



As of 1 August 2022, the English and maths requirements for on-programme and new apprentices undertaking level 2 apprenticeships have changed and are detailed as part of the <u>apprenticeship funding rules</u>. These requirements supersede the current wording in this apprenticeship standard and EPA plan.

End-point assessment plan for construction assembly & installation operative apprenticeship standard

| Apprenticeship standard reference number | Apprenticeship standard level | Integrated approach |
|--|----------------------------------|---------------------|
| ST0265 | 2 | No |

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Introduction and overview

This document sets out the requirements for end-point assessment (EPA) for the Construction Assembly and Installation Operative apprenticeship standard. It is for end-point assessment organisations (EPAOs) who need to know how EPA for this apprenticeship must operate. It will also be of interest to Construction Assembly and Installation Operative apprentices, their employers and training providers.

Full time apprentices will typically spend 18 months on-programme (before the gateway) working towards the occupational standard, with a minimum of 20% off-the-job training. All apprentices must spend a minimum of 12 months on-programme.

The EPA period should only start, and the EPA be arranged, once all of the pre-requisite gateway requirements for EPA have been met and they can be evidenced and made available to an EPAO. The employer must be satisfied that the apprentice is consistently working at or above the level set out in the occupational standard. Apprentices must have compiled a portfolio of evidence, which underpins the EPA interview. Apprentices must have achieved the Slinger and Signaller CPCS A40 qualification.

For level 2 apprenticeships, apprentices without English and mathematics at level 2 must achieve level 1 English and mathematics and take the tests for level 2 prior to taking their EPA. For those with an education, health and care plan or a legacy statement the apprenticeships English and mathematics minimum requirement is Entry Level 3 and British Sign Language qualification are an alternative to English qualifications for whom this is their primary language.

The EPA is to be completed within a typical EPA period lasting three-months, after the apprentice has met the EPA gateway requirements.

EPA must be conducted by an organisation approved to offer services against this apprenticeship standard, as selected by the employer, from the Education & Skills Funding Agency's Register of End-Point Assessment Organisations (RoEPAO).

The EPA consists of three discrete assessment methods. The individual assessment methods will have the following grades:

Assessment method 1 – Multiple-choice test

- fail
- pass
- distinction

Assessment method 2 - Observation with questioning

- fail
- pass

Assessment method 3 – Interview, underpinned by portfolio of evidence

- fail
- pass
- distinction

Performance in the EPA will determine the overall apprenticeship grade of:

- fail
- pass
- distinction

EPA summary table

| On-programme (typically, 18 months) | Training to develop the occupation standard's knowledge, skills and behaviours Training towards English and mathematics level 1 and 2 if required Compilation of a portfolio of evidence |
|---|---|
| End-point assessment gateway | Employer is satisfied the apprentice is consistently working at, or above the level of the occupational standard Apprentice has achieved English and mathematics at Level 1 and taken the tests for level 2 Apprentice has compiled a portfolio of evidence to underpin the Interview Apprentice has achieved Slinger and Signaller CPCS A40 qualification |
| End-point assessment (typically, 3-months) | Assessment method 1: Multiple-choice Test; graded fail, pass, distinction Assessment method 2: Observation with Questioning; graded fail, pass. Assessment method 3: Interview, underpinned by portfolio of evidence; graded fail, pass, distinction Overall EPA and apprenticeship graded fail, pass, distinction |

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Length of end-point assessment period

The EPA (including all assessment methods) will typically be completed within three-months of the gateway.

Order of assessment methods

- 1. Multiple-choice Test
- 2. Either Interview or Observation
- 3. Either Interview or Observation

The method that needs to be passed first is in 'A' column and the method(s) that need to be passed subsequently in the 'B' (and 'C') column(s).

| Α | В | С | Reason for this |
|----------|--------------|--------------|--|
| Multiple | Either | Either | The multiple choice includes critical health and safety questions which must be passed before an apprentice is allowed on site to use the materials. |
| choice | observation | observation | |
| Test | or interview | or interview | |

Gateway

The EPA period should only start once the employer is satisfied that the apprentice is consistently working at or above the level set out in the occupational standard, that is to say they are deemed to have achieved occupational competence. In making this decision, the employer may take advice from the apprentice's training provider(s), but the decision must ultimately be made solely by the employer.

In addition, an apprentice must have completed the following gateway requirements prior to beginning EPA:

• apprentices without English and mathematics at level 2 must achieve level 1 English and mathematics and have taken the tests for level 2 English and mathematics

For those with an education, health and care plan or a legacy statement the apprenticeships English and mathematics minimum requirement is Entry Level 3 and British Sign Language qualification are an alternative to English qualifications for whom this is their primary language.

- apprentices must achieve the Slinger and Signaller CPCS A40 qualification
- for the interview, the apprentice must have completed and submitted a portfolio of evidence – see requirements below

Portfolio of evidence requirements:

 apprentices must compile a portfolio of evidence during the on-programme period of the apprenticeship

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- it must contain sufficient evidence to demonstrate the KSBs that will be assessed by the interview
- it will typically contain no more than 10 discrete pieces of evidence
- evidence must be mapped against the KSBs
- evidence may be used to demonstrate more than one KSB; a qualitative as opposed to quantitative approach is required
- evidence sources may include:
 - workplace documentation, for example job cards/job sheets, check sheets/quality check records, equipment check/maintenance records
 - o annotated specifications, for example drawings, cutting lists, work instructions
 - annotated photographs
 - video clips (maximum duration in total 10-minutes)
 - This is not a definitive list, other evidence sources are allowable
- it should not include any methods of self-assessment
- any employer contributions should focus on direct observation of evidence (for example witness statements) of competence rather than opinions
- the evidence provided must be valid and attributable to the apprentice; the portfolio of evidence must contain a statement from the employer confirming this
- the portfolio of evidence must be submitted to the EPAO at the gateway

Assessment methods

Assessment method 1: multiple-choice test

Overview

This assessment method has one component.

The rationale for this assessment method is:

- allows for the efficient testing of knowledge where there is a right or wrong answer
- does not require independent assessor time, reducing cost
- allows for flexibility in terms of when it is taken

Delivery

Apprentices must be assessed against the knowledge assigned to this assessment method – as shown in mapping of KSBs.

The test can be:

- computer based
- paper based

It will consist of 45 questions of which 5 must be scenario based. These questions will consist of:

• Closed response questions (multiple-choice questions). Apprentices must choose one correct answer from a choice of four.

Each question answered correctly will be awarded one mark apart from the scenario questions which will be awarded 2 marks. Partial marks will be awarded for partial correct responses to scenario questions. Any incorrect or missing answers will be assigned nil marks.

Apprentices must have a maximum of 90 minutes to complete the test.

The test is closed book, which means that the apprentice cannot refer to reference books or materials.

The test must be taken in the presence of an invigilator. The invigilator may be the independent assessor, or another external person employed by the EPAO or specialised (proctor) software, if the test can be taken on-line. The EPAO is required to have an invigilation policy that will set out how the test is to be carried out. This will include specifying the most appropriate ratio of apprentices to invigilators to best take into account the setting and security required in administering the test.

Tests must be marked by independent assessors or markers employed by the EPAO following a marking guide produced by the EPAO.

The EPAO must verify the suitability of the venue for taking the test and the identity of the person taking the test.

EPAOs must ensure that apprentices have a different set of questions in the case of re-sits or re-takes.

Marking

The following grade boundaries apply to the test:

| Grade | Minimum score | Maximum score |
|-------------|---------------|---------------|
| Distinction | 41 | 50 |
| Pass | 26 | 40 |
| Fail | 0 | 25 |

Venue

Apprentices must take the test in a suitably controlled environment that is a quiet space, free of distractions and influence.

The test can take place in any of the following:

- employer's premises
- a suitable venue selected by the EPAO, for example a training provider's premises

Supporting material

EPAOs must produce the following material to support this method:

- a test specification
- sample tests and mark schemes
- live tests and mark schemes

analysis reports which show areas of weakness for completed tests and an invigilation policy

EPAOs must develop 'question banks' of sufficient size to prevent predictability and review them regularly (and at least once a year) to ensure they, and the questions they contain, are fit for purpose.

It is recommended that questions are developed in consultation with employers of this occupation. EPAOs must maintain the security and confidentiality of their questions when consulting employers.

Assessment method 2: observation with questioning

Overview

This assessment method has two components: observation and questioning.

The rationale for this assessment method is:

- this is a practical role, best demonstrated through observation
- observation allows the assessment of work tasks in the apprentice's normal place of work, using tools and equipment with which they are familiar, which is likely to enable the apprentice to perform at their best
- observation is a cost-effective assessment method, as it makes use of the employers' premises and resources
- the tasks chosen reflect something that would be completed by construction assembly and installation operatives in every company on a daily basis; tasks not necessarily completed on a daily basis or not best suited to direct observation are assessed via the other assessment methods
- questioning component enables the checking of underpinning knowledge

Delivery

Apprentices must be observed by an independent assessor completing work in their normal workplace, in which they will be assessed against the KSBs assigned to this assessment method – as shown in mapping of KSBs.

EPAOs must arrange for the observation to take place in consultation with the employer.

An independent assessor must only observe four apprentices at any one time, to allow for quality and rigour. The independent assessor must be unobtrusive whilst conducting the observation.

The observation will take 10 hours. The observation may be split into discrete sections of the core task and the option task held over a maximum of two working days. Each task must be completed before the end of the working day. The length of a working day is typically considered to be 7.5 hours. There may be breaks during the observation to allow the apprentice to move from one location to another as required. The independent assessor has

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the discretion to increase the time of the observation by up to 10%, to allow the apprentice to complete a task at the end of this component of the EPA.

The following activities must be observed during the observation:

CORE

• setting out, temporary works

Option 1: Concrete

 assemble to line and level 3 components including the skills of selecting the appropriate materials and fixings

Option 2: Timber

• measure, mark out, fit, align, position and secure 3 components including the skills of selecting the appropriate materials and fixings

Option 3: Relocatable Modular

• measure, mark out, fit, align, position and secure, 3 elements of the building including the skills of selecting the appropriate materials and fixings

Option 4: Permanent Modular

• measure, mark out, fit, align, position and secure, 3 elements of the building including the skills of selecting the appropriate materials and fixings

The activities must require the apprentice to select and use of a range of machinery, equipment and/or tools.

Observation specifications must be of equal complexity, so as to require a competent person 10 hours to complete.

It is recommended that questioning is asked after each task rather than at the end of the 10hour observation. This would then give the apprentice a better opportunity to answer questions relevant to the task they have just completed.

The independent assessor must ask a minimum of 10 open questions. They may ask follow up questions where clarification is required. The purpose of the questioning is to assess underpinning knowledge, skills and behaviours. Questions must be asked within a time period not exceeding 20 minutes which is included in the overall time allowed of 10 hours. The independent assessor has the discretion to increase the time of the questioning by up to 10%, to allow the apprentice to complete their last answer.

KSBs observed, and answers to questions, must be documented by the independent assessor.

Independent assessors will make all grading decisions.

EPAOs must ensure that apprentices have a different observation specification and set of questions in the case of re-sits or re-takes.

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Venue

The observation must take place in the apprentice's employer's premises, under normal working conditions. The EPAO must ensure the necessary materials and equipment and tools are available to the apprentice.

Supporting material

EPAOs must produce the following material to support this assessment method:

- observation specifications. The 'specification bank,' must be of sufficient size to prevent predictability and reviewed regularly (at least once per year) to ensure they are fit for purpose.
- open questions to assess related underpinning KSBs. The 'question bank' must be of sufficient size to prevent predictability and reviewed regularly (and at least once a year) to ensure that it, and its content, are fit for purpose. It is recommended that questions are developed in consultation with employers of this occupation. EPAOs must maintain the security and confidentiality of their questions when consulting employers.
- assessment recording documentation
- guidance for apprentices and employers

Assessment method 3: interview, underpinned by portfolio

Overview

This assessment method has one component: interview.

The rationale for this assessment method is:

- it allows the apprentice to be assessed against KSBs that may not occur naturally on a daily basis, would take too long to observe, or do not lend themselves to direct observation
- the interview is underpinned by a portfolio of evidence, enabling the apprentice to demonstrate the application of skill and behaviours as well as knowledge
- allows for testing of responses where there are a number of potential answers that could not be tested through the multiple-choice test
- it is a cost effective, as it makes use of the employer's premises and does not require additional resources

Delivery

The interview must be appropriately structured to draw out the best of the apprentice's competence. Apprentices must be assessed against the KSBs assigned to this assessment method – as shown in mapping of KSBs.

EPAOs must make arrangements for this assessment method with the apprentice's employer.

Independent assessors must conduct and assess the interview on a one-to-one basis.

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The interview must last for 45 minutes. The independent assessor has the discretion to increase the time of the interview by up to 10% to allow the apprentice to complete their last answer.

The independent assessor must ask a minimum of 15 open, competence-based questions from their EPAO question bank; follow up questions devised by the independent assessor are allowed to seek clarification. The independent assessor should consider the level of English that the apprentice is working at and pitch questions using appropriate language to ensure inclusivity. Apprentices are expected to understand and use relevant occupational language.

The questions will focus on coverage of prior activity evidenced in the apprentice's portfolio of evidence. Apprentices should refer to and illustrate their answers with evidence from their portfolio of evidence, however the portfolio evidence is not directly assessed.

Questions must cover the following themes (minimum of one question per theme):

- techniques and methods to move, lift and handle, pre-assembled, manufactured elements and modules.
- following specifications and drawings
- following operating procedures
- materials their use, quality, and performance (bespoke to the chosen option)
- Installation methods and working effectively
- safe working including risks and hazards
- post installation checks
- customer focus and quality
- temporary works
- communication
- adaptability
- Concrete: application of finishing products
- Timber: roof structures, roof openings and ancillary items
- Relocatable Modular: commissioning, decommissioning and disassembly
- Permanent Modular: inter-modular requirements, finishing products and validation testing

The independent assessor must use the assessment tools and procedures that are set by the EPAO to record the interview.

Evidence from the questioning must be assessed holistically using the grading criteria for this assessment method. The independent assessor will make all grading decisions.

EPAOs must ensure that apprentices have a different set of questions in the case of re-sits or re-takes.

Independent assessors must be developed and trained by the EPAO in the conduct of interviews and reaching consistent judgement.

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Venue

The interview, underpinned by a portfolio of evidence can take place in any of the following:

- employer's premises
- a suitable venue selected by the EPAO, for example a training provider's premises

Video conferencing can be used to conduct the interview, but the EPAO must have processes in place to verify the identity of the apprentice and ensure the apprentice is not being aided in some way, e.g., use a 360-degree camera.

The interview, underpinned by portfolio of evidence must take place in a quiet room, free from distractions and influence.

Supporting material

EPAOs must produce the following material to support this assessment method:

- set questions, a question bank must be developed by EPAOs. The 'question bank' must be of sufficient size to prevent predictability and reviewed regularly (and at least once a year) to ensure that it, and its content, are fit for purpose. It is recommended that questions are developed in consultation with employers of this occupation. EPAOs must maintain the security and confidentiality of their questions when consulting employers.
- assessment recording documentation
- guidance for apprentices and employers

Reasonable adjustments

The EPAO must have in place clear and fair arrangements for making reasonable adjustments for this standard. This should include how an apprentice qualifies for reasonable adjustment and what reasonable adjustments will be made. The adjustments must maintain the validity, reliability and integrity of the assessment methods outlined in this assessment plan.

Weighting of assessment methods

All assessment methods are weighted equally in their contribution to the overall EPA pass grade. The multiple-choice test and interview underpinned by portfolio assessment methods determine whether a distinction grade is awarded.

Overall EPA grading

Performance in the EPA will determine the apprenticeship grade of fail, pass or distinction.

Independent assessors must individually grade each assessment method, according to the requirements set out in this plan.

EPAOs must combine the individual assessment method grades to determine the overall EPA grade. Apprentices who fail one or more assessment methods will be awarded an EPA 'fail.'In order to 'pass' apprentices must achieve a pass in all three assessment methods.

In order to achieve a 'distinction' apprentices must achieve a distinction in the multiple-choice test and interview underpinned by portfolio and a pass in the observation with questioning.

Grades from individual assessment methods should be combined in the following way to determine the grade of the EPA as a whole:

| Assessment method 1 – multiple choice test | Assessment method 2 – observation and questioning | Assessment method 3 –interview, underpinned by portfolio | Overall grading |
|--|---|---|-----------------|
| Fail | Any grade | Any grade | Fail |
| Any grade | Fail | Any grade | Fail |
| Any grade | Any grade | Fail | Fail |
| Pass | Pass | Pass | Pass |
| Distinction | Pass | Distinction | Distinction |
| Distinction | Pass | Pass | Pass |
| Pass | Pass | Distinction | Pass |

Re-sits and re-takes

Apprentices who fail one or more assessment methods will be offered the opportunity to take a re-sit or a re-take. A re-sit does not require further learning, whereas a re-take does.

Apprentices should have a supportive action plan to prepare for the re-sit or re-take. The apprentice's employer will need to agree that either a re-sit or a re-take is an appropriate course of action.

An apprentice who fails an assessment method, and therefore the EPA in the first instance, will be required to re-sit or retake any failed assessment methods only. The timescales for a resit or retake are agreed between the employer and EPAO. A resit is typically taken within 1 month of the EPA outcome notification. The timescale for a retake is dependent on how much re-training is required and is typically taken within 2 months of the EPA outcome notification.

Re-sits and re-takes are not offered to apprentices wishing to move from pass to distinction.

Where any assessment method has to be re-sat or re-taken, the apprentice can only be awarded fail or pass unless the EPAO identifies exceptional circumstances, which affected the original assessment.

Roles and responsibilities

| Role | Responsibility |
|-------------------------|--|
| Apprentice | complete the on-programme requirements of the apprenticeship prepare for and complete the EPA |
| Employer | identify when the apprentice is ready to pass the gateway and undertake their EPA notify the EPAO that the apprentice has passed the gateway |
| EPAO | As a minimum EPAOs should: • appoint independent assessors • provide training and CPD to independent assessors • have no direct connection with the apprentice, their employer or training provider i.e., there must be no conflict of interest • have processes in place to conduct internal quality assurance and do this on a regular basis • organise standardisation events and activities • organise and conduct moderation of independent assessors' marking • have, and operate, a complaints and appeals process |
| Independent assessor | As a minimum an independent assessor should: • be independent of the apprentice, their employer and training provider(s) i.e., there must be no conflict of interest • meet the experience and qualification requirements in accordance with this plan and have had training from their EPAO in terms of good assessment practice, operating the assessment tools and grading • attend EPAOs standardisation and training events |
| Training provider | As a minimum the training provider should: • work with the employer to ensure that the apprentice is given the opportunities to develop the KSBs outlined in the occupational standard and monitor their progress during the on-programme period • advise the employer, upon request, on the apprentice's readiness for EPA prior to the gateway • plays no part in the EPA itself |

| Invigilator | As a minimum, invigilators should: |
|-------------|--|
| | attend induction training as directed by the EPAO |
| | have no direct connection or conflict of interest with the |
| | apprentice, their employer or training provider; in all |
| | instances, including when the EPAO is the training |
| | provider (i.e., HEI) |
| | invigilate and supervise apprentices during tests and in |
| | breaks during assessment methods to prevent |
| | malpractice in accordance with the EPAO's invigilation |
| | procedures |

Internal Quality Assurance (IQA)

Internal quality assurance refers to the requirements that EPAOs must have in place to ensure consistent (reliable) and accurate (valid) assessment decisions. EPAOs for this EPA must:

- appoint independent assessors who have:
 - $\circ\;$ comprehensive experience of construction assembly and installation i.e., three years or more experience in the sector
 - recent relevant experience of the occupation/sector at least a level above that of the apprentice i.e., worked in the sector in the last three years or can demonstratecurrent knowledge and skills developed through continued professional development
 - hold or be working towards an independent assessor qualification, for example TAQA (Training and Quality Assessment)
- provide training for independent assessors in terms of good assessment practice, operating the assessment tools and grading
- have robust quality assurance systems and procedures that support fair, reliable, and consistent assessment across the organisation and over time
- operate induction training and standardisation events for independent assessors when they begin working for the EPAO on this apprenticeship standard and before they deliver an updated assessment method for the first time

Affordability

Affordability of the EPA will be ensured by using at least some of the following practice:

- online testing
- using an employer's premises and resources
- using an employer's premises, equipment, and resources for the observation

Mapping of knowledge, skills and behaviours (KSBs)

Assessment method 1: Multiple-choice test

Knowledge

K1 The principles of environment, health, safety and welfare and how they must be applied in relation to their work and to others.

K2 The responsibilities under current legislation and official guidance to undertake the work e.g., Lifting Operations and Lifting Equipment Regulations, Manual Handling and Working at Height Regulations.

K5 How to use, store and maintain hand tools, power tools and ancillary equipment.

K6 How to interpret various types of information for drawings and specifications in various types and formats including digital e.g., Building Information Modelling and Personal Digital Assistant models.

K8 The specific safe working practices for moving, lifting and handling pre-assembled, manufacturedelements and modules including – risk assessments and method statements, lift plans, control of hand-arm vibration syndrome, dust and noise.

K9 The different techniques and methods to move, handle and store resources prior to installation.

K10 The principles and practice of working at height and the use of access equipment including: mobile elevated work platforms, scaffold, fall prevention systems and equipment.

K11 The principles of slinging and signalling.

K14 The different methods of installation and removal of temporary works and/or formwork.

Option one - Concrete

K17 How to set out components in relation to datum points to maintain dimensional control.

K18 Component identification marks, their meaning and the implications on working methods e.g., lifting points marked on drawings, lifting configurations and sequencing.

K20 How to select and fix specified temporary works, edge protection.

K21 The properties of a range of fixings, connections, materials and their applications e.g., the purpose and use of wall plates and brackets.

K22 Application methods of cementitious finishing products such as grouts and fillers.

K23 The range of insulation types, their performance, options, quality and installation methods e.g., preventing cold bridges and forming fire stops.

Option two – Timber frame

K24 The range of soleplate types available, their performance, material options, quality and installation and fixing methods.

K25 Timber component Identification marks, their meaning and the implications on working methods.

K29 The range of roof structures available, their performance, material options, quality and installation methods, including hips and valleys, verges and eaves, parapet finishes.

K30 The range of roof components available, their performance, material options, quality and installation methods including false chimneys, windows, hatches, dormers, roof lights and vents.

K31 The range of ancillary components available, their performance, material options, quality and installation methods including membranes, damp proof courses, vapour barriers, fire stops and cavity barriers.

K32 The regulations and requirements of scaffolding, access equipment and working platforms with regard to timber frame structures.

Option three – Relocate modular and portable buildings

K35 How specific maintenance, installation and dismantling times are estimated to meet production sequencing requirements.

K36 How to use methods of calculating quantity, length, area and wastage associated with materials used to construct, install, maintain and dismantle modular and portable buildings.

K37 How to avoid heat loss and condensation by applying the principles of airtightness and ventilation.

Option four – Permanent modular buildings

K38 How to set out components in relation to datum points to maintain dimensional control.

K39 Component identification marks, their meaning and the implications on working methods e.g., lifting points marked on drawings, lifting configurations, specialised handling restrictions and step areas on unit roof zones.

K41 How to select and fix the appropriate temporary works for transportation, e.g.: edge protection, walk-on strips.

K42 The properties of a range of fixings, connections, materials and their applications e.g., the purpose and use of wall plates and brackets.

K43 Application methods of passive fire protection products such as mineral wools, intumescenttapes and fillers.

K44 The range of material types, their performance, options, quality and installation methods e.g.: preventing cold bridges and forming fire stops.

Assessment method 2: Observation with questioning

Skills

S1 Identify and apply safe working practices in accordance with current legislation, health, safety and welfare regulations, Approved Codes of Practice, company guidance, site specific requirements and taking account of changing circumstances.

S2 Plan and undertake work practices productively.

S3 Identify and apply safe use, storage and maintenance of hand tools, power tools and ancillary equipment.

S7 Install and remove temporary works e.g., protection, formwork, propping, bracing and accessramps in accordance with schemes of work.

S8 Assemble, position and install manufactured components such as structural elements, flooring units, stairs, pods, modules and cladding.

S10 Interpret information for drawings and specifications in various types and formats including digital e.g., Building Information Modelling and Personal Digital Assistant models.

Option one - Concrete

S12 Identify and select components according to material identification marks and construction sequence.

S13 Install temporary protection, propping and bracing according to drawings and specifications.

S14 Assemble components in accordance with specification and drawings including move, measure, align, fit, level, plumb, position and secure.

Option two – Timber frame

S18 Identify and select components according to material identification marks.

S19 Assemble timber frame wall panels including move, measure, mark out, align, fit, level, plumb, finish, position and secure.

Option three – Relocate modular and portable buildings

S27 Complete maintenance on relocatable modular and portable buildings including replacementand repair of interior and exterior systems using carpentry, electrical, inspection, plumbing and painting skills.

Option four – Permanent modular buildings

S29 Interpret survey information supplied. Measure, mark, align, position and set out lines, ground-cleats, anchorages and modular landing grids according to drawings and specifications.

S30 Identify and select components according to material identification marks, unique identificationnumbers, references and construction-installation sequence.

S31 Install temporary protection and utilise the specified mounted safety equipment according todrawings and specifications.

S32 Assemble and record components in accordance with specifications, sequence and drawingsincluding landing, securing, activating retaining components, positional accuracy and securing usingspecified fixings and methods.

Behaviours

B1 Working safely: in accordance with legal, regulatory, contractual and company procedures.

B2 Effective communication: oral, written, listening, body language, digital and personal presentation.

B3 Teamwork: work effectively and respectfully with others with minimum supervision, having consideration for equality and diversity.

B4 Independent working: take responsibility for completion of your own work.

B6 Working effectively: undertake the work in a timely and productive manner.

Assessment method 3: Interview, underpinned by portfolio

Knowledge

K3 How to communicate with others and follow organisational procedures to conform to productivework practices.

K4 The different techniques and methods to move, lift and handle, pre-assembled, manufacturedelements and modules.

K7 How to comply with specifications and drawings when assembling, positioning and fixingmanufactured elements and modules.

K12 The use of different materials and how they work together for load bearing and nonload bearing purposes.

K13 The quality requirements of the materials and products that are being installed.

K15 The different methods of installation and removal of products such as structural elements, flooring units, stairs, pods, modules and cladding.

K16 How and when to follow organisational reporting procedures to identify and rectify problemsarising from information, resources and methods of work.

Option One – Concrete

K19 How to adjust temporary works to achieve alignment and level.

Option two – Timber frame

K26 Erection, installation and removal methods for temporary propping, bracing and protectionmeasures.

K27 The range of timber frame panels available, their performance, material options, quality and installation methods including columns and beams, the purpose and use of wall plates.

K28 The range of floor types available, their performance, material options, quality and installationmethods including cassettes, joists and combination systems.

Option three – Relocate modular and portable buildings

K33 How to complete product paperwork, including pre-delivery inspection, handover documentation and after hire inspection reports, identify and record all damages and faults inaccordance with company procedures.

K34 How to construct, install, maintain and dismantle modular and portable buildings including the following elements:

- how to maintain non-structural carpentry work
- how to complete like for like replacement of electrical fittings as instructed
- how to complete a pre-delivery electrical inspection
 - how to maintain non-structural and structural components e.g., door frames,

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windows, partitions, structural supports

- how to install plumbing such as toilet and sink units
- how to apply paint by brush, roller and air spray
- how to prepare surfaces using abrasive blast cleaning
- how to install plaster board linings.

Option four – Permanent modular buildings

K40 How to install, check and record to achieve alignment and level.

Skills

S4 Identify and apply safe working techniques when manual handling, working at height and usingaccess equipment and plant such as – fall prevention systems e.g., fall arrest, restraint and accesssystems, harnesses and scaffold.

S5 Identify and apply safe working techniques when slinging and signalling the movement of loads.

S6 Apply different materials for load bearing and non-load bearing purposes according to design and specifications.

S9 Complete post installation checks to ensure compliance with specification.

Option One – Concrete

S11 Measure, mark, align, position and set out lines, starter bars and/or dowel bars according todrawings and specifications.

S15 Use appropriate materials and fixings in accordance with drawings, specifications and manufacturer's instructions

S16 Apply finishing products to specified quality standard.

Option two – Timber frame

S17 Measure, mark, align, position and secure soleplates according to drawings and specifications.

S20 Install floor systems according to drawings and specifications including cassettes, joists and combination systems.

S21 Erect roof structure carcassing components according to drawings and specifications e.g., false chimneys, hips and valleys, verges and eaves, parapet finishes.

S22 Form roof openings according to drawings and specifications e.g., hatches, dormers, roof lights and vents.

S23 Install ancillary items according to drawings and specifications e.g., membranes, damp proof courses, vapour barriers, fire stops and cavity barriers.

Option three – Relocate modular and portable buildings

S24 Prepare relocatable modular or portable buildings for loading onto transport vehicles, and assist in securing for travel, in line with supplied lift plan and method statements, e.g., temporarystability panels, temporary seals, and covers.

S25 Commission, operate and decommission powered units, machinery and equipment specific to the relocatable modular and portable building operations e.g., pumps, generators, compressors, pressure washers and lighting sets.

S26 Disassemble relocatable modular and portable buildings according to specification includinglinkway connections, staircases and access ramps.

S28 Demonstrate product to a customer, completing all paperwork for pre-delivery inspection, handover documentation and after hire inspection reports.

Option four – Permanent modular buildings

S33 Use weatherproofing and external inter-modular fire stopping materials and fixings in accordance with drawings, specifications, manufacturer's instructions and regulatory compliance.

S34 Select, pre-form, assemble and install internal inter-modular service connections in accordance with drawings, specifications, manufacturer's instructions and regulatory compliance.

S35 Carry out and record validation testing of connected services upon installation and connection, in accordance and alignment with the applicable standards and regulations.

S36 Select, pre-form, assemble and install internal inter-modular fire stopping and internal building fabric-finishing components and materials in accordance with drawings, specifications, manufacturer's instructions and regulatory compliance.

S37 Apply finishing products to quality standard in accordance with drawings and project specifications.

Behaviours

B2 Effective communication: oral, written, listening, body language, digital and personal presentation.

B5 Logical thinking: use clear and valid reasoning when making decisions to undertake the work instructions.

B7 Adaptability: be able to adjust to changes to the work instructions.

B8 Customer focus: deliver work to required quality standards.

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Grading descriptors

Assessment method 2: Observation with questioning

| KSBs | Fail | Pass |
|--------------------------|--|---|
| S1 S2 S3 S7 S8 S10 | Does not meet all of the pass criteria | To achieve a Pass, the apprentice must as a minimum: |
| | | CORE |
| S12 S13 S14 | | Works safely, following health and safety regulations and site procedures at all times, including any changes to circumstances during the task. (S1, B1) |
| S18 S19 | | Plans the task before commencement, communicates with others and follows organisational procedures to conform to productive work practices (S2, B2, B3, B6). |
| S27 | | Assembles, positions and fixes manufactured elements and modules in accordance with specifications and drawings (S3, B3). |
| S30 S31 S32 | | Installs and removes temporary works e.g., protection, formwork, propping, bracing and access ramps in accordance with schemes of work. (S7) |
| B1 B2 | | Assembles, positions and installs manufactured components such as structural elements, flooring units, stairs, pods, modules and cladding. (S8) |
| B3 B4 B6 | | Completes post installation checks to ensure compliance with specification (S10). |
| | | Completes the task independently within the time allocated (B4) |
| | | OPTION 1: CONCRETE |
| | | Identifies and selects components according to identification marks and construction sequence. (S12) |
| | | Installs temporary protection, propping and bracing according to drawings and specifications. (S13) |
| | | Assembles components in accordance with specification and drawings including, move, measure, align, fit, level, plumb, position and secure. (S14) |
| | | OPTION 2: TIMBER |
| | | Correctly identifies and selects components according to material identification marks. (S18) |
| | | Assembles timber frame elements according to drawings and specifications e.g.,sole plates, floor systems and wall panels. Including move, measure, mark out, align, fit, level, plumb, finish, position and secure. (S19) |
| | | |

| OPTION 3: Relocatable Modular |
|--|
| Completes maintenance (interior and exterior) on temporary modular or portable buildings to meet organisational specification, customer requirements and regulatory requirements. (S27) |
| Restores broken or defective parts to full working order. This could include basic carpentry, electrical, plumbing and painting skills. (S27) |
| OPTION 4: Permanent Modular |
| Accurately interprets survey information supplied and correctly measures, marks, aligns, positions and sets out lines, ground-cleats, anchorages and modular landing grids according to drawings and specifications. (S29) |
| Correctly identifies and selects components according to material identification marks, unique identification numbers, references and construction-installation sequence. (S30) |
| Correctly installs temporary protection and utilises the correct mounted safety equipment according to drawings and specifications. (S31) |
| Assembles and records components in accordance with specifications, sequence and drawings including landing, securing, activating retaining components, positional accuracy and securing using specified fixings and methods. (S32) |

Assessment method 3: Interview, underpinned by portfolio

| KSBs | Fail | Pass | Distinction |
|--|--|---|---|
| K3 K4 K7 K12 K13 K15 K16 K19 K26 | Does not meet all of the pass criteria | To achieve a Pass, the apprentice must as a minimum: | To achieve a Distinction, in addition to the pass criteria the apprentice must be able to (at least 3 core must be demonstrated plus at least 3 from the option): |
| K20 K27 | | CORE | CORE |
| K28 K33 K34 K40 | | explains how to communicate with others and follow organisational procedures to conform to productive | Describes the importance of pre use checks for both lifting and working at height equipment (K4) |
| S4 S5 S6 S9 | | Describes the different techniques and methods to move, lift and | Explains consequences of not following procedures (K7, K16, B5) |
| S11 S15 S16 | | handle, pre-assembled, manufactured elements and modules. (K4) | Explains the signs of a failed load- bearing and non-load-bearing element and the options available for |
| S17 S20 | | specifications and drawings when assembling, positioning and fixing manufactured elements and modules. (K7, B5) | Describe the process to take when materials and products being installed have not met quality requirements. |
| S21 S22 S23 | | Describes the use of different materials and how they work together for load bearing and non- load bearing purposes. (K12) | Describes the factors that could alter the installation and removal process (K15) |
| S24 S25 S26 | | Lists the key quality requirements of the materials and products that are being installed. (K13) | Describes the hierarchy of risk when working at height and the legislation with which the organisation and employee must comply. (S4, S5) |
| S28 S33 S34 S35 | | Lists the key steps of installation and removal of 2 products such as structural elements, flooring units, stairs, pods, modules and cladding. (K15) | Gives possible risks of incorrect marshalling, slinging and signalling(S6) Describes the consequences of |
| S36 S37 B2 | | Describes how and when to follow organisational reporting procedures to identify and rectify problems arising from information, resources and methods of work (K16) | ineffective communication (B2) |
| B5 B7 B8 | | describes how to identify and apply safe working techniques when manual handling, working at height | |

| | and using access equipment and plant such as – fall prevention systems e.g., fall arrest, restraint and access systems, harnesses and scaffold. (S4) | |
|--|--|---|
| | Describes an example of when they have worked at height, identifying the safe working techniques and using access equipment and plant (S5) | |
| | Describes an example of marshalling, slinging and signalling the movement of loads and the safety measures they implemented. (S6) | |
| | explains how to complete post installation checks to ensure compliance with specification. (S9) | |
| | Explains examples of when different forms of communication have been used and why each method was the most appropriate to the situation (B2) | |
| | Describes the correct procedure to follow in response to an unexpected situation (B7) | |
| | Describes the steps they took to ensure their work was produced to the required quality standard (e.g., specification, drawings) (B8) | OPTION 1: Concrete |
| | OPTION 1: Concrete | Departition 1. Concrete |
| | Correctly describes how to adjust temporary works to achieve alignment and level. (K19) | alignment and level of temporary works and risks associated with it being incorrect. (K19) |
| | Describes an example of when they have correctly measured, marked, aligned, positioned and set out lines, starter bars and or dowel bars in accordance with drawings and specifications and the supporting documents that they used. (S11) | Describes the possible implications and consequences of not carrying out the measurement, alignment, positioning and setting out of starter rails and or dowel bars in accordance with drawings and specifications. (S11) |
| | Describes an example of when they have used materials and fixings in accordance with drawings, specifications and manufacturers' | Describes an example of when they have found errors or missing |

| instructions and describe the use of these documents in extracting the correct information. (S15) Describes an example of when they have applied finishing products to specified quality standard and how they knew they had met the required standard. (S16) | information in documentation and the steps taken to gain resolution. (S15) Describes the possible implications and consequences of not achieving the quality standards required and how this risk could be mitigated. (S16) |
|--|---|
| OPTION 2: Timber | OPTION 2: Timber |
| Lists the key steps in erection, installation and removal for temporary propping, bracing and protection measures. (K26) | Explains the legislation governing temporary protection measures. (K26) |
| Describes the range of timber frame panels available and their key features e.g., performance, installation methods (K27) | Describes possible performance issues and failure reasons of timber frame panels and wall plates (K27 K28) |
| Explains the purpose and use of wall plates (K27) | Describes the possible faults that could occur in floor installation and explains how to rectify them (K28, |
| Describes the range of floor types available and their key features e.g.,performance, installation methods (K28) | S20) Describes the purpose of soleplates and the consequences of incorrect installation (S17) |
| Can show examples of their work in measuring, marking, aligning, positioning and securing soleplates and describe how they ensured they met the requirements of the drawings and specifications (S17) | Describes the common performance issues with roof components and openings and what measure should be taken to prevent product failure (S21, S22) |
| Demonstrates examples of installing floor systems (cassettes, joists and combination systems, 1 of each) and lists the key steps taken. (S20) | Describes the consequences of incorrect installation of ancillary items (S23) |
| Provides examples of erecting roof structure carcassing components e.g., false chimneys, hips and valleys, verges and eaves, parapet finishes. Lists the key steps in the process. (S21) | |
| Provides examples of forming roof openings e.g., hatches, dormers, | |

| | | roof lights and vents. Explains the steps taken to ensure compliance with drawings and specifications (S22) | |
|--|---|---|---|
| | | Provides examples of installing ancillary items e.g., membranes, damp proof courses, vapour barriers, fire stops and cavity barriers. Lists the purpose of each. (S23) | |
| | | OPTION 3: Pelocatable Modular | OPTION 3: Relocatable Modular |
| | | Provides examples of customer paperwork that they have completed for pre-delivery inspection, handover documentation and after hire inspection reports. Explains the key | Examples of real work paperwork in portfolio are complete and fully legible and explains the importance of an effective handover of a product to a customer or following the end of a hire period (K33, S28) |
| | | features of each. | Explains the risks and hazards that |
| | Describes how to identify and record all damages and faults in accordance with company procedures (K33, S28) | loaded onto transport correctly and what legislation is relevant when a building is in transport (S24) | |
| | Describes how to construct, install, maintain and dismantle modular and portable buildings including the following elements: | Explain the reasons behind the decommissioning process and identify potential issues (S25) | |
| | | Describes implications of not following procedure in the disassembly process. (S26) | |
| | | a) maintenance of non-structural carpentry work | |
| | | b) like for like replacement of electrical fittings | |
| | | completion of a pre-delivery electrical inspection | |
| | | d) maintenance of non-structural and structural components e.g., doorframes, windows, partitions, structural supports | |
| | | e) installation of plumbing such as toilet and sink units | |
| | | f) painting by brush, roller and air spray | |
| | | | |

| | | g) preparation of surfaces using abrasive blast cleaning | |
|--|---|---|---|
| | | h) installation plaster board linings. (K34) | |
| | | Provides an example of when they have prepared temporary modular or portable buildings for loading onto transport vehicles and assisted in securing for travel. Can describe the measures taken to ensure it was done in line with supplied lift plan and method statements. (S24) | |
| | | Uses an example from their portfolio to describe how they commissioned, operated and decommissioned powered units, machinery and equipment. (e.g., pumps, generators, compressors, pressure washers or lighting sets) (S25) | |
| | | Provides examples and lists the key steps taken when they disassembled temporary modular and portable buildings including link-way connections, staircases and access ramps (S26) | |
| | | OPTION 4: Permanent Modular | |
| | | Provides examples of having used weatherproofing and external inter- modular fire stopping materials and fixings and lists the steps taken to ensure it was in accordance with drawings, specifications, manufacturer's instructions and | OPTION 4: Permanent Modular Explains the importance of weatherproofing and external inter- modular fire stopping materials and fixings to the function of the building. (S33) |
| | | regulatory compliance (S33) Provides an example of when they | Describes possible effects of incorrectly installed inter-modular service connections. (S34) |
| | have selected, pre-formed, assembled and installed internal inter-modular service connections | Explains the importance of validation testing to both the customer and organisation (S35) | |
| | | | |

| | and can explain how they ensured it was done in accordance with drawings, specifications, manufacturer's instructions and regulatory compliance. (S34, K40) Provides an example of when they have carried out and recorded validation testing of connected services upon installation and connection. Lists the steps taken to ensure compliance with the applicable standards and regulations. (S35) | Describes the implications of non- compliance with drawings manufacturer's instructions regulation (S36) Describes the common defects in finishing products and how these can be avoided during installation. (S37, K40) |
|--|---|--|
| | Provides an example of when they have selected, pre-formed, assembled and installed internal inter-modular fire stopping and internal building fabric-finishing components and materials. Lists the steps taken to ensure compliance with drawings, specifications, manufacturer's instructions and regulation. (S36) | |
| | Provides examples of applying finishing products to quality standard and explains how they checked that they were in accordance with drawings and project specifications. (S37, K40) | |