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| Title | **Perform measurement for wiring** |
| Level | **2** | **Credits** | **17** |

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| Purpose | The competency standard identifies knowledge and skills required to perform measurements of rooms; distribution box, light plug, main circuit to switch board, TV, telephone, intercom, internet cable, wall lights and levelling of switch board, chiselling with wall cutter and fixing of PVC pipes with box etc. |

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| Classification ISCED | 0732 Building and civil engineering |

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| Available grade | Competent / Not yet competent |

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| Modification history | N/A |

| **Competency Unit** | **Performance Criteria** | **Knowledge and Understanding** |
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| **C1:****Perform measurement of rooms** | **Trainee must be able to:**1. Identify the wiring points as per drawing
2. Mark the wiring points as per drawing.
3. Select the require measuring tool.
4. Measurement of room.
5. Record the measurements in appropriate document.
 | **Trainee must know and understand:****K1**: Measuring units.**K2**: Measuring tools.**K3**: Basic calculation methods. |
| **C2:****Perform measurement of distribution board to switch board** | **Trainee must be able to:**1. Identify the wiring route from distribution board to switch board as per electrical drawing.
2. Measure the distance from distribution board to switch board.
3. Record the measurements in appropriate document.
 | **Trainee must know and understand:****K1**: Measuring units.**K2**: Measuring tools.**K3**: Basic calculation methods |
| **C3:** **Perform measurement of power plugs for AC** | **Trainee must be able to:**1. Identify the wiring route from distribution board to AC power plugs.
2. Measure the distance from distribution board to AC power plug
3. Record the measurements in appropriate document.
 | **Trainee must know and understand:****K1**: Measuring units.**K2**: Measuring tools.**K3**: Basic calculation methods |
| **C4:****Perform measurement of light plug** | **Trainee must be able to:**1. Identify the wiring route from switch board to light plugs.
2. Measure the distance from distribution board to switch board to light plugs.
3. Record the measurements in appropriate document.
 | **Trainee must know and understand:****K1**: Measuring units.**K2**: Measuring tools.**K3**: Basic calculation methods |
| **C5:****Perform measurement of main circuit to distribution board** | **Trainee must be able to:**1. Identify the wiring route from energy meter to distribution board.
2. Measure the distance from energy meter to distribution board.

1. Record the measurements in appropriate document.
 | **Trainee must know and understand:****K1**: Measuring units.**K2**: Measuring tools.**K3**: Basic calculation methods |
| **C6:****Perform measurement of TV, telephone, intercom, internet cable from main to junction board** | **Trainee must be able to:**1. Identify the wiring route of TV, telephone, intercom, internet cable from main to junction board
2. Measure the distance of TV, telephone, intercom, internet cable from main to junction board.

 1. Record the measurements in appropriate document.
 | **Trainee must know and understand:****K1**: Measuring units.**K2**: Measuring tools.**K3**: Basic calculation methods |
| **C7:****Perform levelling of switch boards (AC light, Light plug, Tv)** | **Trainee must be able to:**1. Select levelling tools according to job requirement.
2. Perform levelling of switch boards ( TV, telephone, intercom, internet connection )

 1. Mark the levels.
 | **Trainee must know and understand:****K1**: Measuring units.**K2**: Levelling tools.**K3**: Levelling techniques.**K4**: Basic calculation methods |
| **C8:****Perform levelling of room wall lights** | **Trainee must be able to:**1. Select levelling tools according to job requirement.
2. Perform levelling of wall lights
3. Mark the levels.
 | **Trainee must know and understand:****K1**: Measuring units.**K2**: Levelling tools.**K3**: Levelling techniques.**K4**: Basic calculation methods |
| **C9:****Perform chiselling with wall cutter** | **Trainee must be able to:**1. Select the appropriate size of wall cutter.
2. Perform chiselling at the marked points.
3. Check the levels of chiselled points.
 | **Trainee must know and understand:****K1**: Use and types of wall cutter**K2**: Chiselling techniques |
| **C10:** **Perform fixing of PVC pipes/switch box** | **Trainee must be able to:**1. Identify the appropriate PVC pipe according to required sizes.

 1. Fix the pipe / switch boxes at their desired locations.
2. Check the strength of PVC pipe installation.
 | **Trainee must know and understand:****K1**: fixing techniques for PVC pipe / switch boxes |