Eskom	**Standard**	

Title: **Eskom Personal Protective Equipment (PPE)**

Document Identifier:	**240-44175132**
Alternative Reference Number:	**N/A**
Area of Applicability:	**Eskom Holdings SOC Ltd**
Functional Area:	**Occupational Health and Safety**
Revision:	**2**
Total Pages:	**56**
Next Review Date:	**March 2028**
Disclosure Classification:	**Controlled Disclosure**

Compiled by	**Functional Responsibility**	**Authorized by**
Ntokozo Ngubane	**Miranda Moahlodi**	**Kerseri Pather**
Senior Advisor OHS	**Senior Manager OHS**	**General Manager**
Risk and Sustainability	**Risk and Sustainability**	**Risk and Sustainability**
Date: 05 April 2023	Date: 10 April 2023	Date: 10 April 2023

Content

Page

1. Introduction 4
2. Supporting Clauses 4
   - 2.1 Scope 4
     - 2.1.1 Purpose 4
     - 2.1.2 Applicability 4
     - 2.1.3 Effective Date 5
   - 2.2 Normative/Informative References 5
     - 2.2.1 Normative 5
     - 2.2.2 Informative 6
   - 2.3 Definitions 6
   - 2.4 Abbreviations 7
   - 2.5 Roles and Responsibilities 8
   - 2.6 Process for Monitoring 9
3. Document Content 9
   - 3.1 General 9
   - 3.2 General Garments or Work Wear Specification 11
   - 3.3 Minimum Standard Specifications for Boiler Suits/Overalls - One Piece (Figure 2 on diagram: drg.10332 SANS 434) and two piece (Figure 4 on diagram: drg.15289da on SANS 434) work wear suits 12
   - 3.4 Minimum Standard Specifications for Dust Coats 16
   - 3.5 Minimum Standard Specifications for Shirts 17
   - 3.6 Minimum Standard Specifications for Ladies Shirts And Pants 18
   - 3.7 Minimum Standard Specifications Thermal Jackets (Winter Jackets) 19
   - 3.8 Minimum Standard Specifications for Rain Protection (Rain Suits) 20
   - 3.9 Minimum Standard Specifications for Chemical Protection (Chemical Suits) 20
   - 3.10 Minimum Standard Specifications for Reflective Vests and Bibs 21
   - 3.11 Minimum Standard Specifications for Cold Weather Protection 22
   - 3.12 Minimum Standard Specifications for Aprons 23
   - 3.13 Minimum Standard Specifications for Head Protection 23
   - 3.14 Minimum Standard Specifications for Eye/Face Protection 25
   - 3.15 Minimum Standard Specifications for Hearing Protection 28
   - 3.16 Minimum Standard Specifications for Foot Protection 28
   - 3.17 Minimum Standard Specifications for Hand and Arm Protection 31
   - 3.18 Minimum Standard Specifications for Skin Protection 32
   - 3.19 Minimum Standard Specifications for Respirators 34
   - 3.20 Minimum Standard Specifications for Protective Clothing for Users of Hand-Held Chain Saws 36
   - 3.21 Minimum Standard Specifications for Tog Bags 36
4. Selection Use, Care, And Maintenance of PPE 37
   - 4.1 Head Protection 37

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

4.2 Eye/Face Protection – Goggles, Eyeglasses, Welding Helmets, and Face Shields 39
4.3 Hearing Protection 40
4.4 Foot Protection 40
4.5 Garments (Clothing) 42
4.6 Chemical Protection 44
4.7 Reflective Vests and Bibs 45
4.8 Hand and Arm Protection 45
4.9 Respirators and Dust Masks 46
4.10 Cold-Weather Protection (Freezer Wear) 46
4.11 Skin Protection 47
4.12 Tog Bags 47
5. Acceptance 47
6. Revisions 48
7. Development Team 48
8. Acknowledgements 48
Annex A – Personal Protective Clothing – Standard Sizes 49
Annex B – Standard Nomenclature for Stitches, Seams and Stitching (Informative) 52
Annex C – Material Specification for T006 (Shirts) and all Garment Labels 53
Annex D – Flame Retardant Retro Reflective Material Sewing on Garments 54
Annex E – For Rain Wear Sizes and Chemical Chart Specs 55

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

1. Introduction

The Occupational Health and Safety Act 85 of 1993 places an obligation on employers and/or users of machinery to evaluate all the risks attached to any condition or situation that may arise from their activities and to which persons at work may be exposed to and to take necessary steps to make such condition or situation safe.

Where it is not possible to do so, the employer shall, free of charge, provide and maintain, in a good and clean condition, safety equipment and facilities and ensure that any person exposed to any such condition or situation is rendered safe. The employer is required to instruct or train his/her employees in the proper use, maintenance, and limitations of the safety equipment and facilities provided and to document such training. This document was compiled to provide minimum requirements for generic Personal Protective Equipment (PPE) to be used in Eskom and its subsidiaries and how to care for it. This in turn will ensure the protection of the health and safety of Eskom employees and compliance with the relevant legal requirements.

2. Supporting Clauses

2.1 Scope

2.1.1 Purpose

The purpose of this document is to prescribe the minimum requirements for generic Personal Protective Equipment used in Eskom and provide guidance with regards to the process for the selection, use, care, and maintenance of personal protective equipment (PPE).

This standard does not cover the requirements for specialised work such as Live Work, Fall Arrest Systems and any other specialised equipment that is not included herein. The requirements for specialised work disciplines are covered in their respective standards and/or specifications.

In the case where a particular PPE requirement is not covered in this standard, the onus is on the Division/OU/Cluster/ BU to ensure that all safety requirements are complied with in accordance with the relevant standards, regulations, or codes of practices for that specific PPE requirement.

2.1.2 Applicability

This document shall apply throughout Eskom Holdings SOC Limited divisions and subsidiaries.

The Operating/Business Units or Clusters may determine additional PPE requirements to suit their own needs or working conditions, provided that the minimum requirements as set out in this specification are met as well as the relevant legislation. Such additional requirements should not expose the employee to any risk. This can be determined through a comprehensive activity-related OHS risk assessment.

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

2.1.3 Effective Date

This document will be effective from the day of authorization. Implementation of this document shall be monitored after a period of six months from the authorisation date to allow the business to properly transition to new requirements.

2.2 Normative/Informative References

Parties using this document shall apply the most recent edition of the documents listed in the following paragraphs.

2.2.1 Normative

[1] Occupational Health and Safety Act No. 85 of 1993.

[2] 240-62196227 Eskom Life-saving Rules.

[3] 240-62582234 OHS Roles and Responsibilities and Statutory Appointments.

[4] 240-43848327 Employees' Right of Refusal to Work in Unsafe Situations.

[5] 32-245 Eskom Waste Management Standard.

[6] 32-520 Occupational Health and Safety Risk Assessment Procedure.

[7] SANS ISO 9001:2015 Quality Management Systems.

[8] SANS ISO 9001 Quality Management Systems.

[9] SANS 416 Chemical resistant gloves.

[10] SANS 434 Boiler Suits and Work Wear suits.

[11] SANS 1362 Sewing threads.

[12] SANS 1387-4, 6, 7 Woven cotton and similar apparel fabrics.

[13] SANS 1397 Industrial Safety Helmet.

[14] SANS 1400 Equipment (including oculars) for eye, face and neck protection against non-ionizing radiation arising during welding and similar operations - Welding helmets, hand shields, goggles, and welding spectacles.

[15] SANS 1404 Eye-protectors for industrial and non-industrial use.

[16] SANS 1423-1 Performance requirements for textile fabrics of low flammability.

[17] SANS 1451-1 Hearing protectors Part 1 Earmuffs.

[18] SANS 1451-2 Hearing protectors Part 2 Ear plugs.

[19] SANS 1451-3 Hearing protectors Part 3 Earmuffs attached to an industrial safety helmet.

[20] SANS 1822 Slide (zip) fasteners.

[21] SANS 10101 Standard nomenclature for stitches, seams, and stitching.

[22] SANS 50136 Respiratory protective devices – Full face masks - Requirements, testing, marking

[23] SANS 50140 Respiratory protective devices – Half masks and quarter masks – Requirements, testing and marking.

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

[24] SANS 50142 Respiratory protective devices – Mouthpiece assemblies - Requirements, testing and marking.

[25] SANS 50143 Respiratory protective devices – Particle filters - Requirements, testing and marking.

[26] SANS 50149 Respiratory protective devices – Filtering half masks to protect against particles – Requirements, testing, marking.

[27] SANS 50381-2 Protective clothing for users of hand-held chain saws Part 2: Test methods for leg protectors.

[28] SANS 50381-5 Protective clothing for users of hand-held chain saws Part 5: Requirements for leg protectors.

[29] SANS 50471 High-visibility warning clothing for professional use - Test methods and requirements.

[30] 240-47859177 Generation Policy on the Control of Clean Conditions When Working on Generators.

2.2.2 Informative

[31] 32-109 Brand Architecture and Corporate Identity Policy.

[32] 32-288 Policy Procurement and Supply Chain Management Standard.

[33] 32-599 Standard Procurement and Supply Chain Management Standard.

[34] 32-727SHEQ Policy.

2.3 Definitions

2.3.1 Danger: Anything that may cause injury or damage to persons or property.

2.3.2 Employee: Any person who is employed by or works for an employer and who receives or is entitled to receive any remuneration or who works under direction or supervision of an employer or any other person.

2.3.3 Hazard: A potential source of harm or a source of, or exposure to, danger.

2.3.4 Hem: Free edge of a garment that is folded over and sewn down.

2.3.5 Lining: Layer of fabric sewn to the inside of a garment to give the garment a neat finish.

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

2.3.6 PPE-Free Zone: An area of a work site where employees are not required to wear certain types of PPE. This includes offices and walkways.

2.3.7 Pleat: A feature on a garment that makes provision for extra ease and formed by folding fabric onto itself.

2.3.8 Risk Assessment: Overall process of hazard identification, risk analysis, and risk evaluation.

2.3.9 Seam: Joint consisting of a sequence of stitches uniting material or materials.

2.3.10 Syce: An armhole (or occasionally, a leg hole) in tailoring or dressmaking.

2.3.11 Yoke: Part of a shirt or jacket that is positioned at the shoulder area and joined to the lower section with a seam.

2.4 Abbreviations

Abbreviation	Explanation
ATPV	Arc Thermal Performance Value
BS	British Standard
BU	Business Unit
Cal/cm^2	Calories per square centimetre
dB	Decibel
EN	European Norms
g/m^2	Grams per square meter
MAG	Metal active gas (welding)
MIG	Metal inert gas (welding)
MSDS	Material safety data sheet
NRR	Noise reduction rate
OU	Operating Unit
OHS Act	The Occupational Health and Safety Act, Act 85 of 1993.
PPE	Personal Protective Equipment
PU	Polyurethane
PVC	Polyvinyl chloride
SABS	South African Bureau of Standards
SANS	South African National Standard
SNR	Signal to noise rate
TIG	Tungsten inert gas welding
PPE	Personal Protective Equipment

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

2.5 Roles and Responsibilities

2.5.1 Duties of Employer/Line Managers

- Ensure that a risk assessment is conducted, and a hierarchy of control is implemented before PPE is identified as a control measure.
- Ensure that employees are issued with correct PPE based on the hazard identification and risk assessment document and the relevant PPE Matrix.
- Ensure that all information and instructions are communicated and that the necessary training on the usage of any PPE is provided to all the applicable employees before its use. This shall include the limitations of identified/specific work wear/accessory.
- Ensure that PPE provided to employees is suitable for minimising the impact of the hazard the employees are exposed to by ensuring that risk assessments are performed before identification of PPE.
- An employer shall not require or permit any employee to work unless such an employee is issued with the required personal protective equipment and makes proper use thereof.
- Allow the employee to exercise his/her right to refuse work when exposed to hazards that cannot be eliminated or mitigated by the issuing of PPE.
- Where a possibility exists that cleaning and maintenance will result in the spread of contaminants, such as HBAs and HCAs, it becomes the responsibility of the employer to clean the PPE.
- Where applicable, provide employees with facilities to store PPE.

2.5.2 Duties of Employees

Employees shall:

- Receive or attend comprehensive training on the use and limitations of PPE.
- Personally sign for all issued PPE and wear or use issued PPE to reduce the risk of personal injury where required to.
- Maintain each item of PPE issued to them in a hygienic and good state of repair and not modify any PPE issued.
- Ensure that such PPE is always available during working hours, including stand-by emergencies and overtime.
- Where required, wear or use PPE designed to reduce the risk of personal injury as prescribed by risk assessment, procedures, or any relevant requirements.
- Immediately report if any of the PPE issued has been lost, damaged, worn out, or stolen.
- The cleaning and maintenance of PPE shall be the responsibility of the employee, except where the possibility exists that cleaning and maintenance will result in the spread of contaminants. Then it becomes the responsibility of the employer.
- Cleaning of PPE shall be done according to the manufacturer’s specification.

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

- Persons who are unable to use the standard issue of PPE owing to physical or ergonomic constraints shall approach their employer, through their health and safety representative or manager, occupational health practitioner, or occupational hygienist, to arrange for specially manufactured PPE to be purchased (for example, outsize shoes or boiler suits/overalls).
- For hygiene purposes, PPE should only be used by the person to whom it is issued and should not be shared with other employees.
- Where certain PPE, for example, earmuffs and visitor hard hats, is shared, it is the responsibility of the issuer to ensure that it is properly cleaned or disinfected before storage and use.
- Do not use any PPE that has not been inspected or maintained according to the manufacturer's specification.
- Ensure that all PPE, including attachments, has not expired or damaged.

2.5.3 OHS Department

The OHS Department shall:

- provide support to line management regarding management of PPE.
- assist with the development and facilitation of training on the use of PPE and its limitations.
- ensure that a proper risk assessment is performed before PPE is issued.
- ensure compliance with the OHS Act and relevant PPE documents.
- investigate any PPE queries raised by employees and report to management.
- conduct random inspections to monitor PPE compliance requirements.
- where applicable conduct awareness training on the correct wearing of PPE.

2.6 Process for Monitoring

Compliance to this document shall be monitored and audited by the SHEQ department and Line management. Where possible SHEQ department and/or line managers shall inspect procured PPE to ensure compliance with this document and risk assessments.

3. Document Content

3.1 General

3.1.1 Minimum Requirements

All PPE shall meet the following minimum requirements:

- Must be the last means of protection as per the OHS Act and hierarchy of controls.
- Must be supplied to an employee free of charge and be readily available.

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

- Must be suitable and fit for purpose.
- Must be kept in good condition and be in good working order.
- Misuse of PPE shall be discouraged to ensure proper protection of employees.
- When properly used, it must be capable of controlling the employees' exposure by providing adequate protection and reduce exposure to the specific hazards in the workplace.
- If required, must be compliant to the identified authorised body and comply with technical specifications for the identified PPE.
- Must be issued at a frequency that will ensure effective protection of employees and will depend on the condition of the equipment due to wear and tear or as specified by the Responsible manager. (Each business unit to enforce their own site-specific procedure/process).
- Locally manufactured PPE shall be given preference.

3.1.2 Issuing of PPE

- PPE shall be issued to employees to protect them against occupational hazards free of charge.
- PPE shall be issued in accordance with the approved PPE Matrix that is based on the risk assessment and exposure assessment results.
- This document prescribes the minimum amount of PPE to be issued per individual; additional needs shall be determined by the risk assessment.
- PPE shall be issued to persons on an individual basis.
- Shared PPE must be sanitised or disinfected before use by the next employee or storage.
- A record shall be kept of the issuing of all PPE to persons.
- The physical condition of all PPE shall be inspected by the supervisor or his/her delegate every three months or according to guidance from the manufacturer or applicable legislation or standards and codes.
- Each cluster or business/operating unit shall determine the PPE issuing or replacement schedule based on risk assessment and operational needs.

3.1.3 Replacement of PPE

- Replacements shall be made only based on exchanging unserviceable equipment for new items or based on fair wear and tear based on use and operational requirements.
- On replacement, the employee's line manager or supervisor shall destroy unserviceable items of PPE. Old clothing handed in shall be disfigured or cut up to prevent further use (that is, wearing or using for exchange).
- Old or damaged PPE shall be managed and disposed of according to the Eskom Waste Standard (32-245). It is encouraged that waste management principles, such as reuse or recycle, be adopted before disposal.

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

- All PPE/clothing shall be issued free of charge. Where losses are due to negligence, etc., the appropriate Eskom disciplinary procedures shall be followed.
- All Eskom-branded items of PPE shall be handed in on termination of an employee's service with Eskom. These items shall remain Eskom's property and responsibility. The responsible line manager shall monitor this process within the scope of the existing processes for the issuing and replacement of PPE.

3.1.4 Special Circumstances

Employees who cannot perform their duties due to physical, medical, or ergonomic constraints that prevent them from using appropriate protective equipment may be permitted to purchase specially manufactured equipment (in terms of the Eskom procurement process), provided that a written document from a specialist on such constraints is submitted to the employer via the health and safety representative, Occupational health practitioner, Occupational Hygiene Practitioner, or manager.

3.1.5 PPE-Free Zones

- PPE-free zones shall be declared after conducting a proper risk assessment that confirms that PPE is not a requirement in that area, and it is safe to be in that work area without wearing PPE.

3.2 General Garments or Work Wear Specification

- Garments shall be cut and made following the standard of the prescribed specifications and shall be free from defect that affect their appearance or may affect their serviceability (or both) and free from marks, spots and stains incurred during the manufacturing process.
- All seams/stitching shall be in accordance with the prescribed national standard. Seams and stitching shall be free of twists, pleats, and puckers and shall be sufficiently extensible to obviate seams cracking and undue shrinkage in use.
- All ends of sewing that are not secured in seams or in other sewing shall be adequately back tacked.
- To improve the visibility of employee's, all garments shall have reflective strips sewn on it
- In cases where the reflective strips create a risk due to glare, for example live line and aviation activities, garments without reflective strips shall be worn. This shall be supported by a proper risk assessment.
- All ends of sewing shall be trimmed and loose threads removed.
- All garments shall be in accordance with the prescribed Eskom PPE design specification for the composition of these garments.
- All garments shall be labelled according to SANS 434 and the label shall bear information as given in 5.3.1.2 (see figure 6(a) and figure 6(b)) of SANS 434.
- The garment manufacturer shall receive a certificate of compliance from the manufacturer of the fabric confirming that the fabric complies with the SANS and EN specifications,
- Refer to Annex A for Ladies and Men's sizes (SANS 434).

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

3.3 Minimum Standard Specifications for Boiler Suits/Overalls - One Piece (Figure 2 on diagram: drg.10332 SANS 434) and two piece (Figure 4 on diagram: drg.15289da on SANS 434) work wear suits

- Boiler suits or two-piece work wear suits used shall be as per with SANS 434.
- Flame-treated boiler suits material shall be pre-shrunk 100% woven cotton fabric as per with SANS 1387-4, material type of D59, flame retardant finish that complies with SANS 1423–1, class C category 1.
- Chemical boiler suits (Alkali & Acids) material shall be pre-shrunk 65% / 35% polyester/viscose fabric in accordance with SANS 1387-3 and shall have acid resistant finish.
- The colours shall be Navy Blue. Pantone 19_3920 and for Alkali & Acid shall be Bottle Green Pantone 19_6110TC.
- The zip fastener shall comply with SANS 1822 style C and be of a non-conductive material. Must be intact front and back of garments.
- The colour of the stringers of a slide fastener shall be an acceptable match to that of the fabric with which the slide fastener is used.
- The stitching shall comply with SANS 10101.
- The thread used shall comply with SANS 1362.
- Garments manufactured as per SANS 434 must bear the SABS mark of approval.
- The Eskom logo shall appear on the left-hand top pocket in white and shall be as per Eskom's Corporate Identity.
- The Zero Harm identification shall appear on the right-side sleeve of the top and shall be in accordance with Eskom's Corporate Identity.
- All Personal Protective Clothing to be fitted with flame retro reflective material strips on both sleeves' circumference on the inner upper arm, and reflective strips on both legs at the knee height , with an exception for conditions stated in 3.2. bullet point 5.

NB: Chemical (bottle green) boiler suits are acid treated only and are not flame treated.

3.3.1 Minimum Standard Specifications for Boiler Suits/Overalls (One Piece)

One Piece Boiler suits/overalls shall be in accordance with SANS 434.

- The fronts shall be shirt-style open fronts with a collar.
- The top section, if not cut in one with the trouser section, shall be joined by means of a seam at waist level.
- The back be cut in one piece and shall be joined to the trouser section by means of a seam at waist level.
- The waistline shall require elasticized from side seam to side seam.
- The collar shape shall be such as to be acceptable, the width at the centre back shall be at least 80 mm and the steps shall be of width at least 35 mm.
- Set-in sleeves shall be of one-piece construction and be fitted with a cuff at the bottom end.

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

- Cuffs plain with a double folded turned-in hem of at least 15 mm.
- The front fastening at bottom of the opening shall be securely bar-tacked. All raw edges shall be turned in and stitched. Fly front shall fasten with a slide fastener as per SANS 1822 Figure 4 two-way fastener type A.
- The slide fastener shall be secured with two rows of stitching on each stringer.
- The front edges shall overlap at least 35 mm and the facing shall be grown on.
- The finished width and depth of a pocket shall be measured from edge to edge on the outside of the pocket with pencil pocket. Pocket mouths shall be finished with a hem that is deep enough to accommodate the attachment of a fastening and shall be adequately secured.
- Breast hip pockets: shall be patch pockets, with rounded corners.
- The side and bottom edges of a pocket shall be turned in at least 10 mm and stitched down with two rows of stitching of at least 2 mm and a maximum 10 mm respectively.
- The mouth of the pocket shall be hemmed and each end of the pocket mouth and shall be securely bar-tacked.
- The breast pocket shall be positioned above the scye level in accordance with acceptable patternmaking practice.
- The hip pocket shall be positioned appropriately from the side seam in accordance with acceptable patternmaking practice and at least 60 mm from the waist seam.
- Side pockets shall have a slanted mouth opening of minimum finished length 180 mm and shall have an inside patch pocket of outer material.
- Pencil pocket shall form part of the breast pocket and of width at least 40 mm and the full depth of the breast pocket and shall be positioned at the centre front end of breast pocket.
- The pencil pocket shall be formed by a row of vertical stitching from the front edge.
- Pocket flaps shall be mitred.
- Flaps shall be lined with outer material and shall fasten in the centre with a button and buttonhole.
- All flaps shall be of depth at least 50 mm, and a mitred flap shall taper to at least 30 mm at the ends.
- A flap shall be of such width as to overlap the pocket at each side and shall be positioned at least 10 mm above the pocket mouth and securely tacked at each end.
- Buttonholes shall be large enough to neatly accommodate the buttons and shall be as follows: If four-hole plastics buttons are used, a shirt type buttonhole may be used.
- The bottoms of the legs shall have a plain double folded hem of at least 15 mm.

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

3.3.2 Minimum Standard Specifications Boiler Suits/Overalls (Two Piece)

3.3.2.1 Minimum Standard Specifications for Pants (chemical and flame)

- Flame treated long pants shall be made of pre-shrunk 100% soft woven cotton fabric in accordance with SANS 1387-4, Material Type D 59- flame retardant SANS 1423-1 class C category 1.
- Chemical treated long pants shall (Alkali & Acids) be made of pre-shrunk 65% / 35% polyester/viscose fabric in accordance with SANS 1387-3 and shall have acid resistant finish.
- Long pants shall comply with the size specification in SANS 434 (refer to the trousers for the two-piece Personal Protective Clothing).
- The pants shall be a standard five pocket style which shall exclude the ruler/carpenter's pocket.
- The pants shall have a waistband which shall be elasticated ruched at the back with a zip front and one (1) button on the front of the waistband and a plain bottom.
- The waistband shall have the number of belt loops as prescribed in SANS 434.
- The colour shall be Navy Blue. Pantone 19_3920 for flame treated pants and bottle green for chemical treated pants.
- The logo shall be applied in accordance with Eskom's Corporate Identity and shall be embroidered on the right back pocket.
- The stitching shall comply with SANS 10101.
- The zip fastener shall comply with SANS 1822 and shall be made of a non-conductive material.
- The thread used shall comply with SANS 1362.
- The Zero Harm identification shall appear on the left back pocket of the pants and shall be in accordance with Eskom's Corporate Identity.
- All pants to be fitted with reflective strips on both legs above the knees, with an exception for conditions stated in 3.2. bullet point 5.

3.3.2.2 Minimum Standard Specifications for Clean Condition Pants

- Material type D59 pre-shrunk 100% soft woven cotton fabric in accordance with SANS 1387-4, flame retardant class C category 1.
- The trouser shall have no pockets.
- The trouser shall have no buttons.
- The pants shall have a waistband which shall be elasticated ruched at the back with draw cord 10mm cotton belt string for fastening and without zip on the front no metal attachments.
- The colour shall be white.
- The Eskom logo shall appear on the right back in navy blue and shall be in accordance with Eskom's Corporate Identity.

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

- The Zero Harm identification shall appear on the left back side and shall be in accordance with Eskom's Corporate Identity.
- All personal protective clothing to be fitted with reflective strips on both legs' circumference on the inner upper leg.
- SANS 10101 for stitching.
- SANS 1362 for threads.
- Garment to be individually packed in sealed plastic bags.

3.3.2.3 Minimum Standard Specifications for Jackets (chemical and flame)

- The jacket shall have a collar.
- The front shall be an open type with fastenings.
- The jacket bottom shall have a plain hem, without side vents.
- Pockets shall be as required (see Annex A) and without flaps. For bottom pockets.
- Sleeves shall be one-piece long and set in.
- Front edges shall have grown-on facings of width at least 45 mm and the inside edges neatly finished.
- Each front panel shall not have a yoke.
- The fronts shall fasten with a slide fastener that extends to at least 90 mm above the bottom hem.
- A front with butted edges shall be such that the slide fastener is concealed and stitched down.
- Slide fasteners shall be secured to the fronts with two rows of stitching along each stringer.
- The back shall be plain (no centre back seam).
- Sleeves shall be of the one-piece.
- The sleeve ends shall have a plain cuff of width at least 15 mm.
- Pockets shall be patch pockets of outer material and shall have round corners.
- Pocket mouth hems shall be of finished Width 10 mm or 20 mm (see 4.5.14).
- Breast and side pockets shall be of finished measurement as given in Table 6.
- The breast pocket shall be positioned above the scye level in accordance with acceptable patternmaking and garment construction practice.
- The colour shall be Navy Blue. Pantone 19_3920 for flame treated jackets and bottle green for chemical treated jackets.
- The pencil pocket shall form part of the breast pocket and of width (mouth opening) at least 40 mm and the full depth of the breast pocket and shall be positioned at the centre front end of breast pocket.
- The pencil pocket shall be formed by a row of vertical stitching from the front edge.

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

- Breast pocket flap shall be mitred, lined with outer material, and fasten in the centre with a button and buttonhole.
- A flap shall be of depth at least 50 mm, at the mitred point and taper to at least 30 mm at the ends.
- A flap shall be of such length as to overlap the pocket width, shall be positioned at least 10 mm above the pocket mouth and shall be securely tacked at each end; the bottom of a jacket shall be finished with a plain hem.

3.3.2.4 Minimum Standard Specifications for Clean Condition Jacket

- The jacket shall have a collar.
- The front shall be closed one panel with a V-neck collar.
- Only material type D59 Pre-Shrunk 100% soft woven cotton fabric in accordance with SANS 1387-4, Flame Retardant class C category 1.
- The jacket shall have no pockets.
- No buttons on the garment.
- The colour shall be white.
- The Eskom logo shall appear on the left-hand top chest in navy blue and shall be in accordance with Eskom's Corporate Identity.
- The Zero Harm identification shall appear on the right-side sleeve and shall be in accordance with Eskom's Corporate Identity.
- All personal protective clothing tops to be fitted with reflective strips on both sleeves' circumference on the inner upper arm.
- SANS 10101 for stitching.
- SANS 1362 for threads.
- Garment to be individually packed in sealed plastic bags.

3.4 Minimum Standard Specifications for Dust Coats

- The dust coat length shall be ¾.
- The dust cost shall have pockets, front buttons, two front pockets, slit at the back.
- Buttons acceptable four-hole, dyed plastics buttons that comply with the requirements of SANS 1457.
- Coats shall fasten with button and buttonhole and shall be equidistantly spaced.
- Buttons shall be secured to positions corresponding to the buttonholes.
- The pencil pocket shall form part of the breast pocket and of width (mouth opening) at least 40 mm and the full depth of the breast pocket and shall be positioned at the centre front end of breast pocket.
- The pencil pocket shall be formed by a row of vertical stitching from the front edge.

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

- The back shall have a seam down the centre with a vent in the lower part of the seam.
- The vent shall have an overlap of 40 mm and shall be securely tacked and bar-tacked at the top.
- A hanger loop of outer double folded material of finished length at least 70 mm and of finished width at least 10 mm, shall be securely sewn in with the collar at the back neck on the inside.
- The bottom of the coats and the lower edge of plain sleeve cuffs shall have hems of finished width at least 15 mm.
- Pocket mouths shall have hems of finished width at least 20 mm.
- Coat to be fitted with reflective strips on both sleeves' circumference on the inner upper arm and Zero Harm identification shall appear on the right side of the sleeve and shall be in accordance with Eskom's Corporate Identity.

3.5 Minimum Standard Specifications for Shirts

- All shirts must be of T006 satin weave 100% cotton fabric as per Annex C and treated with a flame-retardant finish that complies with SANS 1423-1, class C category 1.
- The shirts shall comply only with the requirements and sizes referred to Annex A.
- Button front with yoke and two breast pockets and flaps to button closure.
- The pockets shall be 16 cm deep and 14 cm wide.
- The pockets and flaps shall have round edges.
- The flaps on the pockets shall have a pen division on the left side.
- The front pocket shall be fastened by means of non-conductive buttons.
- The collar shall be a standard shirt collar.
- The back of the shirt shall have an inverted pleat with hanger loop and yoke.
- Long-sleeved shirts shall have a cuff- 65 mm wide set-in long sleeve with two knife pleats separate the cuff with button closure of non-conductive buttons. Sleeve opening bound with binding.
- The shirt shall be corporate colour (Grey). (CKS 129-188c).
- The logo shall be embroidered in accordance with Eskom's Corporate Identity.
- The front buttons shall be sewn onto a strengthened front and shall be non-conductive.
- The stitching shall comply with SANS 10101. Seams shoulder, sleeve and back yoke posted.
- Side seam and under arm safety stitch. Hems finished 10mm.
- The thread used shall comply with SANS 1362.
- The Zero Harm identification shall appear on the right side of the sleeve and shall be in accordance with Eskom's Corporate Identity.

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

3.6 Minimum Standard Specifications for Ladies Shirts And Pants

3.6.1 Ladies Shirts

- All shirts shall be made of T006 satin weave 100% cotton fabric as per Annex C and treated with a flame-retardant finish that complies with SANS 1423-1, class C category 1.
- The shirt sizes shall comply to Annex A
- The front of the long-sleeved shirts shall be button down plain collar with bust and waist darts.
- Two Breast pockets shall be 14cm deep and 14.5 cm wide.
- The pockets and flaps shall have cut – edges.
- The flaps on the pockets shall have a pen division.
- The pocket corners shall be back tacked.
- The pocket shall be fastened by means of non-conductive buttons.
- The collar shall be a standard shirt collar.
- Long-sleeved shirts shall have a cuff - 65 mm wide.
- The shirt shall be corporate colour (Grey). (CKS 129 -188c).
- The Eskom logo shall be embroidered in accordance with Eskom's Corporate Identity.
- The front buttons shall be sewn onto a strengthened front and the buttons shall be non-conductive.
- The buttonholes shall be 1.2 cm shirt type buttonholes.
- The hem shall be plain finished and shall be 1.5 cm in width.
- The stitching shall comply with SANS 10101.
- The thread used shall comply with SANS 1362.
- The Zero Harm identification shall appear on the right side of the sleeve and shall be in accordance with Eskom's Corporate Identity.

3.6.2 Ladies Pants

- Long pants shall be made of pre-shrunk 100% soft woven cotton fabric in accordance with SANS 1387-4, Material Type D59, flame retardant SANS 1423-1, class C category 1.
- The size shall comply with the size specification in Annex A.
- Long pants shall have reverse pleats.
- The pants shall have a waistband which shall be elasticated ruched at the back with a zip front and one (1) button on the front of the waistband and a plain bottom.
- The waistband shall be 38-40 mm in width.
- The pants shall have 2 side pockets.
- The pants shall be Eskom Navy Blue Pantone 19_3920.

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

- The Eskom logo shall be applied in accordance with Eskom's Corporate Identity and shall be embroidered on the right back pocket of the pants.
- The stitching shall comply with SANS 10101.
- The zip fastener shall comply with SANS 1822 style A figure 3 and be of a non-conductive material.
- The thread used shall comply with SANS 1362.
- The Zero Harm identification shall appear on the left back pocket of the pants and shall be in accordance with Eskom's Corporate Identity.
- Pants to be fitted with reflective strips on both legs above the knees, with an exception for conditions stated in 3.2. bullet point 5.

3.7 Minimum Standard Specifications Thermal Jackets (Winter Jackets)

- Jackets shall be insulated with pre-shrunk hollow cotton fibre 135 g/m2 which is made of non-flammable material, the inner material shall be a tartan lining, 100% cotton of a darkish colour, with the outer covering be pre-shrunk 100% soft woven fabric in accordance with SANS 1387-4, Material Type D59, flame retardant. (SANS 1423-1), class C category 1.
- The size shall be in accordance with Annex A.
- The jackets shall have one chest pocket and four side pockets. The side pocket shall be the bellows type with a side entry into another separate pocket and shall be 22 cm deep and 21 cm wide.
- The pockets shall have flaps with cut-off edges that can be fastened by means of non-conductive press studs.
- Chest pockets shall be the bellows type – 15 cm deep and 14 cm wide.
- The jackets shall reach below the buttocks.
- The jackets shall have non-conductive press-studs down the front on a double panel strip as well as a non-conductive zip complying with SANS 1822 and be intact front and back.
- The sleeve cuffs shall have two non-conductive press-studs at the end of the sleeve so that the size can be adjusted.
- The Eskom logo shall be embroidered in accordance with Eskom's Corporate Identity.
- The stitching shall comply with SANS 10101.
- The thread used shall comply with SANS 1362.
- The jacket shall comply with the Eskom identity requirements and shall be Eskom Navy blue (Pantone 19_3920 as per corporate colour code.
- The thermal jacket to be fitted with reflective strips on both sleeves' circumference on the inner upper arms.
- The Zero Harm identification shall appear on the right side of the sleeve and shall be in accordance with Eskom's Corporate Identity.

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

3.8 Minimum Standard Specifications for Rain Protection (Rain Suits)

- The fabric for the jacket and trousers shall be a minimum of 180 grams per square meter with the face side 100% polyester, plain weave with 170 threads per square inch and coated with a water-resistant coating.
- The "under" side to be laminated with PVC coating. Seams strength to be 50kPa, (converts to 50kN/m^2). The lining to be 80% polyester and 20% cotton. All sizing benchmark to SANS 434 see size chart Annexure E for rain wear and chemical chart specification.
- The rain jacket shall have a nylon spiral zip and a closed fly front secured by non-conductive press-studs and shall comply with SANS 1822 type 5(auto lock alloy sliders).
- The hood shall be attached to the rain jacket.
- The rain jacket shall cover the buttocks.
- The sleeves shall have a false elastic sleeve at the end (made of a softer material) to prevent rain entering the sleeve.
- The pants shall have two side slits and elasticised waist.
- Rain suits shall be Navy blue in colour.
- The rain suit shall be fitted with reflective strips on both sleeves' circumference on the inner upper arm, reflective strips on both legs above the knees
- The Zero Harm identification shall appear on the right side of the sleeve and shall be in accordance with Eskom's Corporate Identity.
- The Eskom logo shall be silk-screened in accordance with Eskom's Corporate Identity, on the front and on the back.
- The size of the Eskom logo on the front shall be 65 mm high and on the back the Eskom logo shall be 150 mm high.

3.9 Minimum Standard Specifications for Chemical Protection (Chemical Suits)

- The fabric for the jacket and pants shall be a minimum of 400 grams per square meter, PVC Coated Polyester, Tear strength weft 40N and warp 30N, burst strength weft 655N/50mm, warp1232N/50mm, and coating adhesive 15N/50mm.
- Polyester base fabric to be 100% polyester weight 80 grams per square meter and yarn/cm 16 by 14.5.
- Rain suits shall be Hi Vis Yellow in colour. This is global the international colour for chemical rainwear.
- Hook and loop tape 20mm-white and draw cord 3mm polyester, seams to be high frequency welded.
- The chemical rain jacket shall have a nylon spiral zip and a closed fly front secured by acid resistant press-studs and shall comply with SANS 1822 type 5(auto lock alloy sliders).
- The hood shall be attached to the rain jacket.
- The chemical rain jacket shall cover the buttocks.

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

- The sleeves shall have a false elastic sleeve at the end (made of a softer material) to prevent chemicals entering the sleeve.
- The pants shall have no side slits and no pockets.
- The pants shall have an elasticised waist.
- The chemical rain suit shall be fitted with reflective strips on both sleeves' circumference on the inner upper arm, reflective strips on both legs above the knees.
- The Zero Harm identification shall appear on the right side of the sleeve and shall be in accordance with Eskom's Corporate Identity.
- The Eskom logo shall be silk-screened in accordance with Eskom's Corporate Identity, on the front.
- The PVC Coating formulation stipulated not to be changed by supplier.

Chemical tested to ASTM P903-96 for the BTT (break through time) see chemical chart specs annex E

Note Annex E for rain wear sizes and chemical chart specs

3.10 Minimum Standard Specifications for Reflective Vests and Bibs

- Shall comply with SANS 50471: High-visibility warning clothing for professional use.
- The vests/bibs design shall comply with Figure A3 on Annexure A of SANS 50471 except for employees at work A.4 design.
- The reflective tape (retro reflective material) shall comply with SANS 50471 and shall be a minimum of 50mm in width.
- Colour requirements for background and combined performance material shall comply with Table 2 in SANS 50471. Where the prescribed colour is not available, the division/cluster/OU/BU can determine the suitable colour to replace it.
- The front shall be closed by a zip fastener which shall comply with SANS 1822 and be of a non-conductive material.
- The sizes in accordance with the requirements stipulated in section 4.3 of EN 340.
- The Eskom logo shall be silk-screened in accordance with Eskom's Corporate Identity, on the front left side above the identity pocket.
- High visibility tape as per figure A.3 and A.4 where applicable as per the below mentioned table.

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

Category	Colour of Vest	Colour Code	Design
Evacuation Co-ordinator	Cloud White with silver retro reflective material	Cloud White G80 (NCS 0704-G38Y)	A.3
First Aid Co-ordinator	Emerald Green with silver retro reflective material	Emerald Green E14 (NCS 3745-B99G)	A.3
Fire Protection Co-ordinator (Fire Warden)	Fluorescent red with silver retro reflective material	Signal Red A11 (NCS 1678-Y86R)	A.3
Employee at Work	Fluorescent orange-red silver retro reflective material	Light Orange B26 (NCS 1673-Y48R)	A.4
Transport Co-ordinator	Ice Blue with silver retro reflective material	Ice Blue F76 (NCS 0809-B66G)	A.3
Management (Managers, Auditors, Observers and Security).	Fluorescent yellow with silver retro reflective material	Golden Yellow B49 (NCS 1178-Y14R)	A.3

3.11 Minimum Standard Specifications for Cold Weather Protection

3.11.1 Freezer Wear

- The fabric specification for freezer wear shall be: Outer fabric: 100% cotton soft woven fabric in accordance with SANS 1387-4, Material Type D59, flame retardant (SANS 1423-1) class C category 1, Insulating Layer: 135g/m2 polyester.
- Lining: 100% cotton, uncoloured. (Not dyed).
- The jackets shall have non-conductive press-studs down the front on a double panel strip as well as a non-conductive zip complying with SANS 1822. To be intact front and back.
- Freezer suits outer material shall be Hi Vis Orange colour.
- The Zero Harm identification shall be embroidered on the right upper arm and the Eskom logo shall be embroidered in accordance with Eskom's Corporate Identity on the front top pocket; identification: indelible marks, trademark, and size on all items.
- Other special protection includes but not limited to:
  - Cotton thermal underwear
  - Woollen gloves
  - Woollen socks
  - Balaclavas

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

- Freezer suits
- Gumboot inserts
- Body protection – Battery acid/alkali protection

3.12 Minimum Standard Specifications for Aprons

3.12.1 Chemical Apron

- The apron shall be rubber-coated or heavy-duty plastic polyester viscose material.
- The apron shall be full length and hang to the knees or below the knees.

3.12.2 Welding Apron

- Apron, welder: garment size: width 24 x length 42 inches; material: leather cowhide; with adjustable neck strap.
- Must provide complete front body protection.

3.13 Minimum Standard Specifications for Head Protection

- All hard hats must be of the type that has an adjustable three-point webbing chin strap as prescribed in accordance with SANS 1397 and:
- The colour of the hard hats shall be white in accordance with Eskom's Corporate Identity.

Note: The Eskom Logo must be on the front of the helmet.

- The colour of the Eskom logo on the hard hats shall be in accordance with Eskom's Corporate Identity.
- The Zero Harm slogan shall be silk screened on the left-hand side of the hat.
- The hard hat shall have a reflective sticker with emergency numbers attached at the back.

3.13.1 Hard Hats (Industrial Helmet)

All working from height hard hats shall:

- Bear the SABS mark and in accordance with SANS 1397.
- Be purchased with an adjustable chin strap.
- Have an adjustable three-point webbing chin strap in accordance with SANS 1397: Section 3.8.
- Have a shortened sun peak.
- Have limited side rims/gutter.
- Have a webbing suspension harness.
- Have a thick sweat band of +/- 4.5 cm (THICKNESS).
- Have adjustable head bands of standard size 53 cm to 63 cm.

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

3.13.2 Sun Brim (For Hard Hat)

- The shape of the brim shall be oval and shall have a front back and neck protector attached to bottom of the brim.
- The material shall be pre-shrunk 100 % woven cotton fabric in accordance with SANS 1387-4, material type D59, and flame-retardant class C category 1.
- The colours shall be Navy Blue. Pantone 19_3920.
- The Eskom logo shall be embroidered on the back flap in accordance with the Eskom Corporate Identity.
- Sun brim shall have a reinforced stiffened broad brim of at least 90 mm (Brim malgray chip board material 600 to 800g/m2).
- Inside diameter 740mm (front to back 240mm and side to side 200mm).
- Outside front to back 430mm and from side-to-side 380mm.
- The stitching shall comply with SANS 10101.
- The thread used shall comply with SANS 1362.
- Insert for hard hat front peak flap centre 130mm and side fitted to other brim.
- Insert for hard hat rear section centre 130mm and sides fitted to other brim.
- Neck protector at back centre 230mm long and sides fitted halfway to outer sun brim protector.
- Velcro 40 by 25mm attach on left side of brim and rear insert of flap for stability.
- Cotton twill tape 20mm to be fit on inner, outer brim front and back peak supports and neck protector.
- Front peak support to be stitched down 70mm from other brim edge.
- Top bottom and inner layer shall have a minimum of 6 rows reinforcement stitching around the brim.

3.13.3 Hair Nets

- Hair Nets shall be made of pre-shrunk 100% soft woven cotton fabric in accordance with SANS 1387-4, Material Type D59, flame retardant SANS 1423-1 class C category 1.
- Hood with inside pocket for hair protection and additional ear protection.
- Velcro closure on hat harness, the hood will be bound with self-material binding length of hood 320mm, Width of hood 280mm, Pocket depth 220mm.

3.13.4 Soft Bush Hats

- The material shall be pre-shrunk 100 % woven cotton fabric in accordance with SANS 1387-4, material type D59, and flame retardant, class C category 1.
- The colours shall be Navy Blue. Pantone 19_3920.

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

- The Eskom logo shall be embroidered on the front of the hat in accordance with the Eskom Corporate Identity.
- The Zero Harm identification shall be embroidered on the rear of the hat and shall be in accordance with Eskom's Corporate Identity.
- Soft hats shall have a reinforced stiffened broad brim of at least 80 mm and shall have a draw string fitted with a spring-loaded clip.
- The stitching shall comply with SANS 10101.
- The thread used shall comply with SANS 1362.

3.14 Minimum Standard Specifications for Eye/Face Protection

Eye/face protection used shall be in accordance with:

- In terms of robustness all eye protection must be constructed to protect against impact, non-adherence of molten metal, hot solids, liquids, and dust. Where applicable and based on a risk assessment eye-protectors shall be provided with at least brow guards, chin protectors, chin straps and visors.
- SANS 1404, Eye protectors for industrial and non-industrial use. This code specifies the characteristics of personal eye-protectors for industrial and non-industrial use. It covers eye protectors embodying a-focal or prescriptive lenses or combinations of these. The hazards covered are impact, molten metals, hot solids, dust, gases, liquids, and any combination of these.
- SANS 1400, Equipment (including oculars) for eye, face and neck protection against non-ionising radiation arising during welding and similar operations – welding helmets, hand shields, goggles, and welding spectacles.

3.14.1 Spectacle Visitors

Lens and frame colour clear, lens tint clear and coating uncoated, temple style semi-dropped, brow protection both with side shield and vents, nose bridge nonslip and compliance to CE-EN-166 and ANSI Z87.1.

3.14.2 Spectacle Welders

Colour green frame colour black and lens tint welding shade 5.0. Lens coating, hard coat, and adjustable drop temple also temple style drop with adjustable length and with universal nose bridge to compliance to ANSI Z87.1.

3.14.3 Goggles

Impact splash dust and mist resistant moulded lens and anti-fog coating to ANSI D3 D4. frame colour smoke, lens tint clear and coating anti fog anti scratch, temple style wider adjustable fabric strap with "d" slides comply to ANZIz87.1and CE-EN 166.g.

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

3.14.4 Spectacle Sunglasses

- Type wrap around ballistic protection for harsh industrial environments.
- Frame colour shall be preferably black; lens tint shall be 1) Indoor-outdoor, 2) clear and 3) amber lens coating hard coat.
- Temple style drop with adjustable lengths; soft self-fitting rubber nose bridge, super coat protection with anti-fog, anti-scratch, anti-static, and UV 100% ultraviolet protection (Amber 99% UV) comply to ANZI z87.1 and CE-EN 166; meet traffic signal colour recognition requirements of ANSI Z80.3.

3.14.5 Safety Eyewear Cord

- Colour black
- Elastic slip-on construction
- Adjustable length

3.14.6 Spectacle Storage Case

- Must be foam padded
- Nylon eyewear case
- Zipper closure with belt clip colour black to fit all spectacles

3.14.7 Goggle/Earmuffs Storage Case

Oversize microfiber eyewear bag with drawstring; suitable for goggles or earmuffs.

3.14.8 Face Shield – Acid/Alkali Protection (SANS 1404)

- The face shield shall provide protection against acid/alkali/ Hazardous biological substances burn.
- The shield shall be made of a transparent material and which material shall be made of Polycarbonate Grade 1 impact, that is, it shall resist the frontal impact of a 6 mm steel ball travelling at a velocity of 120 m/s.
- For eye protection against high impact and flying particles.
- Dimensions: width 310 X length 205 X thick 1 MM.

3.14.9 Face Shield – LV Switching

The face shield shall provide protection against electrical burns and flashes as applicable for Arc Flash Protection as per Arc Flash category requirements.

- The shield shall be made of a transparent material which shall be made of Polycarbonate.
- The face shield shall have anti-fog coating.
- The face shield shall have a protection bag.

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

- The face shield shall fit the existing hard hats and shall comply with Category 1 of NFPA 70E-2000 and minimum ATPV performance value of 5 Cal/cm2.

3.14.10 Face Shield for Cutting and Grinding

- The face shield shall provide protection against cutting and grinding material.
- The shield shall be made of a transparent material and which material shall be made of Polycarbonate Grade 1 impact, that is, it shall resist the frontal impact of a 6 mm steel ball travelling at a velocity of 120 m/s.
- For eye protection against high impact and flying particles.
- Dimensions: width 310 x length 205 x thick 1 MM.

3.14.11 Welding Helmet Hard Hat Assembled

- Heat resistant thermoplastic shell; material black nylon; visor holder material AS/NZS 1337 medium rating (1); polycarbonate cover lens material AS/NSZ 1338; chipping lens material polycarbonate – medium impact (1); filter lens to have been tested/certified to AS/NZS 1338; Impact protection on the complete assembly to AS/NZS 1337.1 and TA500 series safety helmet.

3.14.12 Welding Helmet Replacement Lenses

- Welding Helmet Replacement Lenses AS/NZS 1337.1, 5051mm x 108mm.
- Polycarbonate clear chipping lens replacement high impact (V).

3.14.13 Welding Helmet Filter Arc Welding Shades

- Welding Helmet Filter Arc Welding Shade 12; AS/NZS 1337.1, 50-51mm x 108mm; high to extra high impact rating; ball speed 6.00mm – 120-190m/sec; 6.35mm – 110-175m/sec; impact protection situations : high grinding, metal cutting, air-arc gauging, welding; range of welding current ≤ 400.
- Welding Helmet Filter Arc Welding Shade 10; AS/NZS 1337.1, 50-51mm x 108mm; high to extra high impact rating; ball speed 6.00mm – 120-190m/sec; 6.35mm – 110-175m/sec; impact protection situations: high grinding, metal cutting, air-arc gauging, welding; range of welding current ≤ 400.
- Welding Helmet Filter Arc Welding Shade 9; AS/NZS 1337.1, 50-51mm x 108mm; high to extra high impact rating; ball speed 6.00mm – 120-190m/sec; 6.35mm – 110-175m/sec; impact protection situations: high grinding, metal cutting, air-arc gauging, welding; range of welding current ≤ 400.
- Welding Helmet Filter Arc Welding Clear.
- Welding Helmet Filter Arc Welding Clear; 1000 hours.

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

3.14.14 Welding Helmet Filter Gas Welding

Welding Helmet Filter Gas Welding Shade 6; AS/NZS 1337.1, 50-51mm x 108mm; heavy cutting, fuse welding pre-heated cast iron and heavy thickness.

3.14.15 Auto Darkening Full Welding Helmet

Auto Darkening Full Welding Helmet; robust and lightweight; CE EN 175S, EN 329, ANSI; covers MAG-MIG – covered electrodes and TIG from 5 amps applications; enlarged viewing area: 98 x 51mm; shade, delay, and sensitivity manual adjustments; solar cells WITH rechargeable and interchangeable batteries CR2032; 3D head harness; lens warranty 24 months.

3.15 Minimum Standard Specifications for Hearing Protection

Hearing protection used shall be in accordance with SANS 1451 part 1-3 and comply with the following:

- Protector Hearing: Earplug re-usable corded woven nylon with carrying case and chain contoured 3 or 4 flange ultra-soft polymer design; universal size self-contour to fit any ear canal; non allergenic polymer material; 25 NRR ANSI and 26 SNR CE protection level 92-102 decibels(dB).
- Soft Ear Plug protector, hearing: type: Uni-fit disposable foam earplug; soft tapered slow expanding polyurethane foam; tapered with longer thinner tip; corded PVC cord colour orange 32 NRR ANSI 37 SNR CE protection level 96-106 dB
- Protector Hearing: Semi –aural headband; earplug noise reduction rate 23 decibels; comply to ANSI s.3.19-1974; clamping force 2.0 Newton.
- Protector Hearing: Earmuff high performance smart fold out design dielectric construction; multi position use without support; self-aligning suspension; soft pliable super seal ear cushions for long lasting and resistant against body oil and sweat colour black/red comply to CE SNR 30 NRR 28.
- The earmuffs can be hard hat mounted or normal fit.
- Manufacturers or suppliers of hearing protection devices must provide the device’s noise attenuation specifications such as Noise Reduction Rating (NRR) or Single Number Rating (SNR)

3.16 Minimum Standard Specifications for Foot Protection

3.16.1 Electrical Safety Boots

- Toe construction type: steel or carbon fibre; tread surface type sole rubber or polyurethane or combination of both and shall have minimum oil and resistance of 4, slip resistant of 3, water resistance of 3, heat resistance of 4, abrasion resistance of 4 and with penetration resistant insert.
- Material must be full grain upper leather and be made in standard or wide size.

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

- Electrical safety shoes shall be electrically tested and certified to be able to withstand electrical resistance of 20 kilo volts for 60 seconds.
- The boots shall be dark brown. Where it is not possible to obtain brown then black will be the only alternative and the laces shall match the relevant boot colour.
- Only locally produced or manufactured textiles leather and footwear material or input will be considered.
- Item to be marked with SABS SANS 20345: mark of approval.

3.16.2 General Safety Boots

- Toe construction type: steel or carbon fibre; tread surface type sole rubber or polyurethane or combination of both and shall have minimum oil and resistance of 4, slip resistant of 3, water resistance of 3, heat resistance of 4, abrasion resistance of 4 and with penetration resistant insert.
- Material must be full grain upper leather and be made in standard or wide size.
- The boots shall be dark brown. Where it is not possible to obtain brown then black will be the only alternative and the laces shall match the relevant boot colour.
- Only locally produced or manufactured textiles leather and footwear material or input will be considered.
- Item to be marked with SABS SANS 20345: mark of approval.

3.16.3 Electrical Safety Shoe

- Toe construction type: steel or carbon fibre; tread surface type sole rubber or polyurethane or combination of both and shall have minimum oil and resistance of 4, slip resistant of 3, water resistance of 3, heat resistance of 4, abrasion resistance of 4 and with penetration resistant insert.
- Material must be full grain upper leather and be made in standard or wide size.
- Electrical safety shoes shall be electrically tested and certified to be able to withstand electrical resistance of 20 kilo volts for 60 seconds.
- The boots shall be dark brown. Where it is not possible to obtain brown then black will be the only alternative and the laces shall match the relevant boot colour.
- Only locally produced or manufactured textiles leather and footwear from local raw material or input will be considered.
- Item to be marked with SABS SANS 20345: mark of approval.

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

3.16.4 General Safety Shoe

- Toe construction type: steel or carbon fibre; tread surface type sole rubber or polyurethane or combination of both and shall have minimum oil and resistance of 4, slip resistant of 3, water resistance of 3, heat resistance of 4, abrasion resistance of 4 and with penetration resistant insert.
- Material must be full grain upper leather and be made in standard or wide size.
- The boots shall be dark brown. Where it is not possible to obtain brown then black will be the only alternative and the laces shall match the relevant boot colour.
- Only locally produced or manufactured textiles leather and footwear from local raw material or input will be considered.
- Item to be marked with SABS SANS 20345: mark of approval.

3.16.5 Clean Condition Boots

- Toe construction type carbon fibre.
- Tread surface type sole rubber or polyurethane or combination of both and shall have minimum oil and resistance of 4, slip resistant of 3, water resistance of 3, heat resistance of 4, abrasion resistance of 4 and with penetration resistant insert.
- Material shall be full grain upper leather.
- Shoes to comply with safety shoes electrical testing specification 34-232.
- The boots colour to be white.
- Type will be slip on type (No laces).
- Only locally produced or manufactured textiles leather and footwear from local raw material or input will be considered.
- Item to be marked with SABS SANS 20345 Mark of Approval.

3.16.6 Shoe Protection (Boot Spats)

- The material shall be leather cowhide with self-grip back fastener, under strap.
- The dimensions shall be length 320 X HT 250 mm.

3.16.7 Gumboots

- Gumboots shall be preferably made of solid rubber or combination of PU/rubber and shall be black in colour with a protective toe cap.
- It shall be made of low abrasion material.
- The sole shall be acid and oil resistant minimum 4, and non-slip.
- It shall be waterproof.
- Gumboots shall comply with SANS 20345.

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

3.16.8 Wader Suit

- Consist of trousers and attached boots.
- It must be waterproof and made of PVC material.
- The colour of the wader must be olive green.

3.16.9 Socks

- Non-conductive, anti-static and Anti-Bacterial socks shall be made from between 72%-75% Cotton, 20%-26% Poly, 2-5%% Silver Fibre.
- The socks must be available in three different sizes, namely: small/medium, large/x-large and xx-large/xxx-large.

3.17 Minimum Standard Specifications for Hand and Arm Protection

- Where tasks require hand and arm protection, the appropriate protection must be supplied.
- All hand protection used shall be subject to a risk assessment (fit for purpose). Colours may vary according to availability of stock.
- When purchasing the protective equipment, every effort must be made to purchase equipment that bears the British Safety Standard Mark (BS) or the European Norm Standard (EN).

3.17.1 Welding Gloves

- PIMGLOVE Lined welders heat resistant glove 30cm and must be Red all cow leather gloves with double apron, cotton and foam lining and Kevlar yarn. Glove must withstand heat up to 500 degrees Celsius.
- General Purpose Welding Gloves Lined green welders' glove 20cm cuff all cow leather glove with full cotton lining that can withstand heat between 140-175 degrees Celsius.

3.17.2 General Purpose Gloves

- **General Purpose Cut: Resistant Gloves:** Lightweight, cut-resistant, micro-foam nitrile coated glove. EN388 minimum level 3 cut resistance. This glove shall be used in activities where the risk of being cut high.
- **General Purpose Gloves:** preferably dark grey or black. Shall be rated EN 388-4131; Shall have full coating colour: black or grey; palm: 1 mm; This is a general-purpose glove used for these application's: maintenance; logistics and warehousing; using tools and instruments.
- **TIG welding glove: Pigskin or Sheepskin** garment closing method: elasticated; colour: beige; cuff type: plain; type: TIG; mechanical abrasion EN level 1; cut EN level 1; tear EN level 2; puncture EN level 1; heat suitable for minimal application; cold suitable for minimal application; to be used as a general handling glove for rigging, TIG welding and electrical.

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

3.17.3 Chemical Gloves

The chemical protective glove shall be type 5 and be aqueous solutions of acids, acid salts, alkalis, alkaline salts, aromatic hydrocarbons, alcohols, ethers, ketones, and organic acids resistant; material shall be butyl rubber II R coated; colour: preferably black; cuff type: rolled end; cuff length: 150 mm; specification: EN 388 / EN 374: 2003.

3.18 Minimum Standard Specifications for Skin Protection

3.18.1 Sunscreen Products – Protective Creams

- Sunscreen products shall be in accordance with SANS 1557. This code specifies requirements for sunscreen products suitable for tropical use for the protection of human skin against the adverse effects of solar UV rays.

3.18.1.1 Product Requirements

- Water resistant with moistening effect
- The product shall be free from palpable particles.
- The product shall not contain any substances prohibited in terms of the current Foodstuff, Cosmetics, and Disinfectant Act.
- The maximum concentration of the UV filters in the sunscreen product shall not exceed that approved by the Department of Health.
- The sunblock shall have a minimum SPF of 40+ rubbed on types; supplied in 150ml tubes.

3.18.2 Insect Repellent

- Form gel stick: odour perfumed; colour opaque, translucent light green; PH 8.9 to 9.0; solubility miscible in water; storage below 25 °C; and away from sunlight, conforms to Medicines Control Counsel (MCC) of South Africa – Act 101 of 1965 Registration no: l686. (mosquito insects).

- Bayticol Aerosol Spray; Insecticide fabric spray that kills ticks and prevent tick bites on humans; composition Flumenthrin (pyrethroid) 2g/kg; Net Contents 240ml; Used as a fabric spray to prevent tick bites; flammable; Supply with Material Safety Data Sheet(MSDS).

3.18.3 Barrier Cream

The barrier creams shall meet the relevant requirements for barrier creams suitable for protection of the skin against acids, alkalis, oils, and solvents. It also lays down requirements for homogeneity, wash ability, odour, stability, application, pH value, and penetrability to challenging solutions and occurrence of fungal and bacterial growth.

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

3.18.3.1 Chemical and Physical Requirements

- All types of cream shall be homogeneous and soft in texture, free from grit and substances known to be harmful to the skin during long exposure. All types of creams shall be readily removed from the skin with detergent and water.
- Barrier creams complying with the requirements of this specification shall be free from objectionable odours during and after application to the skin.
- The barrier cream shall show no separation of liquid from the cream/paste at 15°C and 30°C after standing for 48 hrs.
- When applied to the skin the barrier cream shall form a flexible adhering film at temperatures of 15°C to 30°C.
- The pH value of a water extract of the barrier cream shall not be less than 5,0 and not more than 8,5.
- The barrier cream shall leave no stains on a cotton duct.
- When tested in accordance the barrier cream shall show no fungal or bacterial growth.

3.18.4 Skin Protect Cream

White smooth, non-greasy oil-in-water emulsion with a light fragrance. High quality cosmetic grade, oil-in-water silicone free emulsion including Collagen Allantoin & MF moisturising agents as skin care agents; Physical State Cream; Miscibility in water Complete; All the individual organic components of the product must be biodegradable and anticipated that when used at the recommended dilution the product must not be harmful to the environment; Packaging: 500 ml Tubs preferably with dispensing pump.

3.18.5 Solvgard Barrier Cream Against Solvents

Solvgard White oil-in-water emulsion, odourless; Containing waxes, oils, zinc oxide and skin care agents, silicone free; Skin care agents include Allantoin & Hydro MF moisturising agent; Highly effective barrier coating against petrol, dieseline, thinners, paraffin turps, dust and powders; Miscibility in water Complete; Biodegradable: All the individual organic components of the product must be biodegradable and anticipated that when used at the recommended dilution the product must not be harmful to the environment;. Packaging: 500 ml Tubs preferably with dispensing pump.

3.18.6 Skin Barrier Cream against Acids and Alkalis

Skin cream with protective blocking agent; Whitish water-in-oil emulsion slightly greasy feel, odourless. Must Contains a high proportion cosmetic oil, titanium dioxide, talcum, Vaseline and skin care agents, silicone free. Skin care agents include Allantoin & Hydro MF moisturising agent. Highly effective barrier coating against all water borne substances (e.g., acids, alkalis) + dust and powders.

Miscibility in water: Not miscible in water; Biodegradable: All the individual organic components of the product must be biodegradable and anticipated that when used at the recommended dilution the product must not be harmful to the environment; Packaged 500 ml Tubs without dispensing pump.

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

3.18.7 Foot Care Cream

Cosmetic grade ingredients blended to refresh tired feet, reduce excessive perspiration, and prevent unpleasant foot odours. Reduce common irritation of athlete's foot and similar foot afflictions. Inclusion of witch hazel for soothing action. Chlorhexidine component to offers a broad antibacterial spectrum. Composition oil-in-water emulsion, off white in colour, silicone free, mixture of oils and waxes, witch hazel Chlorhexidine and camphor; All the individual organic components of the product must be biodegradable and anticipated that when used at the recommended dilution the product must not be harmful to the environment; Storage 1 year stored at room temperature. Keep lid closed. Packaging 500 ml tubs preferably with dispensing pump.

3.19 Minimum Standard Specifications for Respirators

- Respirators to be worn where required/specified or where a risk assessment/exposure assessment indicate wearing of respirator is required.
- The specifications for respiratory equipment shall be in terms of the following:

3.19.1 Dust Mask FFP2 with Valve

- Disposable particulate mask for protection against solid and non-volatile liquid particles only; EN 149:2001 +A1 2009 FFP2 NR D CE 0086.
- Can be supplied plain or carbon coated (welding).
- Protection factor 10 X WEL material that has low breathing resistance with effective protection against: sub-micron particles, fine dusts, non-volatile liquid mists, and biological agents.
- Valve provides effective removal of heat and moisture for a cooler and more comfortable wear whilst also minimising the risk of misting eyewear.

3.19.2 Dust Mask FFP2 without Valve

- Disposable particulate mask for protection against solid and non-volatile liquid particles only; EN 149:2001 +A1 2009 FFP2 NR D CE 0086.
- Can be supplied plain or carbon coated (welding).
- Protection factor 10 X WEL material that has low breathing resistance with effective protection against: sub-micron particles, fine dusts, non-volatile liquid mists, and biological agents.

3.19.3 Dust Mask FFP3 with Valve

- Disposable particulate mask for protection against solid and non-volatile liquid particles only; EN 149:2001 +A1 2009 FFP3 NR D CE 0086.
- Can be supplied plain or carbon coated (welding).

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

- Protection factor 20 X WEL material that has low breathing resistance with effective protection against: sub-micron particles, fine dusts, non-volatile liquid mists, and biological agents.
- Valve provides effective removal of heat and moisture for a cooler and more comfortable wear whilst also minimising the risk of misting eyewear.

3.19.4 Full Face Mask Reusable Air-Purifying Respirator

- Tight Fitting; 5 Point; EN 136 CL 2. CE 0158. Part Number D2055790. FP 42, OF CLASSES 1, 2, OR 3 (MASK).
- Highest standard of face seal to protects the eyes.
- These respirators for use with chemical cartridges in emergencies.

3.19.5 Canister Filter Gas and Combination Filter

- Canister filter gas and combination filter for solids and vapours according to EN 14387 A2 B2E2 K1 HG-P3 R D PART NUMBER 1070705 D 1070705 MEE CE 0121 ES 5/16 MAX 50 H.
- If the respirator is of a different make from the one specified above the user shall ensure to supply the correct part number before purchase.
- The user and/or buyer shall ensure that the canister is compatible to the mask if the different for the mask specified in paragraph 3.18.5 bullet 1.
- Protective respirator filter to be suitable for use in full face mask filter housing fitted with round thread in accordance with EN148-1 (RD 40 X 1/7”).
- Chemical cartridges should be replaced when saturated or expired.

3.19.6 Canister Filter Organic Gasses and Vapour

- Canister filter organic gasses and vapour; combination filter EN 141 A2 P3 PART NUMBER HFP/C3/3.
- If the respirator is of a different make from the one specified above the user shall ensure to supply the correct part number before purchase.
- The user and/or buyer shall ensure that the canister is compatible to the mask if the different for the mask specified in paragraph 3.18.6 bullet 1.
- Filter to be suitable for use in full face mask filter housing fitted with round thread in accordance with EN148-1 (RD 40 X 1/7”).

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

3.20 Minimum Standard Specifications for Protective Clothing for Users of Hand-Held Chain Saws

- Protective clothing for users of hand-held chain saws shall be in accordance with SANS 50381-5. This code defines design and specifies the requirements for leg protectors that offer protection against cutting by a hand-held chain saw.
- SANS 50381-2 specifies the test methods to be used to assess the resistance of leg protectors to cutting by hand-held chain saws and other properties.

3.20.1 Requirements in terms of SANS 50381-5

- SANS 50381-5 defines three designs for leg protectors and all three designs have different specified protective areas, as indicated in sections 4.2, 4.3 and 4.4 of SANS 50381-5.
- The protective clothing shall be as lightweight as possible.
- Between the crotch and the fly, a break of 30 mm is allowed, but it is recommended that this break is kept as small as possible.
- The design shall be without appendages, which could become entangled in the machinery.
- Braces shall have a minimum width of 30 mm.
- The construction around the knee shall facilitate bending of the leg.
- For zippers or buttons, an opening break of 30 mm shall be allowed.
- The Zero Harm identification shall appear on the right-side sleeve of the top and shall be in accordance with Eskom's Corporate Identity.
- All Personal Protective Clothing tops and raincoats to be fitted with reflective strips on both sleeves' circumference on the inner upper arm, reflective strips on both legs above the knees.

Note: With the aid of risk assessment techniques Line Management supported by Safety Risk Management shall determine the most effective design, per person required for this category of tasks.

Note: When purchasing the above protective equipment and SANS specification are not available every effort must be made to purchase equipment that bears the British Safety Standard Mark (BS) or the European Norm Standard (EN).

Note: All hand protection used shall be subject to a risk assessment (fit for purpose). Colours may vary according to availability of stock.

3.21 Minimum Standard Specifications for Tog Bags

- Tog bags shall be made from hard-wearing PVC canvas material and shall have a drawstring closure.
- A label holder with a clear plastic window shall be stitched on one side of the tog bag.
- The colour of the tog bag shall be Eskom Navy blue Pantone 19_3920.

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

- The Eskom logo shall appear in white silkscreen printing in accordance with Eskom's Corporate Identity.
- The height of the bag shall be a minimum of 60 cm with a diameter of 30 cm.

4. Selection Use, Care, And Maintenance of PPE

4.1 Head Protection

4.1.1 Hard Hats

4.1.1.1 Use

Hard hats shall be worn:

- by all persons working or entering an area where people are working above them or where there is a danger of objects falling or flying, whether it be at ground level or at height.
- in areas where the international symbolic sign is displayed (designated hard hat area).
- when so requested by the person in charge of a work site.
- in confined spaces where the risk of bumping the head exists; and
- where a risk assessment has identified a need for hard hats.

4.1.1.2 Care and Maintenance by the Employee

Hard hats shall:

- be kept clean and maintained in good condition, and cradles and sweatbands shall be washed at least once a month using warm soapy water only and not solvents.
- be inspected before use by the employee for cracks and signs of impact and wear that may reduce the degree of safety originally provided; and
- not be painted or defaced in any manner whatsoever, except for attachment of stickers that have been approved by the manufacturer and the Eskom Corporate Identity Department.
- The wearer shall ensure that the hard hat fits properly and that the lining or cradle is properly adjusted to fit the head. It must be secured in such a manner that it does not fall off when leaning forward.
- The wearer shall also ensure that nothing is worn under the hard hat, except a balaclava without a pom-pom, as this prevents the hard hat from performing as intended, and that the chin straps are worn at all times.
- If the hard hat is worn continuously in the sun or exposed to any other substances that deteriorate the quality of the hat, it may be replaced after two years. Otherwise, it will only be exchanged, when necessary, where a wear-and-tear principle shall be applied.

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

- A “bend test” can be performed to see whether the hard hat material has become brittle, in which case it should be replaced.

4.1.2 Sun Brim for Hard Hats

4.1.2.1 Use

A sun brim shall be used:

- by all persons exposed to the sun and working in an area where they are required to wear a hard hat and shall be fitted on the hard hat; and
- where a risk assessment has identified the need for a sun brim.

4.1.2.2 Care and Maintenance by the Employee

The sun brim shall be:

- kept clean and maintained in good condition; and
- not be defaced/modified in any manner whatsoever.
- When fitting the sun brim on the hard hat, the employee shall ensure that it fits properly.
- Exposed facial and neck areas not protected by the sun brim shall be protected by the application of approved sunblock issued by the employer.

4.1.3 Hairnets

4.1.3.1 Use

Hairnets shall be used:

- by all persons who have long or extended hair and are required to wear a hard hat; and
- where a risk assessment has identified the need for a hairnet.
- The hairnet serves to ensure that long hair is not forced into the hard hat, thus minimising its effectiveness.

4.1.3.2 Care and Maintenance by the Employee

Hairnets shall be:

- kept clean and maintained in good condition; and
- not be defaced/modified in any manner whatsoever.
- When wearing a hairnet, the employee shall ensure that it is properly fitted on the hard hat and that hair is placed inside the hairnet pocket.

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

4.1.4 Soft Hats

4.1.4.1 Use

Soft hats shall be worn:

- by all persons exposed to the sun and working in an area where a hard hat is not required; and
- where a risk assessment has identified the need for soft hats.

4.1.4.2 Care and Maintenance by the Employee

Soft hats shall be:

- kept clean and maintained in good condition; and
- not be defaced/modified in any manner whatsoever.
- When wearing a soft hat, the employee shall ensure that it fits properly and that exposed facial and neck areas not protected by the soft hat is protected by the application of approved sunblock issued by the employer.

4.2 Eye/Face Protection – Goggles, Eyeglasses, Welding Helmets, and Face Shields

4.2.1 Use

Eye/Face protection shall be used:

- by all persons working in an area where a risk of eye or face injury exists.
- by persons performing welding activities, and the user shall ensure that he/she uses the correct welding filter for the work he/she is performing.
- in an area where the international symbolic sign is displayed (designated eye/face protection); and
- where a risk assessment has identified a need for eye or face protection.
- All eye protection shall be SANS-approved eye/face protection, including welding helmets and shall be issued to all persons required to perform work where the risk of sustaining injury to the eyes/face exists.

Note: As a general rule, face shields should be worn over suitable basic eye protection. A variety of face shields protect the face and neck against flying particles, sprays of hazardous liquids, splashes of molten metals, and hot solutions. In addition, they provide antiglare protection, where required.

4.2.2 Care and Maintenance by the Employee

- Eye and face protection shall be kept clean and maintained in good condition.
- When not in use, these items shall be stored in a manner to prevent any scratches or damage, preferably in a storage case.

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

- The employee shall ensure that eye/face protection fits properly and that the correct eye/face protection is used for the specific task being performed.
- Face shields and a hard hat assembled welding helmet shall be used with compatible headgear or hard hat.
- The welding filters shall be stored in a safe manner to avoid breaking.
- Damaged filters shall be replaced, when necessary.

4.3 Hearing Protection

4.3.1 Use

Hearing protection shall be used:

- in the vicinity of noise levels equal to or more than 85 decibels (dBA);
- where noise signs are displayed, at a predetermined radius to demarcate the noise zone;.
- in an area where the international symbolic sign is displayed; and
- where a risk assessment and a noise level survey have identified a need for hearing protection.

4.3.2 Care and Maintenance by the Employee

- Hearing protection shall be kept clean and maintained in good condition. Reusable protection shall be washed with warm soapy water and rinsed properly to prevent infections.
- When not in use, hearing protection items shall be stored in such a manner as to prevent the ingress of foreign matter, preferably in a storage case or bag.
- When wearing hearing protection, the employee shall ensure that it fits properly and that the correct hearing protection is used to reduce the noise level to an acceptable level.
- Disposable earplugs shall be used once and disposed of after use.
- Earplugs shall not be shared between employees and shall be disposed of, when necessary.

4.4 Foot Protection

4.4.1 Safety Boots/Shoes

4.4.1.1 Use

Safety boots shall be worn:

- by all persons exposed to the possibility of injury to the feet in the performance of their duties (for example, construction work and the workshop environment).
- in an area where the international symbolic sign is displayed (designated foot protection

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

area); and

- where a risk assessment has identified the need for foot protection. This shall include the type of safety boot to be worn.

4.4.1.2 Care and maintenance by the employee

- The boots/shoes shall be kept clean and maintained in good condition.
- Polish shall be applied to the boots/shoes routinely.
- Laces will be replaced on a basis of fair wear and tear.
- Boots/Shoes shall not be defaced in any manner whatsoever.
- When not in use, boots/shoes shall be stored in an approved manner.
- The employee shall ensure that the safety boots/shoes fit properly and that the laces are tied when worn.

4.4.2 Gumboots

4.4.2.1. Use

Gumboots shall be worn:

- by all persons exposed to wet concrete, muddy, or wet conditions.
- in an area where the international symbolic sign is displayed (designated foot protection area); and
- where a risk assessment has identified the need for gumboots.

4.4.2.2 Care and Maintenance by the Employee

Gumboots shall:

- be kept clean and maintained in good condition.
- not be defaced in any manner whatsoever; and
- be stored or secured in an approved manner when not in use.
- The employee shall ensure that the boots fit properly.

4.4.3 Wader Suits

4.4.3.1 Use

Wader suits shall be worn:

- by employees who work in/on water sources such as water treatment plants, dams, etc.; and
- where a risk assessment has identified the need for a wader suit.

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

4.4.3.2 Care and Maintenance

- Wader suits shall be kept clean and maintained in good condition.
- The suits shall be dried before storage.
- Wader suits shall not be defaced in any manner whatsoever.

4.4.4 Socks

4.4.4.1 Care and Maintenance

- Socks shall be kept clean and maintained in good condition.
- They shall not be defaced in any manner whatsoever.
- When wearing socks, the wearer shall ensure that they fit properly.

4.5 Garments (Clothing)

4.5.1 Boiler Suits (One-Piece or Two-Piece Workwear Suit)/Overalls

4.5.1.1 Use

Boiler suits/Overalls shall be worn:

- by all persons performing work where the protection offered by the optional/alternative clothing is inadequate; and
- by all persons performing work in construction and workshop environments; and
- where a risk assessment has identified a need for boiler suits/overalls.
- Acid-resistant boiler suits/overalls shall be worn in an area where employees are exposed to chemicals.
- Where the concentration of the chemicals in the workplace is above the limits stipulated on the boiler suit label and/or in Annexure E (chemical chart specification), an acid-proof apron or chemical suit shall be worn.

4.5.1.2 Care and Maintenance by the Employee

- Boiler suits/Overalls shall be kept clean and maintained in good condition.
- They shall not be defaced or modified in any manner whatsoever.
- The washing of boiler suits/overalls shall be the responsibility of the employees concerned.
- The boiler suits/overalls shall be washed according to the manufacturer’s instructions reflected on the label to ensure that flame retardancy lasts longer.
- When wearing an overall, the employee shall ensure that it fits properly.

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

4.5.2 Dust Coats

4.5.2.1 Use

Dust coats shall be worn:

- where a risk assessment has identified the need for a dust coat to be worn.

4.5.2.2 Care and Maintenance by the User

- Dust coats shall be kept clean and maintained in good condition.
- They shall not be defaced in any manner whatsoever.
- When wearing a dust coat, the wearer shall ensure that it fits properly.
- The dust coat shall be washed according to the manufacturer's specifications.

4.5.3 Shirts

4.5.3.1 Use

- Shirts shall be worn as determined by the risk assessment and PPE Matrix.
- Unless stated in the risk assessment, an operator's jacket shall be worn over the shirt when performing work.

4.5.3.2 Care and Maintenance by the User

- Shirts shall be kept clean and maintained in good condition.
- They shall not be defaced in any manner whatsoever.
- When wearing a shirt, the wearer shall ensure that it fits properly and is in good condition.
- The shirts shall be washed according to the manufacturer's specifications.

4.5.4 Thermal Jackets

4.5.4.1 Use

- Thermal jackets shall be worn in addition to a two-piece (long pants with a long-sleeved shirt) when working in cold weather.
- They shall also be worn where a risk assessment has identified the need for a thermal jacket to be worn.

4.5.4.2 Care and Maintenance by the Employee

- Thermal jackets shall be kept clean and maintained in good condition.
- They shall not be defaced or modified in any manner whatsoever.
- The cleaning of thermal jackets shall be the responsibility of the employees concerned.

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

- When wearing a thermal jacket, the employee shall ensure that the thermal jacket fits properly.
- The jackets shall be washed according to the manufacturer's specifications.

4.5.5 Rain Protection (Rain Suits)

4.5.5.1 Use

- Rain protection shall be worn by all persons exposed to wet weather in the performance of their duties and where a risk assessment has identified the need for rain protection.
- Rain suits shall not be worn for warmth.

4.5.5.2 Care and Maintenance by the Employee

When not in use, rainwear shall be:

- stored in an approved manner.
- dried before storage; and
- kept clean and in good condition.
- When wearing rainwear, the employee shall ensure that it fits properly and that it is in good condition.
- Rainwear shall not be defaced in any manner whatsoever.

4.6 Chemical Protection

A chemical outfit can consist of a one-piece or two-piece chemical-resistant suit, chemical-resistant gloves, chemical aprons, disposable covers for shoes, breathing apparatus, and full-face masks.

4.6.1 Use

Chemical-resistant protective clothing shall be worn:

- by all persons performing work where the protection offered by the optional/alternative clothing is inadequate.
- by all persons working with hazardous chemicals where there is a risk of coming into contact via spillage with those chemicals or where the MSDSs of those chemicals require this type of protective clothing to be worn; and
- where a risk assessment has identified the need for a chemical-resistant outfit.
- Where the chemical-resistant suit cannot provide the required level of protection, a chemical-proof suit or apron shall be worn.

4.6.2 Care and Maintenance by the Employee

- Chemical-resistant outfits shall be kept clean and maintained in good condition.
- They shall not be defaced or modified in any manner whatsoever.

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

- The acid-resistant PPE shall be washed according to the manufacturer's specifications as attached to the garment.
- The chemical-resistant PPE shall be washed separately to prevent contamination and the deterioration of other domestic laundry.
- The acid-resistant PPE shall be maintained in good condition.
- If the chemical-resistant PPE is cut or damaged or is perishing, it shall be replaced immediately.
- When wearing a chemical outfit, the employee and supervisor shall ensure that the correct protective clothing is worn for the specific task being performed.

4.7 Reflective Vests and Bibs

4.7.1 Use

- Reflective vests/bibs shall be worn where there is a need for the wearer to be visible and where the risk assessment has identified the need for reflective vests.

4.7.2 Care and Maintenance by the Employee

- Reflective vests/bibs shall be cared for in accordance with the manufacturer's recommendations.
- They shall be kept clean and maintained in good condition.
- They shall not be defaced in any manner.
- The wearer shall take care when working in an area that has open flames to avoid the vest/bib catching fire.

4.8 Hand and Arm Protection

4.8.1 Use

Hand protection shall be worn:

by all persons working on or with equipment **where** a risk of injury/infection to the hand or forearm exists, for example, welding, handling chemicals, etc.

- in an area where the international symbolic sign is displayed (designated hand protection area); and
- where a risk assessment has identified the need for hand protection.

4.8.2 Care and Maintenance by the Employee

- All hand protection shall be cared for in accordance with the manufacturer's recommendations.
- All hand protection shall be kept clean and maintained in good condition.
- When wearing hand protection, the employee shall ensure that it fits properly.

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

- The correct hand or forearm protection must be worn for the specific task being performed, that is, to protect the individual against physical damage and against cuts, scratches, skin diseases, etc.

4.9 Respirators and Dust Masks

4.9.1 Use

- Respirators shall be worn by employees exposed to the risk of dust, fibres, gas, smoke, vapours, fumes, or in areas where insufficient oxygen is present, such as employees working in confined spaces as determined by a risk assessment.
- The risk assessment shall determine the type of respirator or dust mask to be used.
- Proper selection will depend on the toxic substance encountered, conditions of exposure, individual human capabilities, and equipment fit.
- The wearer shall ensure that a proper canister is attached to the respirator for the chemicals to which he/she is exposed.

4.9.2 Care and Maintenance

- Employees shall be trained in the proper use, care, and limitations of respiratory equipment.
- Employees shall conduct daily equipment inspections before use.
- The storing and maintenance programme shall comply with the manufacturer's instructions.
- A respirator shall be kept clean and maintained in good condition.
- It shall not be defaced or modified in any manner whatsoever.
- The cleaning of a respirator shall be the responsibility of the employee concerned.
- The dust masks shall not be shared and should be used once and disposed of after use.
- Employees must ensure that they check expiry dates of canisters before use.

4.10 Cold-Weather Protection (Freezer Wear)

4.10.1 Use

- Cold-weather protection can consist of cotton thermal underwear, woollen gloves, woollen socks, balaclavas, freezer suits, and gumboot inserts.
- Cold-weather protection shall be used when employees are working in an area that has extremely cold temperatures as determined by the Environmental Regulations for Workplaces Regulation 2, framed under the Occupational Health and Safety Act, and the risk assessment.

4.10.2 Care and Maintenance

- Cold-weather protection shall be cared for in accordance with the manufacturer's recommendations.
- It shall be kept clean and maintained in good condition.

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

- It shall not be defaced in any manner.

4.11 Skin Protection

4.11.1 Use

- Skin protection, that is, barrier cream, sunscreen, foot cream, and insect repellent, shall be used by employees exposed to UV rays, chemicals, insects, and employees who require foot care cream, as identified by an applicable risk assessment.
- Skin protection shall be used according to the manufacturer's instructions.

4.11.2 Care and Maintenance

- Skin protection shall be stored and used according to the manufacturer's requirements and care taken to see that it has not expired before use.

4.12 Tog Bags

4.12.1 Use

- A tog bag shall be issued to staff who require PPE to do their work and so that they can keep their PPE in one place and take it with them to their work site and prevent damage.
- PPE, such as workwear (garments) and boots that must be worn most of the time, shall be worn according to work area requirements or risk assessments, and the tog bag shall be used to carry accessories such as a hard hat, earplugs, gloves, etc.

4.12.2 Care and Maintenance

- It shall be kept clean and maintained in good condition.
- It shall not be defaced in any way.

5. Acceptance

This document has been seen and accepted by:

[1] Occupational Health and Safety Steering Committee.

[2] Risk and Sustainability Division Management Committee.

[3] Eskom Corporate Identity.

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

6. Revisions

Date	Revision	Complier	Remarks
April 2013	0	Mxolisi Thanjekwayo	New document
February 2020	1	Ntokozo Ngubane	• The document was due for review and had to be aligned to the latest revision of SANS standards. • New definition for textile industry added. • PPE performance requirements included in some of the PPE items.
	2	Ntokozo Ngubane	• The PPE specification document was combined with the PPE standard to ensure that general PPE requirements are stipulated in a in one document. • The review was also meant to remove issuing and replacement requirements from a level 1 document so that division can specify own issuing and replacement requirements based on their risk assessments.

7. Development Team

The following people were involved in the development of this document:

- Ntokozo Ngubane
- Mxolisi Thanjekwayo
- Naledi Lekoto
- JR Rossouw
- Deon Labuschagne
- Ntswaki Fedile

8. Acknowledgements

- Diane Else

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

Annex A - Personal Protective Clothing – Standard Sizes

MENS SHIRT, TROUSERS SIZE CHART													
	S			M				L			XL	XXL	
Men's Shirts	34	36 14	37	38 15	39	40	41 16	42	43 17	44	46 18	47 48 49	
Men's Trousers Waist		1 66 26	2 71	3 76 30	4 81 32	5 87 34	6 92 36	7 97 36	8 102 40	9 107 42	10 112 44		

LADIES PANTS SIZE CHART															
Sizes	67	72	77	82	87	92	97	102	107	112	117	122	127	132	137
Waist Extended	67	72	77	82	87	92	97	102	107	112	117	122	127	132	137
Seat*	92	97	102	107	112	117	122	127	132	137	142	147	152	157	162
Out-Leg	106	106	107	108	108	109	109	110	111	111	112	113	113	114	114
In-Leg	79	79	80	80	0	81	81	81	82	82	83	83	83	83	83

*MEASURED 20cm DOWN FROM WAIST BAND.

ALL MEASUREMENTS SUBJECT TO A TOLERANCE OF ± 4.0%

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

LADIES LONG SLEEVED SHIRTS SIZE CHART															
Sizes	77	82	87	92	97	102	107	112	117	122	127	132	137	142	147
Bust @ Base Of Armhole	92	97	102	107	112	117	122	127	132	137	142	147	152	157	162
Back Length	64	65	65	66	66	67	67	68	68	69	69	70	70	71	71
Back Width	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64
Sleeve Length*	41	41	41	42	42	42	43	43	43	44	44	44	45	45	45
Hip	102	107	112	117	122	127	132	137	142	147	152	157	162	167	172
Cuff	21	21	21	22	22	22	23	23	23	24	24	24	25	25	25

*UNDER ARM MEASUREMENT

ALL MEASUREMENTS SUBJECT TO A TOLERANCE OF ± 4.0%

	MEN'S LONG SLEEVE SHIRTS					
Collar Size	**Size**	**Chest**	**Back Length**	**Back Width**	**Long Sleeve U/Arm**	**Cuff Button**
34/35	XS	112	79.5	43	50.5	20
36/37	S	116	80	45	51	21
38/39	M	120	80.5	47	51.5	22
40/41	L	124	81	49	52	23
42/43	XL	128	81.5	51	52.5	24
44/45	2XL	132	82	53	53	25
46/47	3-XL	136	82.5	55	53.5	26
48/49	4-XL	140	83	57	54	27
50/51	5-XL	144	83.5	59	54.5	28
52/53	6-XL	148	84	61	55	29
54/55	7-XL	152	84.5	63	55.5	30
56/57	8-XL	156	85	65	56	31

CONTROLLED DISCLOSURE

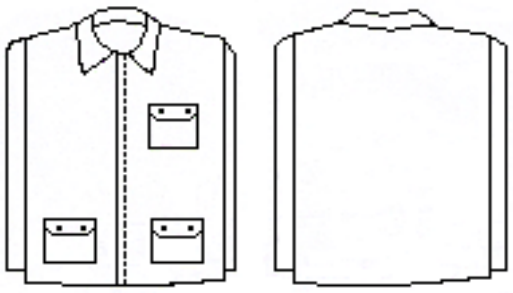
When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

THERMAL JACKETS				
Sizes	**Chest at base of armhole**	**Back Length**	**Back Width**	**Sleeve length ***
Small	135	76	56	49.5
Medium	140	77	56	50
Large	145	80	58	50.5
X-LG	150	81	60	51
2X-LG	155	82	62	51.5
3X-LG	160	83	64	52
4X-LG	165	84	66	52.5
5X-LG	170	85	68	53
6X-LG	175	86	70	53.5

** **Measured at the underarm seam*** **** All measurements subject to a tolerance of 2%***

**** Measurements in centimetres and according to SANS standards***

Jacket Sketch



Jackets	S	M	L	XL	2XL	3XL	4XL	5XL	6XL
	87	97	107	117	122	132	137	147	157
Soft Bush Hats	56 67/8	57 7	58 71/8	59 71/4	60 73/8	62 71/2			

Shoes gumboots and boots	Ladies		210 2	220 3	230 4	240 5	250 6	255 7	262 8	
	Men	5	247 6	255 7	262 8	270 9	277 10	285 11	292 12	300 13
Socks	Men/ ladies	S	M	L	XL	XXL	XXX L			

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

Annex B - Standard Nomenclature for Stitches, Seams and Stitching (Informative)

B1 Stitches, seams and stitches

B1.1 General

All sewing shall be in accordance with SANS 10101

B1.2 Stitches

a) Main seaming and ruching. Stitch type 401.

b) Over locking. Stitch type 402-505.

c) Other sewing. Stitch type 301.

B1.3 Seams

Seams shall be at least 8 mm wide. They shall be as follows:

a) Main seams. Seam type Ssa – 2, Lsc – 2 or Lsc – 3.

b) Breast pocket flaps to blouse. Seam type Lsc – 2, Lsba – 2 or sewn in with yoke seam.

c) Leaf edge of collar and flaps. Seam type – 4.

d) Breast waist seam. Seam type Ssag – 3 or similar acceptable seam type.

e) Side wing-pocket bags. Seam type Sse – 2, Bsc – 2, Bse – 4.

f) Side patch-pocket bags. Seam type Lsd – 4.

g) Other seams. Seam type Ssa – 1.

B1.4 Number of stitches

a) Seaming and top stitching. 40 + 4 per 1 cm.

b) Overclocking. 32 + 2 per 10 cm.

c) Button holes. 12 + 1 per 1 cm.

d) Back-tacks. 18 min per 1 cm.

e) Buttons. 18 min per button.

B 1.5 Sewing threads

The sewing threads shall comply with the relevant requirements of SANS 1362 and shall be compatible with, and the colour shall be an acceptable match to, the material(s) with which they are used and shall be 100 % cotton.

The thread shall be as follows:

a) Needle, bobbin and looper threads shall have a breaking strength of at least 12 N.

b) Over locking threads shall have a breaking strength of at least 8

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

Annex C - Material Specification for T006 (Shirts) and all Garment Labels

C1. T006 fabric specification

FABRIC SPECIFICATIONS

BLEND	100% COTTON
WARP COUNT	30
WEFT COUNT	30
WEAVE	4/1 SATIN
FINISHED DETAILS:	
ENDS/CM	46
PICKS/CM	22
O/ALL WIDTH (CMS)	140 to 143
MASS (GSM)	206
TENSILE STRENGTH:	
WARP	900N
WEFT	350N
STABILITY%:	
WARP	3
WEFT	3
COLOUR FASTNESS:	
WASH	5
RUB	4 – 5
LIGHT	5
PILLING:	2
MARTINDALE (RUBS):	10000 – 12000
SEAM SLIPPAGE:	
WARP	117N
WEFT	211N

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

Annex D - Flame Retardant Retro Reflective Material Sewing on Garments

a) Product: Retro-reflective material referenced WATT – FRIS91 – Silver (50mm)

b) Product shall comply to EN 471 + A1; 2007 requirements including the following three

c) EN469, Clause 6.1, Annex B.3.2

d) EN469, Clause 6.5, Annex B.3.1

e) BSENISO14116: Limited Flame Spread

f) Retro-reflective tape shall be fitted mid-way on both sleeves circumference of the inner leg and U/arm sleeve measurement on one and two piece work wear including rainwear long pants and jackets.

Garments labels as per SANS 1309

a) All garments shall have a cotton or rayon label firmly sewn to the yoke at the back neck on the inside

b) The label shall provide the following information in legible and indelible marking ink for textiles as per SANS 432

c) Manufacturer’s name or trade mark or both

d) Name of the manufacture of the material and their location

e) Year of manufacture

f) VAT registration number of the manufacture

g) Full washing instructions

h) Material fabric type Ex (D59 Zero flame) and (T006 Zero flame)

i) Size

j) Customer item code / traceability number as per SANS 432 indelible marking ink for textile fabrics

k) Country of origin

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

Annex E - For Rain Wear Sizes and Chemical Chart Specs

Size Chart

Jackets	Chest	Back Len.	Sleeve Len.	Cuff Circ.
Small	115	75	75	33
Medium	125	76	78	34
Large	135	77	81	35
X-Large	140	80	84	36
2X-Large	145	85	86	37
3X-Large	150	85	87	38
4X-Large	155	85	88	39

Pants	Waist	In-Leg	Outer-Leg	Hem Circ
Small	103	70	100	46
Medium	107	72	103	48
Large	111	74	106	50
X-Large	115	76	109	52
2X-Large	121	80	115	56
3X-Large	127	84	121	60
4X-Large	140	88	125	64

Overalls	Chest	Sleeve Len.	Cuff Circ.	Waist
Small	109	48	28	95
Medium	119	49	28	105
Large	129	50	29	115
X-Large	139	51	30	125
2X-Large	149	52	30	135
3X-Large	159	53	31	145
4X-Large	169	54	32	155

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30

Chemical Chart Specifications

Liquid	Pressure Kpa	Time Minutes
1: Phosphoric	0	5
	20	10
	100	10
2: Hydrochloric	0	5
	20	10
	100	10
3: Hydroflouric	0	5
	20	10
	100	10
4: Sulphuric	0	5
	20	10
	100	10
5: Phenol	0	5
	20	10
	100	10

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd, © copyright Eskom Holdings SOC Ltd, Reg No 2002/015527/30