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## SOUTH AFRICAN QUALIFICATIONS AUTHORITY REGISTERED UNIT STANDARD:

#### Assess a worksite for work at height and prepare a fall protection plan

SAQA US ID	UNIT STANDARD TITLE								
229994	Assess a worksite for work at height and prepare a fall protection plan								
ORIGINAT	OR								
SGB Hiring	Services								
PRIMARY OR DELEGATED QUALITY ASSURANCE FUNCTIONARY									
-									
FIELD			SUBFIELD						
Field 11 - Services			Cleaning, Domestic, Hiring, Property and Rescue Services						
ABET BAND	UNIT STANDARD TYPE	PRE-2009 NQF LEVEL	NQF LEVEL	CREDITS					
Undefined	Regular	Level 4	NQF Level 04	3					
REGISTRATION STATUS		REGISTRATION START DATE	REGISTRATION END DATE	SAQA DECISION NUMBER					
Reregistered		2018-07-01	2023-06-30	SAQA 06120/18					
LAST DATE FOR ENROLMENT		LAST DATE FOR ACHIEVEMENT							
2024-06-30		2027-06-30							

In all of the tables in this document, both the pre-2009 NQF Level and the NQF Level is shown. In the text (purpose statements, qualification rules, etc), any references to NQF Levels are to the pre-2009 levels unless specifically stated otherwise.

This unit standard does not replace any other unit standard and is not replaced by any other unit standard.

#### PURPOSE OF THE UNIT STANDARD

Learners wishing to acquire the competencies in this standard will be people responsible for the safety and protection of people working at height where there is a risk of injury from a fall. The learner will be responsible for the safety of others performing tasks at height. Qualifying learners are able to develop fall protection plans for people working at height, required by the Occupational Health and safety act (Act 85 of 1993).

The qualifying learner is capable of:

- Performing a risk assessment of the worksite where work is to be done at height.
- Demonstrating knowledge of fall arrest rescue equipment and advanced fall arrest rescue.
- Developing a fall protection plan and fall arrest plan.

• Managing safety of personnel working at heights.

In order for a successful learner of this standard to be able to function in a rope access operation, the learner must:

• Be medically fit and in possession of a medical certificate, declaring him/her free from a condition that may prevent him/her from working safely as specified in the range statement. (An example of the content of the medical certificate is available in SABS 0333:2 Annex A.)

• Have knowledge of suspension trauma.

#### LEARNING ASSUMED TO BE IN PLACE AND RECOGNITION OF PRIOR LEARNING

Learners accessing this unit standard will have demonstrated competence in:

- Communication at NQF Level 3 or equivalent.
- Mathematical Literacy at NQF Level 3 or equivalent.

### **UNIT STANDARD RANGE**

• The scope of this unit standard is for any person who needs to draw up fall protection plans for persons performing work at height.

• In the context of this unit standards fall protection refers to the prevention of falls and fall arrest to the equipment used to stop a person from a fall from a height or elevated position.

• It applies to situations where work is performed at a height where there is risk of injury from a fall. In legislation the height is considered to be 3m above ground level.

• This unit standard is suitable for personnel who are responsible for preparing fall protection plans for people working at height for example a safety officer or supervisor.

• Assessment criteria marked \* indicate assessment according to worksite procedures.

• Compatibility of equipment of include but is not limited to size of anchor, sharp items, prevent damage, point loading, size of hook.

• Connectors include but are not limited to maillons, locking carabiner, double action snap hook, pylon hook, double action scaffold hook.

• Energy absorber includes fall arrest harness and work positioning system.

• Fall arrest equipment include personal equipment, full body harness, deceleration devices, lifelines, helmet, work positioning system, lanyard and energy absorber, shock absorbing lanyard, retractable life-line. It excludes body belts.

• Fall arrest equipment includes all hardware, software, harnesses, lanyard and slings for fall protection and fall arrest.

• Fall arrest plan includes the fall arrest equipment, rescue equipment, requirements of the Occupational Health and Safety Act, rescue procedures, medical back up within 15 minutes.

• Fall arrest system includes energy absorbing lanyard including 2 singles, v-type, double legged lanyard or double lanyard.

• Fall prevention equipment include personal equipment, body harness, body belt, lanyard, lifelines, physical equipment, including but not limited to guardrails, screens, barricades, anchorages.

• Fall protection plan includes risk assessment, evaluation of personnel's' physical and psychological fitness ((medical physical and psychological), training for people working at height, procedures for equipment inspection, testing and maintenance fall protection equipment, requirements of the Occupational health and safety act).

• Hardware includes connectors, maillons, locking carabiner, double action hooks. Inspection criteria for hardware include checking hardware for damage, deformation and functioning.

• Hazards include but are not limited to potential falls of persons, material, equipment, strong winds, fumes, electricity and so forth.

• Legislation governing the safety of work at height includes detailed knowledge of the requirements for fall arrest as describe in the Occupational Health as safety act and the relevant regulations.

• Medically fit means learners should be free from any disability that may prevent them from working safely. These include but are not limited to heart disease, high blood pressure, epilepsy, fits and blackouts, fear of heights, giddiness or difficulty with balance, impaired limb function, alcohol or drug dependence, psychiatric illness, diabetes. Physical and psychological fitness necessary to work at elevated positions.

• PPE include but is not limited to helmets with a chinstrap, gloves, goggles, safety footwear, close fitting overalls or items specified for the task. Inspection criteria for helmets include damage, intact chinstrap.

• Risks while awaiting rescues can include suspension trauma, position, physical injury, injury from hot surfaces, electricity, fumes, water. Feet to be kept moving to prevent reduced flow of blood to the brain that can lead to unconsciousness or death.

• Slings include but are not limited to certified tape slings, wire slings and rope slings.

• Software include harness, work positioning harness, and energy-absorbing lanyard. Inspection criteria for software include checking stitching, webbing, identification or labels, buckles, D-rings and connectors.

## **Specific Outcomes and Assessment Criteria:**

#### **SPECIFIC OUTCOME 1**

Perform a risk assessment of the worksite where work is to be done at height.

#### OUTCOME RANGE

Risk assessment includes all of the following: identification of risks and hazards, evaluation of risks, documented work procedures, monitoring of the plan, review of plan.

#### **ASSESSMENT CRITERIA**

#### **ASSESSMENT CRITERION 1**

A worksite, where work is to be done at height, is assessed for risks.

#### ASSESSMENT CRITERION RANGE

Assessment including hazard identification, hazard analysis and risk evaluations.

#### **ASSESSMENT CRITERION 2**

Hazard analysis is done to consider the likelihood and severity of hazards to determine their significance.

#### **ASSESSMENT CRITERION 3**

The requirements of the person performing risk assessments are listed based on legal requirements.

#### **ASSESSMENT CRITERION 4**

Safe work procedures, monitoring and review plans are developed for at least three hazards to reduce or control the identified risks.

#### **ASSESSMENT CRITERION 5**

Ways to protect and prevent falls of people, equipment and materials are described using three examples.

#### **ASSESSMENT CRITERION 6**

The content of a comprehensive risk assessment is listed based on legal requirements and the reasons for making documented risk assessments available to the worksite are explained with examples of the consequences of not doing so.

#### **ASSESSMENT CRITERION 7**

Personnel who are required to receive safety training in hazards and work procedures in terms of work site assessment are identified with examples and reasons given for their choice.

#### **SPECIFIC OUTCOME 2**

Demonstrate knowledge of fall arrest rescue equipment and advanced fall arrest rescue techniques.

### ASSESSMENT CRITERIA

#### **ASSESSMENT CRITERION 1**

The different requirements and use of a comprehensive range of fall arrest and fall prevention equipment are described with examples.

#### ASSESSMENT CRITERION RANGE

Include retractable lanyards, energy absorbing lanyards, guided type fall arresters on anchor lines.

#### **ASSESSMENT CRITERION 2**

The rescue equipment needed for various rescue situations are listed with examples of their application.

#### ASSESSMENT CRITERION RANGE

Includes rescue equipment for simple lowering techniques, for hauling systems, and for fall arrest rescues using cableways.

#### **ASSESSMENT CRITERION 3**

The use of each of the various rescue techniques are explained with examples of when simple lowering techniques, hauling systems and cable ways are used.

#### **ASSESSMENT CRITERION 4**

The terms, "shock load", "fall factors" and "anchor loads", are explained with examples and safe loading of an anchor point which is calculated according to manufacturer's instructions.

#### **ASSESSMENT CRITERION 5**

The reason for ensuring that appropriate rescue equipment is available is explained with examples of the consequences.

### **ASSESSMENT CRITERION 6**

A procedure for fall arrest equipment inspection, maintenance and testing is drawn up, implemented and maintained to demonstrate that equipment meets statutory requirements.

## ASSESSMENT CRITERION RANGE

Includes all hardware, software, harnesses, lanyard and slings for fall protection and fall arrest.

### **SPECIFIC OUTCOME 3**

Develop a fall protection plan and fall arrest plan.

### **ASSESSMENT CRITERIA**

#### **ASSESSMENT CRITERION 1**

A fall protection plan is prepared for a real or simulated environment, based on the requirements of the Occupational Health and Safety Act, Building Regulations.

#### **ASSESSMENT CRITERION 2**

The maintenance and distribution of a fall protection plan is discussed with examples.

#### **ASSESSMENT CRITERION 3**

A fall protection plan is prepared based on the requirements of the Occupational Health and Safety Act, Construction Regulations.

#### **ASSESSMENT CRITERION 4**

The difference between fall protection and fall arrest is described with examples of each.

#### **SPECIFIC OUTCOME 4**

Manage safety of personnel working at heights.

#### ASSESSMENT CRITERIA

#### **ASSESSMENT CRITERION 1**

Medical and other risks associated with falls are explained with examples.

#### **ASSESSMENT CRITERION 2**

The cause for suspension trauma that can lead to death is explained and precautions described with examples.

#### **ASSESSMENT CRITERION 3**

The requirements for reporting a height safety incident are explained in accordance with current legislation.

## **ASSESSMENT CRITERION 4**

The reasons why it is best to let people work in teams under a supervisor during working at height are explained with examples.

#### **ASSESSMENT CRITERION 5**

The factors to consider when evaluating people's suitability for performing work at height are listed according to statutory requirements including health and training.

#### **ASSESSMENT CRITERION 6**

Safety training records for personnel working at height are maintained and the requirements described according to current legislation.

#### UNIT STANDARD ACCREDITATION AND MODERATION OPTIONS

• Any institution or provider offering learning that will enable achievement of this unit standard must be accredited by the relevant ETQA.

• To assess competency, an assessor must be registered by the relevant ETQA as an assessor.

 Internal and external Moderation of the assessment will be overseen by the relevant ETQA according to the moderation guidelines outlined in the relevant qualification and agreed ETQA procedures.

- Assessors will need to be assessed as competent against the unit standards:
- > Perform a range of advanced fall arrest rescue.
- > Assess a worksite for work at height and prepare a fall protection plan.

#### UNIT STANDARD ESSENTIAL EMBEDDED KNOWLEDGE

- Fall arrest equipment and limitations.
- Fall factors and shock loading.
- Content of fall protection plans and legislation governing work at height.
- Knowledge of the mechanism for suspension trauma.

## UNIT STANDARD DEVELOPMENTAL OUTCOME

N/A

#### **UNIT STANDARD LINKAGES**

N/A

# Critical Cross-field Outcomes (CCFO):

#### UNIT STANDARD CCFO IDENTIFYING

Identify and solve problems in which response displays that responsible decisions, using critical and creative thinking, have been made.

#### UNIT STANDARD CCFO WORKING

Work effectively with others as a member of a team, group, organisation or community.

#### UNIT STANDARD CCFO ORGANISING

Organise and manage oneself and one's activities responsibly and effectively.

#### UNIT STANDARD CCFO COMMUNICATING

Communicate effectively by using mathematical and/or language skills in the modes of oral and/or written presentation.

#### UNIT STANDARD CCFO SCIENCE

Use science and technology effectively and critically, showing responsibility towards the environment and health of others.

#### UNIT STANDARD CCFO CONTRIBUTING

Contribute to the full personal development of each learner and the social and economic development of the society at large by:

- Participating as a responsible citizen in the life of local, national and global communities.
- Being culturally and aesthetically sensitive across a range of social contexts.

#### UNIT STANDARD ASSESSOR CRITERIA

N/A

#### **REREGISTRATION HISTORY**

As per the SAQA Board decision/s at that time, this unit standard was Reregistered in 2012; 2015.

#### **UNIT STANDARD NOTES**

Supplementary information:

Definition of terms:

• Engineered anchor point refers to anchor points that have been specifically designed taking into account the material and the loads. Some international standards require these to withstand forces of/equivalent to 6x2= 12kN. Example - sufficiently strong enough to lift a "Uno".

• Fall arrest equipment refers to equipment used to stop (arrest) the person in a fall from an elevated position.

• Fall prevention equipment refers to equipment used to prevent persons from falling from an elevated position.

• Hazard identification refers to identification and documentation of existing or expected hazards (things that can cause harm) to the health and safety of persons which are normally associated with the type of work being performed.

• Non-Engineered anchor points refer to an anchor point that has not specifically been designed as an anchor point. It could include railings or structures. Some international standards require these to have an additional safety factor and to withstand a force of/equivalent to 22kN. Sufficiently strong enough to lift a "four by four" vehicle.

• Locking karabiner refers to a type of metal shackle or clip formed by a complete loop with a spring loaded entry gate which is safeguarded in the closed position by a screw-closed sleeve.

• Lanyard refers to a rope made of synthetic fibre, wire, webbing or chain in accordance to SANS 354.

• Legislation governing the safety of work at height refers to the Occupational Health and safety act (Act 85 of 1993 and its amendments).

• PPE or personal protective equipment refers to any device or appliance designed to be worn or held by an individual for protection against potential hazard. Helmet SABS EN 397./SANS 50397.

• Suitable helmets need to conform to the requirements in SABS/EN 397.

#### ID QUALIFICATION PRE-2009 NQF LEVEL STATUS END DATE PRIMARY OR DATE PRIMARY OR DELEGATED QA FUNCTIONARY

## QUALIFICATIONS UTILISING THIS UNIT STANDARD:

Elective	<u>49081</u>	National Certificate: Construction: Advanced Plant Operations		NQF Level 03	Reregistered	2023- 06- 30	СЕТА
Elective	<u>48889</u>	Further Education and Training Certificate: Hiring Operations	Level 4	NQF Level 04	Reregistered	2023- 06- 30	SERVICES
Elective	<u>65949</u>	Further Education and Training Certificate: Supervision of Construction Processes	Level 4	NQF Level 04	Reregistered	2023- 06- 30	CETA

## PROVIDERS CURRENTLY ACCREDITED TO OFFER THIS UNIT STANDARD:

This information shows the current accreditations (i.e. those not past their accreditation end dates), and is the most complete record available to SAQA as of today. Some Primary or Delegated Quality Assurance Functionaries have a lag in their recording systems for provider accreditation, in turn leading to a lag in notifying SAQA of all the providers that they have accredited to offer qualifications and unit standards, as well as any extensions to accreditation end dates. The relevant Primary or Delegated Quality Assurance Functionary should be notified if a record appears to be missing from here.

- 1. Agisanang SA Training
- 2. D and E Services Pty Ltd
- 3. Daily Environmental Safety Solutions
- 4. DiphitlheleloTechnical Services
- 5. Fall Risk Consultancy
- 6. FORJO83
- 7. Gravitek
- 8. Gravity Access
- 9. Group 583
- 10. HIGHVELD BOTTLING (Legacy)
- 11. Matimba Rigging & Training (SECUNDA) (TP)
- 12. Mohlaje Solutions (Pty) Ltd
- 13. Nomathatha Rope Access
- 14. Ntongenhle Construction Force
- 15. PMA Holdings (PTY ) LTD.
- 16. Powerpro Technologies and Training Facility (PTY) LTD
- 17. Rappel International
- 18. Scaffold Training Group
- 19. Sinethemba Visiwe PTY LTD
- 20. THE TRAINING ACADEMY
- 21. TITAN EQUIPMENT TRAINING ACADEMY PTY LTD
- 22. TOP PERFORMERS FOR AFRICA CC
- 23. Topfix Scaffolding (Pty) Ltd
- 24. Transvaal Training Mpumalanga
- 25. WACO Africa (Pty) Ltd
- 26. WHSE Training College

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