



Readiness for Assessment: Candidate Self-Assessment Checklist

AM2S
(Electrotechnical
Apprenticeship
Standard)

To be completed by candidate, employer and training provider

Candidate Name: <hr/>
NI Number: <hr/>
Candidate ULN (Unique Learner Number): <hr/>



By the industry, for the industry

July 2019

Important Information

Completing this checklist is a compulsory part of the AM2S assessment preparation. It helps all parties to thoroughly review whether an individual has the required knowledge and experience to undertake the test. If gaps are identified, additional training or experience is recommended before taking the assessment.

The checklist should be completed by the candidate, with input from their employer and training provider. Experience shows that a three-way discussion is the most effective way of doing this. We recommend that you use this checklist as a working document and carefully review each section, noting where further practical experience or knowledge is required.

Bear in mind that you are unlikely to be sufficiently prepared to pass the assessment if you cannot confidently tick at least "Adequate" for every statement in terms of both Knowledge and Practical Experience.

The AM2S Electrotechnical End Point Assessment is designed for those who wish to practise either as an installation electrician, or as a maintenance electrician. It demonstrates they have the level of competence expected by the industry in the following key occupational areas:

- Risk assessments and health and safety
- Safe isolation
- The interpretation of specifications, drawings and diagrams
- Planning and preparing to install, terminate and connect identified wiring systems
- Installing, terminating and connecting identified wiring systems
- Inspection, testing and certification
- Fault diagnosis and correction of electrical faults
- The understanding and application of industry recognised procedures, working practices and the requirements of statutory and non-statutory regulations.

In accordance with the installation specification and the relevant statutory and non-statutory regulations, candidates will be expected to install, terminate, connect, inspect, test and commission:

- A three-phase distribution board and sub-circuit
- A three-phase Direct-on-Line Motor circuit
- Single phase lighting and power circuits
- A central heating/sustainable energy system
- A safety services circuit and device
- A data-cabling system.

The assessment is in five sections:

Section A - Composite Installation

Section B - Inspection and Testing of the Completed Composite Installation

Section C - Safe Isolation

Section D - Fault Diagnosis and Rectification

Section E - Assessment of Applied Knowledge

Using this Checklist

Please work through Sections A to E in this document and tick the boxes that best suit the candidate's knowledge and experience in each area. Once this task is complete, identify any areas where further knowledge or experience is needed before the candidate can undertake the assessment. Remember that you are unlikely to be sufficiently prepared to pass the assessment if you cannot confidently tick at least "Adequate" for every statement in terms of both Knowledge and Practical Experience.

If there are areas of concern, an action plan should be produced to help the candidate achieve the required standard.

The completed, signed document is a compulsory gateway check to confirm readiness for assessment before the EPA can be booked. It must be submitted to NET as part of the Request for Assessment.

Privacy Notice

NET Services and the Assessment Centre you attend are both Data Controllers for the purposes of data Protection Law. Where applicable they will jointly uphold your rights. Information that you include in this form is necessary for the completion of your assessment and will only be shared between the Controllers for this purpose or their professional or legal obligations. For full details of NET Service's policy on Data Protection please go to the website www.netservices.org.uk or the website of your assigned Assessment Centre.

Section A1: Safe Isolation and Risk Assessment (45 mins)

To demonstrate occupational competence candidates will be expected to:

	For each item please tick one box in the Knowledge section and one box in the Experience section							
	KNOWLEDGE				EXPERIENCE			
	Limited	Adequate	Extensive	Unsure	Limited	Adequate	Extensive	Unsure
1 Carry out and document an assessment of risk								
2 Carry out safe isolation in the correct sequence								

Section A: Composite Installation (10 hours)

This section has areas where candidates will need to demonstrate occupational competence in accordance with statutory and non-statutory regulations and approved industry working practices.

	For each item please tick one box in the Knowledge section and one box in the Experience section							
	KNOWLEDGE				EXPERIENCE			
	Limited	Adequate	Extensive	Unsure	Limited	Adequate	Extensive	Unsure
1 Interpretation of specifications and technical data								
2 Selection of protective devices								
3 Install protective equipotential bonding								
4 Install and terminate PVC singles cable								
5 Install and terminate PVC/PVC multi-core & cpc cable								
6 Install and terminate SY multi-flex cable								
7 Install and terminate heat-resistant flex								
8 Install and terminate XLPE SWA								
9 Install and terminate data-cable								
10 Install and terminate FP200 type cable								
11 Forming and install 20mm metal conduit								

Section A: Composite Installation (10 hours) - continued

	For each item please tick one box in the Knowledge section and one box in the Experience section							
	KNOWLEDGE				EXPERIENCE			
	Limited	Adequate	Extensive	Unsure	Limited	Adequate	Extensive	Unsure
12 Forming and installing 20mm PVC conduit								
13 Install protective devices in a TP&N distribution board								
14 Install a two-way and intermediate lighting circuit in PVC/PVC multi-core cable								
15 Install a BS 1363 13A socket outlet ring circuit in PVC singles cable								
16 Install a carbon monoxide detector safety service circuit in FP200 type cable								
17 Install data outlets circuit in Cat. 5 cable								
18 Install a BS EN 60309 16A T P & N socket outlet in XLPE SWA cable								
19 Install protective equipotential bonding to gas and water services								
20 Connect a 3-phase direct on line motor circuit in SY cable								
21 Install an S Plan central heating and hot water system with a solar thermal sustainable energy element utilising heat resistant flexible cable and PVC singles cable								

Section B: Inspection and Testing of the Composite Installation (3.5 hours)

In this area candidates will be expected to follow practices and procedures that take into account electrically sensitive equipment. To demonstrate occupational competence, candidates will be expected to:

	For each item please tick one box in the Knowledge section and one box in the Experience section							
	KNOWLEDGE				EXPERIENCE			
	Limited	Adequate	Extensive	Unsure	Limited	Adequate	Extensive	Unsure
Undertake an assessment of risk and work according to best practice as required by Health and Safety legislation								
Ensure the installation is correctly isolated before commencing the inspection and test activity								
Carry out a visual inspection of the installation in accordance with BS 7671 and IET Guidance Note 3								
Complete the following tests on the installation in accordance with BS 7671 and IET Guidance Note 3:								
1 Continuity of protective conductors								
2 Continuity of ring final circuit conductors								
3 Insulation resistance								
4 Polarity								
5 Earth fault-loop impedance (EFLI)								
6 Prospective fault current (PFC)								
7 Check for phase sequence and phase rotation								
8 Functional testing								
Verify that the test results obtained conform to the values required by BS 7671 and IET Guidance Note 3								
Complete an electrical installation certificate, schedule of inspections and schedule of test results using the model forms as illustrated in Appendix 6 of BS 7671								

Section C: Safe Isolation (30 mins)

To demonstrate occupational competence candidates will be expected to:

	For each item please tick one box in the Knowledge section and one box in the Experience section							
	KNOWLEDGE				EXPERIENCE			
	Limited	Adequate	Extensive	Unsure	Limited	Adequate	Extensive	Unsure
Carry out safe isolation in the correct sequence on a single-phase circuit								
Carry out safe isolation in the correct sequence on a three-phase circuit								
Carry out safe isolation in the correct sequence on a three-phase installation								

Section D: Fault Diagnosis and Rectification (2 hours)

	For each item please tick one box in the Knowledge section and one box in the Experience section							
	KNOWLEDGE				EXPERIENCE			
	Limited	Adequate	Extensive	Unsure	Limited	Adequate	Extensive	Unsure
Undertake an assessment of risk and work according to best practice as required by Health and Safety legislation								
Correctly identify and use tools, equipment and test instruments that are fit for purpose								
Carry out checks and preparations that must be completed prior to undertaking fault diagnosis								
Identify faults from 'fault symptom' information given by the examiner								
State and record how the identified faults can be rectified								

Section E: Assessment of Applied Knowledge (1 hour)

This assessment will last for one hour and be in the form of a computerised multiple-choice test. Candidates will be expected to answer 30 questions and achieve a minimum pass mark of 70% (21 correct answers). Candidates will be assessed on their application of knowledge associated with:

	For each item please tick one box in the Knowledge section and one box in the Experience section							
	KNOWLEDGE				EXPERIENCE			
	Limited	Adequate	Extensive	Unsure	Limited	Adequate	Extensive	Unsure
Health and Safety								
BS 7671: Requirements for Electrical Installations								
Building Regulations								
Inspection, Testing and Fault Finding								

Behaviours

Behaviours are assessed throughout the apprenticeship and as part of the Level 3 Electrotechnical Qualification.

The following statement should be signed by the candidate's employer:

I confirm that *(enter candidate's name)*:

has consistently demonstrated the following behaviours to the standard I require:

- Work reliably and effectively without close supervision
- Accept responsibility for the work of themselves and others
- Accept allocate and supervise technical and other tasks
- Use oral, written and electronic methods for the communication of technical and other information
- Work effectively with colleagues, other trades, clients, suppliers and the public
- Undertake work in a way that contributes to sustainable development
- Maintain and enhance competence in own area
- Exercise responsibilities in an ethical manner.

Signed by employer:

Print Name:

Date:

Identifying any further knowledge or experience required

Having completed the checklist, summarise below any areas where further knowledge or experience is required before undertaking the assessment.

Knowledge

The candidate requires further knowledge in:

List items	Tick when achieved

Experience

The candidate requires further experience in:

List items	Tick when achieved

Declarations and Required Signatures

Candidate:

I believe that I have the required knowledge and experience to take this assessment.

Candidate Signature: _____
Print Name: _____
Date: _____

Employer:

I believe that the candidate has the required knowledge and experience and is ready to take this assessment.

Employer Signature: _____
Print Name: _____
Date: _____

Training Provider:

I believe that the candidate has the required knowledge and experience and is ready to take this assessment.

Training Provider Signature: _____
Print Name: _____
Date: _____

Submitting this Checklist

Once you have completed and signed the checklist please submit it to your chosen assessment centre for gateway approval. Checklists sent to the NET head office will not be reviewed and will be destroyed in line with our data protection and privacy policy.

Please ensure the whole document is submitted. Documents with missing pages will not be accepted.

