
4.2.5.4	
4.2.5.5	
4.2.5.6	
4.2.5.7	
4.2.5.8	
5.0 **Tests and Inspection**	
5.1	
5.2	
5.3	
5.4	
6.0 **Marking, Labelling and Packing**	
6.1	
6.2	
6.3	

Note: - This schedule does not in any way substitute for detailed information required elsewhere in the specification.

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Supplier's Name, Signature, Stamp and Date