

Domain	ELECTRICAL POWER LINES INSTALLATION
Title:	Install overhead line accessories
Level: 3	Credits: 8

Purpose

This unit standard is intended for those who install overhead line accessories. People credited with this unit standard are able to plan and prepare for work; install and test overhead line accessories; and clean-up work area.

This unit standard is intended for those who work as electrician linesman.

Special notes

1. Entry information

Prerequisite:

- *Unit 1157 - Demonstrate basic knowledge of workplace health and safety*

2. To demonstrate competence, at a minimum, evidence is required of the install overhead line accessories. Performing these tasks requires correct identification of requirements, selection and use of appropriate processes, tools and equipment and completing all work to specification.

3. This unit standard is to be assessed in the context of electrical transmission lines installation and should be assessed in conjunction with other relevant technical unit standards selected from this domain.

4. Assessment evidence may be collected at a real workplace or a simulated workplace environment in which electrical operations are carried out.

5. Glossary of terms:

- *'Isolation and lockout procedures'* refer to isolating an electrical circuit from the source of supply.
- *'Specifications'* refers to any, or all of the following: manufacturers' specifications and recommendations, workplace specific requirements, national and international standards and legislations.
- *'ISO'* refers to International Organization for Standards.
- *'SANS'* refers South African National Standards.

6. Regulations and legislation relevant to this unit standard include the following:

- Labour Act No. 11 of 2007
- Petroleum Products and Energy Amendment Act No. 2 of 2005
- National Energy Fund Act of 2000
- Gas Act (Draft 2b)
- Regulations relating to the health & safety of employees at work under Schedule 1 (2) of the Labour Act No.11 of 2007
- ISO 14001 (Environmental Management Standard)

- Electricity Act No.4 of 2007
- SANS 10142-1 and SANS 10142-2 electrical wiring codes and all subsequent amendments to any of the above.

Quality Assurance Requirements

This unit standard and others within this subfield may be awarded by institutions which meet the accreditation requirements set by the Namibia Qualifications Authority and the Namibia Training Authority and which comply with the national assessment and moderation requirements. Details of specific accreditation requirements and the national assessment arrangements are available from the Namibia Qualifications Authority on www.namqa.org and the Namibia Training Authority on www.nta.com.na.

Elements and Performance Criteria

Element 1: Plan and prepare for work

Performance criteria

- 1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and interpreted.
- 1.2 Signage and barricade requirements are identified and implemented, where necessary.
- 1.3 Personal protective equipment is selected in line job and safety requirements
- 1.4 Tools and equipment selected to carry out tasks are consistent with job requirements, checked for serviceability, and any faults are rectified or reported prior to commencement.
- 1.5 Material quantity requirements are calculated in line with plans, specifications and quality requirements.
- 1.6 Environmental protection requirements are identified and applied in line with environmental plans and regulatory obligations.

Element 2: Install and test overhead line accessories

Range

Overhead line accessories include and not limited to insulators, arcing horns, supports, cross arms and dampers.

Performance Criteria

- 2.1 Overhead line accessories are assembled according to manufacturers' instructions.

- 2.2 Overhead line accessories are fitted and installed according to workplace procedures and manufacturers' instructions.
- 2.3 Overhead line accessories are tested and commissioned according to manufacturers' instructions.

Element 3: Clean-up work area

Performance Criteria

- 3.1 Work area is cleared, cleaned, restored and secured in line with workplace procedures.
- 3.2 Tools and equipment are cleaned, checked and stored in line with manufacturer specifications and workplace procedures.
- 3.3 Materials and wastes are disposed of, reused, or recycled in accordance with legislation, regulations, codes of practice and job specifications.

Registration Data

Subfield:	Electrical Engineering
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