



Information:  
Wiring and commissioning



MINISTÈRE DE L'ÉDUCATION NATIONALE

MINISTÈRE DE L'ENSEIGNEMENT SUPÉRIEUR, DE LA RECHERCHE ET DE L'INNOVATION

Life Is On

Schneider Electric



**WIRE AND COMMISSION DOMESTIC OR COMMERCIAL ELECTRICAL CIRCUITS: 258968**

Physical planning and construction	Electrical infrastructure construction
ABET band: Undefined	NQF level : level 3
NQF level: level 3	Credits : 8
Unit standard type: Regular	

**SPECIFIC OUTCOMES AND ASSESSMENT CRITERIA :**

Specific outcome	Assessment criteria
<p><b>SO1: PLAN TO WIRE AND COMMISSION DOMESTIC OR COMMERCIAL CIRCUITS.</b></p>	<p><b>AC 1.1</b> Job instruction is interpreted and a sequence of operation is determined.  <b>AC 1.2</b> Applicable electrical drawings are correctly interpreted and selected to meet job requirements.  <b>AC 1.3</b> Equipment and personal protective equipment is selected, inspected and checked for functionality A.Cand safety prior to commencement.  <b>AC 1.4</b> Safety procedures related to job requirements and work site procedures are obtained.  <b>AC 1.5</b> Different types/sizes of wire conductors are identified and selected according to job instructions.  <b>AC 1.6</b> Appropriate tools are identified and selected to meet the requirements of the task according to statutory requirements.</p>
<p><b>SO2: REPAIR TO WIRE AND COMMISSION DOMESTIC OR COMMERCIAL CIRCUITS</b>            (End products = distribution board, light switches, socket outlets, light fittings, geyser point and stove point. Obstacles = through walls or concrete decking, over beams, around corners/bends, over water pipes).</p>	<p><b>AC 2.1</b> Wire ways are identified and checked to be ready for the installation of wires/conductors or Cables.  <b>AC 2.2</b> Work site is inspected for safety and hazards and corrective action is taken according to statutory A.Crequirements.  <b>AC 2.3</b> Wire way installation is checked for the placing/mounting of inspection/end/termination boxes, end products and various obstacles so as to take necessary corrective action or processes when wiring domestic or commercial circuits.</p>
<p><b>SO: WIRE DOMESTIC OR COMMERCIAL CIRCUITS</b>            (Distribution boards, isolators and circuit protection devices, lighting circuits, socket outlet circuits, stove circuit, geyser circuit and bell circuit.            Single phase and three phase circuits).</p>	<p><b>AC 3.1</b> Appropriate tools are selected and used correctly as per manufacturer's specifications and work site standards.  <b>AC 3.2</b> Draw wire is inserted into wire way in preparation for pulling through of wires into wire ways or through/around obstacles.  <b>AC 3.3</b> Circuits are wired separately into wire ways depending on the circuit requirements to comply with SANS standards.  <b>AC 3.4</b> Maximum amounts of wires per size of wire ways and type of circuit is adhered to as per SANS standards.  <b>AC 3.5</b> Correct colour coded wires are used in wire ways as per the SANS and job requirements.  <b>AC 3.6</b> Wiring must be done in accordance with SANS standards.  <b>AC 3.7</b> All connections must be correct, tight and required slack as per job requirements in accordance with SANS</p>
<p><b>SO: 4 COMMISSION DOMESTIC OR COMMERCIAL CIRCUITS</b>            (Various sizes of wiring and flexible cabling for different circuits terminated with compression glands, bends radius and inspection boxes).</p>	<p><b>AC 4.1</b> Distribution board is inspected, checked, tested to ensure that protection devices are operational; wiring and connections are correct.  <b>AC 4.2</b> All inspection boxes and terminations are inspected and checked to be correct before circuit is energised/commissioned.  <b>AC 4.3</b> Tests are conducted on circuits for requirements and energising to ensure compliance with work site procedures, SANS standards and safety regulations.  <b>AC 4.4</b> Different circuits are energised/commissioned individually to ensure that it is correct.  <b>AC 4.5</b> Tests are conducted on specific circuits to ensure that earth leakage protection is operational within the stipulated rating</p>
<p><b>SO:5 COMPLETE THE WIRING AND COMMISSIONING OF DOMESTIC OR COMMERCIAL CIRCUITS</b>(Continuity tests, insulation tests and polarity test. Lighting circuits, plug circuits, geyser circuit, and stove circuit).</p>	<p><b>AC 5.1</b> Electrical installations are labelled as per SANS 10142-1.  <b>AC 5.2</b> All connections are tight and mechanically sound to ensure electrical safety.  <b>AC 5.3</b> Test readings are recorded using appropriate documentation and forms as specified in work site procedures.  <b>AC 5.4</b> The work area is cleaned and waste disposed of in the appropriate manner.  <b>AC 5.5</b> Work area is restored to serviceable condition according to statutory requirements.  <b>AC 5.6</b> Appropriate tools are cared for and stored according to work site requirements.  <b>AC 5.7</b> Reports/documentation and drawing are updated and returned to source according to statutory requirements.</p>