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| Title | **Install domestic wiring** |
| Level | **2** | **Credits** | **17** |

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| Purpose | This competency standard is intended for those who carry out electrical operations. People holding credit for this competency standard are able to: Plan wiring layout; lay cable; perform wiring test; install electrical appliances; and complete work. |

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| Classification ISCED | 0713 Electricity and energy |

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| Available grade | Competent / Not yet competent |

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| Modification history | N/A |

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| **Competency Unit** | **Performance Criteria** | **Knowledge and Understanding** |
| **K1:****Plan wiring layout** | **P1-** Draw wiring layout**P2-** Discuss with home owner**P3-** Measure distance to connection points**P4-** Estimate material**P5-** Prepare tools, equipment and materials | **K1-** Interpretation of drawings, symbols, cable number according to load, and colour coding**K2-** Measuring of units and conversion**K3-** Quality of different conductor and insulator types**K4-** Application of tools, equipment and materials |
| **K2:****Lay cables** | **P1-** Prepare installation of cable**P2-** Install conduit, **GI** pipes, **PVC** pipesand/or ducts**P3-** Pull cables in conduits **P4-** Connect cables**P5-** Connect fixtures | **K1-** Chiselling, ducting, **PVC** and **GI** pipe wiring procedures**K2-** Properties of materials**K3-** Application of cables and tools**K4-** Types of joints**K5-** Types and purpose of fixtures |
| **K3:****Perform wiring test** | **P1-** Inspect wiring and distribution board**P2-** Conduct tests**P3-** Document test results | **K1-** Importance of continuity and factors of loose fittings**K2-** Application of equipment and tools used for testing; Importance of earthing**K3-** Importance of documenting compliance and noncompliance of test results and subsequent steps to be taken |

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| **K4:****Install electrical appliances** | **P1-** Interpret and confirm installation specifications**P2-** Install, position and secure appliances**P3-** Connect appliance and test for correct operation**P4-** Confirm completed installation | **K1-** Interpretation of installation requirements and specifications**K2-** Importance of correct position and location; Safety precautions**K3-** Basic operation of appliance and settings to adjust performance; Requirements for good, properly bonded earth**K4-** Client communication |
| **K5:****Complete work** | **P1-** Complete work related documents and procedures**P2-** Perform final quality inspection**P3-** Clean up and store tools, equipment and materials | **K1-** Importance of documentation; Customer care procedures and techniques**K2-** Importance of quality; handing over to client**K3-** Waste disposal procedures; Care of tools and equipment |