

# End-point assessment plan for Advanced Carpentry and Joinery apprenticeship standard

Apprenticeship standard reference number	Apprenticeship standard level	Integrated end-point assessment
ST0263_v2	3	No

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## Introduction and overview

This document sets out the requirements for end-point assessment (EPA) for the Advanced Carpentry and Joinery 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 advanced carpentry and joinery apprentices, their employers and training providers.

Advanced carpentry and joinery is a core and options apprenticeship standard. Apprentices must be trained and assessed against the core and one option, either:

- Advanced site carpenter
- Advanced architectural joiner

Full time apprentices will typically spend 15 months on-programme (before the gateway) working towards the occupational standard, with a minimum of 20% off-the-job training. All apprentices will spend a minimum of 12 months on-programme.

The EPA period should only start, and the EPA be arranged, once the employer is satisfied that the apprentice is consistently working at or above the level set out in the occupational standard, all of the pre-requisite gateway requirements for EPA have been met and that they can be evidenced to an EPAO.

All pre-requisites for EPA assessment methods must also be complete and available for the independent assessor as necessary.

For level 3 apprenticeships, apprentices without English and mathematics at level 2 must achieve level 2 English and mathematics prior to taking their EPA.

The EPA must be completed within an EPA period lasting typically 3 months, beginning when the apprentice passes through the EPA gateway.

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 3 discrete assessment methods.

The individual assessment methods will have the following grades:

### **Assessment method 1:** Knowledge test

- Fail
- Pass
- Distinction

### **Assessment method 2:** Practical test

- Fail
- Pass
- Distinction

### **Assessment method 3:** Interview underpinned by portfolio of evidence

- Fail
- Pass
- Distinction

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

- Fail
- Pass
- Distinction

## EPA summary table

<b>On-programme</b> (typically 15 months)	<p>Training to develop the occupation standard's knowledge, skills and behaviours (KSBs).</p> <p>Training towards English and mathematics if required</p> <p>Compiling a portfolio of evidence</p>
<b>End-point assessment gateway</b>	<ul style="list-style-type: none"> <li>• Employer is satisfied the apprentice is consistently working at, or above, the level of the occupational standard</li> <li>• English and mathematics at level 2 achieved</li> </ul> <p>Completion of the BWF approved SiteRight Fire Door Installation Awareness delivered by a NOCN approved provider</p> <p>Apprentices must complete:</p> <ul style="list-style-type: none"> <li>• A portfolio of evidence to underpin the interview (see details below)</li> </ul>
<b>End-point assessment</b> (which will typically take 3 months)	<p>Assessment method 1: Knowledge test</p> <p>With the following grades:</p> <ul style="list-style-type: none"> <li>• Fail</li> <li>• Pass</li> <li>• Distinction</li> </ul> <p>Assessment method 2: Practical test</p> <p>With the following grades:</p> <ul style="list-style-type: none"> <li>• Fail</li> <li>• Pass</li> <li>• Distinction</li> </ul> <p>Assessment method 3: Interview underpinned by portfolio of evidence</p> <p>With the following grades:</p> <ul style="list-style-type: none"> <li>• Fail</li> <li>• Pass</li> <li>• Distinction</li> </ul> <p>Performance in the EPA will determine the overall apprenticeship standard grade of:</p> <ul style="list-style-type: none"> <li>• Fail</li> <li>• Pass</li> <li>• Distinction</li> </ul>

## Length of end-point assessment period

The EPA must be completed within an EPA period lasting typically 3 months from the gateway.

The portfolio must be completed on-programme, signed off by their employer and submitted to the EPAO as part of the gateway submission. An apprentice cannot pass their gateway without this submission.

## Order of assessment methods

The assessment methods can be delivered in any order. The result of one assessment method does not have to be known before an apprentice starts the next one.

## EPA 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, the apprentice must have completed the following gateway requirements prior to beginning EPA:

- Apprentices without English and mathematics at level 2 must achieve 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.
- Completion of the Fire Door Installation Awareness Course

For the knowledge test:

- no specific requirements

For the practical test:

- no specific requirements

For the interview underpinned by portfolio of evidence:

- apprentices must compile a portfolio of evidence during the on-programme period of the apprenticeship, typically during the last 10 months of their apprenticeship
- it must contain evidence related to the KSBs that will be assessed by the interview

- the portfolio of evidence will typically contain 15 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 suggested
- evidence sources may include (this is not a definitive list):
  - Workplace documentation, for example job cards/job sheets, check sheets/quality check records, accident records, equipment check/maintenance records
  - Annotated specifications, for example drawings, cutting lists, work instructions
  - Annotated photographs
  - Video clips (maximum duration in total of 10 minutes), supported by clear timestamps detailing when key pieces of evidence occur.
- it should not include any methods of self-reflection or 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 must contain a statement from the employer and the apprentice confirming this.
- the portfolio of evidence must be submitted to the EPAO at the gateway

The portfolio of evidence is not directly assessed. It underpins the interview and therefore should not be marked by the EPAO. EPAOs should review the portfolio of evidence in preparation for the interview but are not required to provide feedback after this review of the portfolio.

## End-point assessment methods

**Assessment method 1: Knowledge test** (This assessment method has 1 component.)

### Assessment method 1 component 1: Knowledge test

#### Overview

A knowledge test is a controlled assessment which consists of a series of multiple-choice questions in which apprentices are asked to provide a response.

The rationale for this assessment method is:

- it allows for the efficient testing of knowledge
- it does not require independent assessor time, reducing cost; the knowledge test can be administered, invigilated and marked by an independent person appointed by the EPAO.
- it allows for flexibility in terms of when, where and how it is taken
- it allows larger volumes of apprentices to be assessed at one time
- there are core knowledge areas in the occupation which an advanced carpenter or joiner needs to be able to recall from memory e.g. Health and Safety. Therefore, a multiple-choice knowledge test will enable the testing of this ability.

## Test format

The knowledge test will be:

- computer based

A paper-based version must however be available for reasonable adjustments.

It will consist of 40 questions.

These questions will consist of multiple-choice questions. The multiple-choice questions will have four options of which one will be correct. The questions must be varied, to avoid the knowledge test becoming too predictable, yet allow assessment of the relevant KSBs.

The apprentice will be given 10 working days' notice from the EPAO of the knowledge test date to provide time to prepare.

## Knowledge test administration

Apprentices must have 60 minutes to complete the test.

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

Apprentices must take the test in a suitably controlled environment that is a quiet space, free of distractions and influence, in the presence of an invigilator. The invigilator must be the independent assessor, or another independent person approved by the EPAO with experience in invigilation or specialised (proctor) software if the test can be taken online. 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.

The EPAO is responsible for ensuring the security of testing they administer to ensure the test remains valid and reliable (this includes any arrangements made using online tools). The EPAO is responsible for verifying the validity of the identity of the person taking the test and the suitability of the venue for taking the test.

This assessment method will be carried out as follows:

- 30 of the questions will be multiple-choice knowledge recall questions. These questions will ask apprentices to recognise and recall facts and basic concepts across the knowledge criteria detailed within the standard.
- 10 questions within the test will be used to assess the apprentice's understanding through a range of multiple-choice scenario-based questions. These questions will present a scenario that the apprentice could experience within the workplace and ask them to answer in context of that scenario.
- Out of these 40 questions, 10 will be used to assess the option selected, with 3 of these being scenario based, and the remaining 7 being knowledge recall. These count towards the above totals for each question type.

## Marking

Tests must be marked by independent assessors or markers employed by the EPAO following a marking guide produced by the EPAO. Alternatively, marking by computer is permissible where questions types allow this.

Correct answers must be awarded 1 mark. Any incorrect or missing answers must be assigned 0 marks.

### Question development

Questions must be written by EPAOs and must be relevant to the occupation. It is recommended that this be done in consultation with occupationally competent technical experts such as: employers, professional bodies and qualified tradespeople who have experience of working within the current sector climate. EPAOs should also maintain the security and confidentiality of their questions when consulting. 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. EPAOs must ensure that apprentices have a different set of questions in the case of re-sits/re-takes.

### Support material

As a minimum EPAOs will produce the following material to support this method:

- a question bank
- 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.

## Assessment method 2: Practical test (This assessment method has 1 component.)

### Assessment method 2 component 1: Practical test

#### Overview

Apprentices must be observed by an independent assessor completing a practical test which is split into 4 tasks in which they will demonstrate the KSBs assigned to this assessment method. The end-point assessment organisation will arrange for the test to take place, in consultation with the employer.

The independent assessor will ask questions in relation to underpinning knowledge and/or skills and behaviours where an opportunity to observe them has not occurred, or to seek clarification and further test coverage of the mapped KSBs to make assessment decisions.

The rationale for this assessment method is:

- it allows for a varied range of tasks to be observed, that could not be guaranteed to be achieved through a single observation in the workplace
- this is a practical role, best demonstrated through completing tasks in a realistic work setting
- it allows for consistency of activities to be completed and efficiency in scheduling
- questioning allows for the testing of related underpinning knowledge and/or skills and behaviours where an opportunity to observe them has not occurred
- this method standardises the assessment across all advanced carpentry and joinery apprentices and a controlled environment ensures that all apprentices are assessed against the same criteria in a consistent and fair setting

- it is a holistic assessment method

## Delivery

Apprentices must be observed by an independent assessor completing tasks set by the EPAO and questioned in relation to the tasks' underpinning knowledge, skills and/or behaviours where an opportunity to observe them has not occurred.

One assessor may observe up to a maximum of 4 apprentices at any one time. This is justified as this is a practical trade and a number of the tasks will have an end product which means constant observation of each candidate is not necessary to determine competence. In addition, it allows for cost effective delivery of the test. Apprentices will be assessed against the KSBs assigned to this assessment method – as shown in the mapping of KSBs.

Practical test specifications must be of equal challenge, capable of being completed by a competent advanced carpenter or joiner.

The EPAO must arrange for the practical test to take place, in consultation with the apprentice's employer.

The practical test will take 7 hours. It may be split into four discrete sections (tasks) held over a maximum of 1 working day. The tasks will have the following timings:

Task 1: 90 minutes

Task 2: 90 minutes

Task 3: 120 minutes

Task 4: 120 minutes

The length of a working day is typically considered to be 7.5 hours.

There may be breaks during the practical test to allow the apprentice to move from one location to another and for meal/comfort breaks. During these breaks, the clock must be stopped and then restarted to ensure that the practical test assessment duration is not reduced.

The assessor has the discretion to increase the time of each task within the practical test by up to 10% per task to allow the apprentice to complete the final part of the task or complete an answer to a final question.

In the event of reasonable adjustments, additional time being granted, or breaks pushing the assessment duration beyond the duration of a reasonable working day, a second day can be used to complete the assessment. Once a task has commenced, it must be completed on the same day to ensure security of the assessment. This would need to be agreed between the employer and the EPAO, and the EPAO would be responsible for maintaining the security of the assessment.

In advance of the practical test, apprentices must be provided with information on the format of the test, including timescales. This information is exclusive of the practical test assessment time.

The task will holistically assess the skills, knowledge and behaviours described in the occupational standard and in the mapping of the knowledge, skills and behaviours in this document.

All practical tests will feature the following elements:

- interpreting information

- estimating resource quantities; planning and organising work (including materials and other resources)
- setting out/markings out as appropriate
- tool skills (including hand and powered tools)
- fundamental wood working skills
- independent and effective work, and time management.

The practical tests have been designed to test a range of fundamental knowledge, skills and behaviours needed by an advanced site carpenter or advanced architectural joiner. Once these are embedded, they can be applied to any commercial product. Replication of large-scale projects such as roofs and stairs and the use of such materials in the test is not required. Tests can be designed using cheaper materials (e.g. Canadian Lumber Standard timber (CLS) can be used, as long as this is still able to replicate the item being worked on) and to suit the size of the test venue. EPAOs may consult with employers in order to develop test specifications.

There will be specifications for each task provided by the EPAO to meet the mapped KSBs. The tests will follow the format below:

**Task 1            Take information (including from CAD drawings) and develop it into work instructions: 90 minutes (K6, K7, S3, S4, S5 - both options. K23, S15 (set out only) – option 2 only)**

Site carpenter: create a detailed raw material requirement sheet for a job, for example a dormer roof

Architectural joiner: set out full size on a rod – for example a door with swept head and gun stock middle rail.

**Task 2            Power tools: 90 minutes (K11, S2 (power tools except nail gun, maintain and store), S5)**

Both options: A task in using a selection of power tools (as per list in K11 except nail guns) safely and proficiently. For example to cut a circular shape, produce a jig to enable a plunge router to cut the rectangular aperture, power drill for the holes and circular saw to size the panel as per specification.

**Task 3            Hand tools: 120 minutes (K10, S2 (hand tools except maintain and store), S6)**

Both options: A task in using a selection of hand tools (as per list in K10) safely and proficiently to produce an item (with multiple components) as per the specification (different to that in task 2).

**Task 4            Option Task: 120 minutes**

Site carpenter: Nail guns are only used by site carpenters. It is therefore deemed appropriate that this is a standalone test. From a detailed instruction, use appropriate tools to form advanced woodworking joints. For example use a crosscut saw to form two triangular trusses before being fixed vertically using a nail gun. Then two further members replicating hips and jack rafters to be fitted and all fixed to wall plates. (K11, K14, S2 nail guns only, S7)

Architectural joiner: From a detailed cutting list, prepare material using fixed machinery as listed in K26, as per the specification. Form connections using appropriate tools and install appropriate ironmongery

components (K22, K26 (except maintenance), S7, S15 (except set out), S18 (except maintenance and CAD))

All parts (B3, B4, B5, B6)

As the apprentice, their employer and training provider will be unaware of the exact nature of the tasks required for the practical test, it is vital that apprentices are proficient in all skills listed within the occupational standard. The EPAO will develop a range of tasks, which will include written instructions and verbal instructions to be presented immediately prior to the start of the assessment task. Apprentices will be presented with a scenario or task and asked to complete it within the allocated time.

In all of the above tasks, the EPAO must ensure that an apprentice cannot gain advantage from seeing what the other apprentices being assessed are doing or by hearing answers to questioning.

During all these tasks, questioning allows for the testing of related underpinning knowledge and/or skills and behaviours where an opportunity to demonstrate them has not occurred.

Questioning will take place during the practical test. These will be asked during the assessment time, but at an appropriate point where it is deemed safe to do so by the independent assessor. The assessor can also ask questions at the end of the task, as long as this is within the overall assessment time. The questions will be used to clarify understanding and may also be used to cover any KSBs that may not have occurred during the practical assessment.

The independent assessor must ask a minimum of one question per task to test related underpinning knowledge, skills and behaviours. These questions may be a combination of those from the EPAO question bank and those generated by the independent assessor. Additional follow up questions are allowed, to seek clarification and to make an assessment against the grading descriptors.

The EPAO must produce a bank of sample questions to assist the independent assessor.

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

Evidence from the practical test must be assessed holistically using the grading criteria for this assessment method.

Independent assessors will make all grading decisions.

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

## Venue

The practical test can take place in:

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

## Support material

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

- outline of the assessment method's requirements
- marking materials

- resource requirements
- question bank
- A range of scenario and task specifications including diagrams

### Question development

A structured practical test specification and question bank must be developed by EPAOs. The 'question bank' and practical test specification must be of sufficient size to prevent predictability and the EPAO must review it regularly (and at least once a year) to ensure that it, and its content, are fit for purpose. The specifications, including questions relating to the underpinning knowledge, skills and behaviours, must be varied yet allow assessment of the relevant KSBs.

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

## Assessment method 3: Interview underpinned by portfolio of evidence (This assessment method has 1 component.)

### Assessment method 3 component 1: Interview underpinned by portfolio of evidence

#### Overview

This assessment will take the form of an interview, which must be appropriately structured to draw out the best of the apprentice's competence and excellence and cover the KSBs assigned to this assessment method. It will involve the questions that will focus on coverage of prior learning or activity. Apprentices may refer to and illustrate their answers with evidence from their portfolio of evidence, however the portfolio is not directly assessed.

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 skills and behaviours as well as knowledge.
- it allows for testing of responses where there are several potential answers that couldn't be tested through the knowledge test
- it assesses an apprentice's depth of knowledge
- it is cost effective, as it makes use of the employer's premises, or can be conducted remotely, and does not require additional resources.
- an assessment based on a portfolio of evidence replicates the approach used in the CSCS card scheme accreditation.

#### Delivery

The independent assessor will conduct and assess the interview underpinned by a portfolio of evidence. The apprentice will be given 2 weeks' notice of the interview to allow the independent assessor sufficient time to review the portfolio and prepare appropriate questions.

The interview must last for 75 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. Further time may be granted where required, in-line with the EPAO's reasonable adjustment process.

During the interview, the assessor must ask a minimum of 10 questions to enable the apprentice to evidence the mapped KSBs. Assessors may ask follow-up questions where clarification is required.

During this method, the assessor must use the question bank as a source for questioning using their professional judgement to tailor those questions appropriately. Independent assessors are responsible for generating suitable follow-up questions in line with the EPAO's training and standardisation process. These follow-up questions are allowed to seek clarification from the apprentice and to make a judgement against the grading descriptors and do not count towards the minimum question requirements. The EPAO question bank 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 interview will be conducted as set out here:

The apprentice must use their portfolio to support their answers that demonstrate how they have achieved the knowledge, skills and behaviours mapped to this assessment method. All apprentice responses must reference the evidence in their portfolio.

The independent assessor must use the assessment tools and procedures that are set by the EPAO to record the interview in terms of questions asked and the responses to these questions.

The independent assessor will make all grading decisions.

## Venue

The interview should take place in a quiet room, free from distractions and influence. The interview can take place in any of the following:

- employer's premises
- a suitable venue selected by the EPAO (e.g. a training provider's premises)
- remotely via video conferencing

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.

## Question and resource development

A structured specification and question bank must be developed by EPAOs. The 'question bank' must be of sufficient size to prevent predictability and review it regularly (and at least once a year) to ensure that it, and its content, are fit for purpose. The specifications, including questions relating to the underpinning knowledge, skills and behaviours, must be varied yet allow assessment of the relevant KSBs.

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

## Support material

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

- assessment recording documentation
- guidance for apprentices and employers
- question bank

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

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

## Reasonable adjustments

The EPAO must have in place clear and fair arrangements for making reasonable adjustments for this apprenticeship 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 grade.

### Grading

#### Assessment method 1: Knowledge Test

KSBs	Fail	Pass	Distinction
<b>Core:</b>  K1, K2, K3, K4, K5, K9  <b>Option 1: K13</b>  <b>Option 2: K19,            K20</b>	0-23 marks	24-32 marks	33-40 marks

#### Assessment method 2: Practical Test

KSBs	Fail	Pass	Distinction
		<b>All of the following must be achieved to gain a pass:</b>	<b>In addition to the pass criteria, all of the following core criteria, plus the required number of tolerances, must be achieved to gain a distinction:</b>
<b>K6, K7, K10 (except maintain and store), K11 (except nail gun, maintain and store)</b>  <b>S2 (except nail gun, maintain and store, S3, S4, S5, S6)</b>	Does not meet the pass criteria	<b>All tasks:</b> Interprets provided specifications and drawings (including CAD) to complete work to specification within the time allowed; calculates and selects estimated quantities, materials and resources; plans sequence of work to maximise productivity. To include: <ul style="list-style-type: none"> <li>- quantities, materials, and resources estimated to within 10% of correct quantity (K6,</li> </ul>	<b>All tasks:</b> Quantities, materials, and resources throughout the tasks estimated to within 5% of correct quantity (K7, S4)  Explains how to plan work in order to optimise productivity and the use of materials and resources, and explains the impact of this on the task (K7, S3, S4, B3a)

<p><b>B3a, B4a, B5a, B6a</b></p>		<p>K7, S3, S4, S5, B3a, B4a, B5a, B6a)</p> <p>Correctly identifies and applies safe use of hand tools, power tools and equipment, and uses tools and equipment to produce work to required specifications and drawings, to include the following tolerances (K10, K11, S2, S6):</p> <p><b>Task 2:</b></p> <p>Product produced to following tolerances:</p> <ul style="list-style-type: none"> <li>• Positions, dimensions, accurate: <b>+/- 1 mm</b></li> <li>• Angles accurate: <b>+/- 2 deg</b></li> <li>• Profiling accurate to detail: <ul style="list-style-type: none"> <li>○ Jigsaw cut <b>+/-1mm</b></li> <li>○ Router cut <b>+/- 1mm</b></li> </ul> </li> <li>• MDF Panel dimension: <ul style="list-style-type: none"> <li>○ length: <b>+/- 1 mm</b></li> <li>○ width: <b>+/- 1 mm</b></li> </ul> </li> <li>• Edge detail: <b>2 imperfections</b></li> <li>• Drill/hole position: <b>+/- 1 mm</b></li> <li>• Dimension of cut-out: <b>+/- 1mm</b></li> </ul> <p><b>Task 3:</b></p> <ul style="list-style-type: none"> <li>• Saw-cuts: <ul style="list-style-type: none"> <li>○ square and clean: <b>+/- 1 mm</b></li> <li>○ angle and clean: <b>+/- 1 mm</b></li> </ul> </li> <li>• Joints: <ul style="list-style-type: none"> <li>○ Position: <b>+/- 1 mm</b></li> <li>○ Fit: <b>+/- 1 mm</b></li> <li>○ Flush: <b>+/- 1 mm</b></li> <li>○ Plane work chamfers: <b>+/- 1 mm</b></li> <li>○ Scribe joint: <b>+/- 1mm</b></li> <li>○ Mitre joint: <b>+/- 1mm</b></li> <li>○ Zipbolt joint: <b>+/- 2mm</b></li> </ul> </li> </ul>	<p>Uses tools and equipment to produce work to required specifications and drawings, to include the following tolerances (K10, K11, S2, S6):</p> <p><b>Task 2 (6/9 required):</b></p> <p>Product produced to following tolerances:</p> <ul style="list-style-type: none"> <li>• Positions, dimensions, accurate: <b>+/- 0.5 mm</b></li> <li>• Angles accurate: <b>+/- 1 deg</b></li> <li>• Profiling accurate to detail: <ul style="list-style-type: none"> <li>○ Jigsaw cut <b>+/- 0.5mm</b></li> <li>○ Router cut <b>+/- 0.5mm</b></li> </ul> </li> <li>• MDF Panel dimension: <ul style="list-style-type: none"> <li>○ length: <b>+/- 0.5 mm</b></li> <li>○ width: <b>+/- 0.5 mm</b></li> </ul> </li> <li>• Edge detail: <b>1 imperfection</b></li> <li>• Drill/hole position: <b>+/- 0.5 mm</b></li> <li>• Dimension of cut-out: <b>+/- 0.5mm</b></li> </ul> <p><b>Task 3 (6/9 required)</b></p> <ul style="list-style-type: none"> <li>• Saw-cuts: <ul style="list-style-type: none"> <li>○ square and clean: <b>+/- 0.5 mm</b></li> <li>○ angle and clean: <b>+/- 0.5 mm</b></li> </ul> </li> <li>• Joints: <ul style="list-style-type: none"> <li>○ Position: <b>+/- 0.5 mm</b></li> <li>○ Fit: <b>+/- 0.5 mm</b></li> <li>○ Flush: <b>+/- 0.5 mm</b></li> <li>○ Plane work chamfers: <b>+/- 0.5 mm</b></li> <li>○ Scribe joint: <b>+/- 0.5mm</b></li> </ul> </li> </ul>
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			<ul style="list-style-type: none"> <li>○ Mitre joint: <b>+/- 0.5mm</b></li> <li>○ Zipbolt joint: <b>+/- 1mm</b></li> </ul>
			<b>Must meet 6/8 distinction tolerances below in addition to the core distinction criteria</b>
<p><b>Option 1 (Site Carpenter)</b></p> <p><b>K11 (nail gun only), K14</b></p> <p><b>S2 (nail gun only), S3, S4, S7 (to meet carpentry specific requirements)</b></p>		<p><b>Task 1</b></p> <p>Produces a raw material requirement sheet according to specifications and drawings (S3, S4)</p> <p><b>Task 4</b></p> <p>Applies safe use of power tools, including nail guns, and uses tools to produce work to required specifications and drawings, to include the following tolerances (K11, K14, S2, S7):</p> <ul style="list-style-type: none"> <li>• Framework to size: <b>+/- 2 mm</b></li> <li>• Framework to detail: <b>+/- 2 mm</b></li> <li>• Chop saw each material: <ul style="list-style-type: none"> <li>○ to length: <b>+/- 2 mm</b></li> <li>○ angle cut: <b>+/- 2 mm</b></li> </ul> </li> <li>• Nailing gun each joint: <ul style="list-style-type: none"> <li>○ Position: <b>+/- 2 mm</b></li> <li>○ Joint flush: <b>+/- 1 mm</b></li> </ul> </li> <li>• Number of fixings per joint: <b>more than 2 No.</b></li> <li>• Angles at correct degree: <b>+/- 3 degrees</b></li> </ul>	<p><b>Task 4</b></p> <p>Uses tools to produce work to required specifications and drawings, to include the following tolerances (K11, K14 S2, S7):</p> <ul style="list-style-type: none"> <li>• Framework to size: <b>+/- 1 mm</b></li> <li>• Framework to detail: <b>+/- 1 mm</b></li> <li>• Chop saw each material: <ul style="list-style-type: none"> <li>○ to length: <b>+/- 1 mm</b></li> <li>○ angle cut: <b>+/- 1 mm</b></li> </ul> </li> <li>• Nailing gun each joint: <ul style="list-style-type: none"> <li>○ Position: <b>+/- 1 mm</b></li> <li>○ Joint flush: <b>+/- 0.5 mm</b></li> </ul> </li> <li>• Number of fixings per joint: <b>2 No.</b></li> <li>• Angles at correct degree: <b>+/- 1 degree</b></li> </ul>
			<b>Must meet 9/12 distinction tolerances below in addition to the core distinction criteria</b>

<p><b>Option 2 (Architectural Joiner)</b></p> <p><b>K22, K23, K26 (except maintain)</b></p> <p><b>S15, S18 (except maintain fixed machinery and produce CAD drawings)</b></p> <p><b>S3, S4, S7 (to meet joinery specific requirements)</b></p>		<p><b>Task 1</b></p> <p>Produces setting out details according to specification and drawings to the following tolerances: (K23, S3, S4, S15)</p> <ul style="list-style-type: none"> <li>• Overall length/height accurate: <b>+/- 1 mm</b></li> <li>• Overall width accurate: <b>+/- 1 mm</b></li> <li>• Overall thickness accurate: <b>+/- 1 mm</b></li> <li>• Profile sizes accurate <b>+/- 1 mm</b></li> <li>• Rebate sizes accurate: <b>+/- 1 mm</b></li> <li>• Drawn to Building Regs (stairs) <b>+/- 1 mm</b></li> </ul> <p><b>Task 4</b></p> <p>Inspects, prepares and operates fixed machinery according to manufacturer's guidelines and task specification (K26, S18)</p> <p>Completes work to specification and to the following tolerances (K22, S7):</p> <ul style="list-style-type: none"> <li>• Surface planer: <b>+/- 1 mm</b></li> <li>• Thickness planer: <b>+/- 1 mm</b></li> <li>• Crosscut to length each length: <b>+/- 1 mm</b></li> <li>• Mortice position each: <b>+/- 1 mm</b></li> <li>• Tenoner Joint flush: <b>+/- 1mm</b></li> <li>• Spindle to Detail: <b>+/- 1mm</b></li> </ul>	<p><b>Task 1</b></p> <p>Produces setting out details according to specification and drawings to the following tolerances: (K23, S3, S4, S15)</p> <ul style="list-style-type: none"> <li>• Overall length/height accurate: <b>+/- 0.5 mm</b></li> <li>• Overall width accurate: <b>+/- 0.5 mm</b></li> <li>• Overall thickness accurate: <b>+/- 0.5 mm</b></li> <li>• Profile sizes accurate <b>+/- 0.5 mm</b></li> <li>• Rebate sizes accurate: <b>+/- 0.5 mm</b></li> <li>• Drawn to Building Regs (stairs) <b>+/- 0 mm</b></li> </ul> <p><b>Task 4</b></p> <p>Completes work to specification and to the following tolerances (K22, S7):</p> <ul style="list-style-type: none"> <li>• Surface planer: <b>+/- 0.5 mm</b></li> <li>• Thickness planer: <b>+/- 0.5 mm</b></li> <li>• Crosscut to length each length: <b>+/- 0.5 mm</b></li> <li>• Mortice position each: <b>+/- 0.5 mm</b></li> <li>• Tenoner Joint flush: <b>+/- 0.5mm</b></li> <li>• Spindle To Detail: <b>+/- 0.5mm</b></li> </ul>
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## Assessment method 3: Interview underpinned by portfolio of evidence

Core KSBs	Fail	Pass  All of the following must be achieved to gain a pass:	Distinction  In addition to the pass criteria, all of the following (core plus appropriate option) must be achieved to gain a distinction:
<p><b>K8, K10 (maintain only and store only), K11 (maintain and store only), K12</b></p> <p><b>S1, S2 (maintain and store only)</b></p> <p><b>B1, B2, B3b, B4b, B5b, B6b, B7</b></p>	Does not meet the pass criteria	<p>Explains how they identify and apply safe working practices and techniques in accordance with legislation, regulations, codes of practice, company guidance, and site-specific requirements in the workplace and the actions they take when circumstances change (S1)</p> <p>Explains how they communicate and work effectively in the workplace using a range of techniques, including oral, written and listening (K8, B1)</p> <p>Explains how they maintain and store hand tools, power tools, and equipment, including sharpening techniques (K10, K11, S2)</p> <p>Describes how they plan the work for self and others in order to meet schedules and deadlines (K12)</p> <p>Describes how they work effectively without supervision, and how they provide leadership to others by example (B2, B5b)</p> <p>Explains how they use own time effectively to support effective team working, how they monitor the work of others, and how they help others achieve work targets (B3b, B4b, B6b)</p>	<p>Analyses health and safety changes and developments in the industry and the effect these have had on their work and their team's work (S1)</p> <p>Determines the benefits of collaborating with others in the workplace and explains the impact of poor communication for the individual and the team (K8, B1, B2)</p>

		Explains how they implement change, and how they adjust their working practices to changes in work instructions (B7)	
<b>Option 1</b> <b>(Site Carpenter)</b>  <b>K15, K16, K17, K18</b>  <b>S8, S9, S10, S11, S12, S13, S14</b>	Does not meet the pass criteria	<p>Explains how they carry out complex first fixing work including installation of complex and non-standard timber frames, linings, floor coverings, flat roof decking, flights of stairs with turns and handrails, and how to erect both structural and non-structural timber stud partitions (K15, S8, S10)</p> <p>Explains how they carry out complex second fixing work including installation of service encasements, cladding, bespoke wall and floor units and fittings, side hung doors, ironmongery and timber mouldings, complex handrails and spindles to stairs with turns, side hung doors, ironmongery, timber mouldings, fire doors and door sets (K16, S9)</p> <p>Explains how they carry out complex structural carcassing work including erecting trussed rafter roofs and bracings, fix verge and eave components, form dormer windows to roofs and construct complex traditional cut roofs with trusses, pearling, ridges, hips and valleys, install floor joists and coverings (K17, S11, S12, S13)</p> <p>Describes how they install and maintain structural and non-structural carpentry components including how they install and maintain doors, windows and structural timbers, how to replace glazing, how to reinstate surfaces, timber doors, window frames, mouldings, guttering</p>	<p>Explains the implications of poor workmanship in complex first fix work and the common pitfalls that occur, explaining how to avoid them (K15, S8, S10)</p> <p>Explains the considerations needed for different materials used in complex second fix work and explains the implications of not using appropriate materials. (K16, S9)</p>

		and fixings and replace sash window cords (K18, S14)	
<b>Option 2</b> <b>(Architectural Joiner)</b>  <b>K21, K24, K25, K26</b> <b>(maintenance only)</b>  <b>S16, S17, S18</b> <b>(maintain fixed machinery produce CAD drawings only)</b>	Does not meet the pass criteria	<p>Explains the purpose and capabilities of software programmes used for architectural joinery work, how they use CAD to produce drawings and the process for programming, setting up and operating Computer Numerically Controlled (CNC) machinery. (K21, S18)</p> <p>Explains how they manufacture and repair shaped architectural joinery products including interpreting information, preparing for manufacture of shaped joinery, manufacture assemble and finish shaped doors and frames, manufacture assemble and finish straight stairs with turns (K24, S16)</p> <p>Describes how they take site measurements and site fix joinery products including doors, fire doors, frames and windows, and straight stairs with turns (K25, S17)</p> <p>Describes how they maintain fixed machinery (K26, S18)</p>	<p>Explains the individual and the team benefits of using software programmes and CAD drawings for architectural joinery work (K21, S18)</p> <p>Explains the considerations needed for different materials and the implications of not using appropriate methods in production. (K24, S16)</p>

## Overall EPA grading

All EPA methods must be passed for the EPA to be passed overall.

The final grade will be determined by collective performance in the three assessment methods in the EPA, calculated using the table below. Each element is separately graded according to the grading descriptors.

To achieve a distinction, the apprentice must gain a distinction in the practical test, as well as at least a distinction in one other method and at least a pass in one other method.

Assessment method 1 - Knowledge test	Assessment method 2 - Practical test	Assessment method 3 – Interview	Overall grading
Fail	Any grade	Any grade	Fail
Any grade	Fail	Any grade	Fail
Any grade	Any grade	Fail	Fail
Pass	Pass	Pass	Pass
Pass	Pass	Distinction	Pass
Distinction	Pass	Pass	Pass
Distinction	Pass	Distinction	Pass
Pass	Distinction	Pass	Pass
Pass	Distinction	Distinction	Distinction
Distinction	Distinction	Pass	Distinction
Distinction	Distinction	Distinction	Distinction

## Re-sits and re-takes

Apprentices who fail one or more assessment method/s will be offered the opportunity to take a re-sit or a re-take at the employer's discretion. The apprentice's employer will need to agree that either a re-sit or re-take is an appropriate course of action.

A re-sit does not require further learning, whereas a re-take does.

An apprentice who fails one or more assessment methods, and therefore the EPA in the first instance, will be required to re-sit or re-take the failed assessment method only.

Apprentices should have a supportive action plan to prepare for the re-sit or a re-take.

The timescales for a re-sit/re-take is agreed between the employer and EPAO. A re-sit is typically taken within 3 months of the EPA outcome notification. The timescale for a re-take is dependent on how much re-training is required and is typically taken within 6 months of the EPA outcome notification.

All assessment methods must be taken within a 6-month period, otherwise the entire EPA will need to be re-sat/re-taken.

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

Where any assessment method has to be re-sat or re-taken, the apprentice will be awarded a maximum EPA grade of pass, unless the EPAO determines there are exceptional circumstances requiring a re-sit or re-take.

## Roles and responsibilities

Role	Responsibility
Apprentice	<p>As a minimum, apprentices should:</p> <ul style="list-style-type: none"> <li>• participate in and complete on-programme training to meet the KSBs as outlined in the occupational standard for a minimum of 12 months</li> <li>• undertake 20% off-the-job training as arranged by the employer and the training provider</li> <li>• understand the purpose and importance of EPA undertake the EPA including meeting all gateway requirements</li> </ul>
Employer	<p>As a minimum, employers should:</p> <ul style="list-style-type: none"> <li>• select the EPAO and training provider</li> <li>• work with the training provider (where applicable) to support the apprentice in the workplace and to provide the opportunities for the apprentice to develop the KSBs</li> <li>• arrange and support a minimum of 20% off-the-job training to be undertaken by the apprentice</li> <li>• decide when the apprentice is working at or above the occupational standard and so is ready for EPA</li> <li>• ensure that all supporting evidence required at the gateway is submitted in accordance with this EPA plan</li> <li>• remain independent from the delivery of the EPA</li> <li>• confirm arrangements with the EPAO for the EPA (who, when, where) in a timely manner (including providing access to any employer-specific documentation as required, for example company policies)</li> <li>• ensure that the EPA is scheduled with the EPAO for a date and time which allow appropriate opportunity for the KSBs to be met</li> <li>• ensure the apprentice is well prepared for the EPA</li> <li>• ensure the apprentice is given sufficient time away from regular duties to prepare for and complete all post-gateway elements of the EPA, and that any required supervision during this time (as stated within this EPA plan) is in place</li> </ul>

	<ul style="list-style-type: none"> <li>• where the apprentice is assessed in the workplace, ensure that the apprentice has access to the resources used on a daily basis</li> </ul>
EPAO	<p>As a minimum, EPAOs should:</p> <ul style="list-style-type: none"> <li>• conform to the requirements of this EPA plan and deliver its requirements in a timely manner</li> <li>• conform to the requirements of the Register of End-Point Assessment Organisations (RoEPAO)</li> <li>• conform to the requirements of the external quality assurance provider (EQAP) for this apprenticeship standard</li> <li>• understand the occupational standard</li> <li>• make all necessary contractual arrangements, including agreeing the price of the EPA</li> <li>• develop and produce assessment materials including specifications and marking materials (for example mark schemes, practice materials, training material)</li> <li>• appoint suitably qualified and competent independent assessors</li> <li>• appoint administrators (and invigilators where required) to administer the EPA as appropriate</li> <li>• provide training for independent assessors in terms of good assessment practice, operating the assessment tools and grading</li> <li>• provide adequate information, advice and guidance documentation to enable apprentices, employers and training providers to prepare for the EPA</li> <li>• arrange for the EPA to take place, in consultation with the employer</li> <li>• where the apprentice is not assessed in the workplace, ensure that the apprentice has access to the required resources and liaise with the employer to agree this if necessary</li> <li>• develop and provide appropriate assessment recording documentation to ensure a clear and auditable process is in place for providing assessment decisions and feedback to all relevant stakeholders</li> <li>• have no direct connection with the apprentice, their employer or training provider. In all instances, including when the EPAO is the training provider (i.e. HEI), there must be no conflict of interest</li> <li>• have policies and procedures for internal quality assurance (IQA), and maintain records of regular and</li> </ul>

	<p>robust IQA activity and moderation for external quality assurance (EQA) purposes</p> <ul style="list-style-type: none"> <li>• deliver induction training for independent assessors, and for invigilators and/or markers (where used)</li> <li>• undertake standardisation activity on this apprenticeship standard for all independent assessors before they conduct an EPA for the first time, if the EPA is updated and periodically as appropriate (a minimum of annually)</li> <li>• manage invigilation of apprentices in order to maintain security of the assessment in line with the EPAO's malpractice policy</li> <li>• verify the identity of the apprentice being assessed</li> <li>• use language in the development and delivery of the EPA that is appropriate to the level of the occupational standard</li> <li>• provide details of the independent assessor's name and contact details to the employer</li> <li>• have and apply appropriately an EPA appeals process</li> <li>• request certification via the Apprenticeship Service upon successful achievement of the EPA</li> </ul>
Independent assessor	<p>As a minimum, independent assessors should:</p> <ul style="list-style-type: none"> <li>• have the competence to assess the apprentice at this level and hold any required qualifications and experience in line with the requirements of the independent assessor as detailed in the IQA section of this EPA plan</li> <li>• understand the occupational standard and the requirements of this EPA</li> <li>• have, maintain and be able to evidence up-to-date knowledge and expertise of the subject matter</li> <li>• deliver the end-point assessment in-line with the EPA plan</li> <li>• comply with the IQA requirements of the EPAO</li> <li>• 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)</li> <li>• attend induction training</li> <li>• attend standardisation events when they begin working for the EPAO, before they conduct an EPA for the first time and a minimum of annually on this apprenticeship standard</li> </ul>

	<ul style="list-style-type: none"> <li>• assess each assessment method, as determined by the EPA plan, and without extending the EPA unnecessarily</li> <li>• assess against the KSBs assigned to each assessment method, as shown in the mapping of assessment methods and as determined by the EPAO, and without extending the EPA unnecessarily</li> <li>• make all grading decisions</li> <li>• record and report all assessment outcome decisions, for each apprentice, following instructions and using assessment recording documentation provided by the EPAO, in a timely manner</li> <li>• use language in the development and delivery of the EPA that is appropriate to the level of the occupational standard</li> </ul>
Training provider	<p>As a minimum, training providers should:</p> <ul style="list-style-type: none"> <li>• work with the employer and support the apprentice during the off-the-job training to provide the opportunities to develop the knowledge, skills and behaviours as listed in the occupational standard</li> <li>• conduct training covering any knowledge, skill or behaviour requirement agreed as part of the Commitment Statement (often known as the Individual Learning Plan).</li> <li>• monitor the apprentice's progress during any training provider led on-programme learning</li> <li>• advise the employer, upon request, on the apprentice's readiness for EPA</li> <li>• remain independent from delivery of the EPA. Where the training provider is the EPA (i.e. a HEI) there must be procedures in place to mitigate against any conflict of interest</li> </ul>
Marker	<p>As a minimum, the marker should:</p> <ul style="list-style-type: none"> <li>• attend induction training</li> <li>• 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)</li> <li>• mark multiple-choice test answers accurately according to the EPAO's mark scheme and procedures</li> </ul>
Invigilators	<p>As a minimum, invigilators should:</p> <ul style="list-style-type: none"> <li>• attend induction training as directed by the EPAO</li> </ul>

	<ul style="list-style-type: none"><li>• 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)</li><li>• invigilate and supervise apprentices during tests and in breaks during assessment methods to prevent malpractice in accordance with the EPAO's invigilation procedures</li></ul>
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## Internal Quality Assurance (IQA)

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

- appoint independent assessors who have knowledge of the following occupational areas:
  - Assessors must have 2 years industry experience after having completed a minimum level 3 NVQ or advanced craft qualification in carpentry & joinery with up-to-date CPD
- hold or be working towards an independent assessor qualification e.g. A1
- appoint independent assessors who are competent to deliver the end-point 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 standard and before they deliver an updated assessment method for the first time

ensure independent assessors attend standardisation events on an ongoing basis and at least once per year

## Value for money

Value for money of the EPA will be aided by using at least some of the following practice:

- online assessment of the knowledge test
- the option of using an employer's premises
- assessing multiple apprentices simultaneously during the practical test

## Professional body recognition

Professional body recognition is not relevant to this occupational apprenticeship.

# Mapping of knowledge, skills and behaviours (KSBs)

## Assessment method 1: Knowledge test

Knowledge
<b>K1</b> The principles of environment, health, safety and welfare and how they must be applied in relation to their work and to others. eg electrical safety, storage of materials, accident & emergency procedures
<b>K2</b> The responsibilities under current legislation and official guidance to undertake the work e.g. Control of Substances Hazardous to Health, Manual Handling and Working at Height Regulations, Fire Door legislation
<b>K3</b> How to use health and safety control equipment including personal protective equipment (PPE), respiratory protective equipment (RPE), local exhaust ventilation (LEV)
<b>K4</b> The different workplace signs and safety notices and their meaning, how to undertake hazard identification in the workplace and the procedures for the identification and removal of hazardous waste
<b>K5</b> The principles of building construction including foundations, roofs, walls, floors, utilities and services, BIM and environmental and sustainability considerations
<b>K9</b> The characteristics, quality, uses, sustainability, limitations and defects associated with timber and timber-based products and components, such as hardwood, softwood, MDF and other materials. The different energy efficiency and sustainable materials for construction
<b>K13</b> Advanced Site Carpenter (ASC): the different types of fixings and fasteners for site carpentry work including their uses
<b>K19</b> Advanced Architectural Joiner (AAJ): the characteristics, quality, uses and limitations of relevant materials including timber, glass, laminates, finishing's (paint, stains, lacquers). The different defects associated with relevant raw materials, the different types of ironmongery products associated with architectural joinery including locks, handles etc
<b>K20</b> AAJ: component performance requirements including the U-value and security requirements for doors and windows in accordance with current building and CE marking regulations, the requirements for fire doors in accordance with current building regulations, the requirements for stairs in accordance with current building regulations

## Assessment method 2: Practical test

Knowledge
<b>K6</b> How to interpret relevant information from drawings, specifications and work instructions including the basic principles of Computer Aided Design (CAD) and Building Information Modelling (BIM)
<b>K7</b> How to estimate resource quantities to carry out work eg quantity of fixings, length of timber.

<b>K10 (all except 'maintain and store')</b> Hand Tools : how to prepare, use, maintain and store hand tools including tool limitations and sharpening techniques e.g chisels, planes, hand saws, hammers
<b>K11 (all except 'maintain and store')</b> Power Tools: how to prepare, use, maintain and store power tools including the procedure for undertaking visual first use check eg portable circular saws, drills, saws, planers, routers, sanders and nail guns. How to produce jigs.
<b>K14 ASC:</b> how to form advanced woodworking joints including the resources required and how to mark out and form advanced woodworking joints. How to form products using advanced woodworking joints including splayed and level (horizontal and vertical) joints
<b>K22 AAJ:</b> how to form shaped woodworking joints including the resources required to mark out and form shaped woodworking joints, how to mark out woodworking joints for shaped work, how to form products using shaped woodworking joints
<b>K23 AAJ:</b> how to set out and mark out for shaped joinery products including how to interpret information for producing shaped joinery product details and how to prepare
<b>K26 (all except 'maintain')</b> AAJ: how to prepare and use fixed machinery to create shaped work including how to prepare and check prior to use, how to maintain, how to develop, specialist jigs to manufacture curved joinery products. How to use, including the uses and limitations of narrow bandsaws, crosscut saws, re-saws, panel saw, surface planers, thicknessers, morticers, spindle moulders and single end tenoners.

Skills
<b>S2 (all except 'maintain and store')</b> Apply safe use, storage and maintenance of hand tools, power tools and equipment including the use of PPE, LEV and RPE.
<b>S3</b> Interpret relevant information from drawings, specifications and work instructions.
<b>S4</b> Estimate resource quantities to carry out work taking site measurements where appropriate eg quantity of fixings, length of timber.
<b>S5</b> Plan and undertake work practices productively.
<b>S6</b> Carry out a range of carpentry and joinery skills including measuring, marking out, fitting, cutting, splicing, mitring, scribing, horizontal and vertical levelling (including laser levelling), finishing, positioning and securing.
<b>S7</b> Mark out and form advanced woodworking joints including splayed and plumb joints
<b>S15</b> AAJ: set out, mark out and form products using shaped woodworking joints
<b>S18 (all except maintain fixed machinery and produce CAD drawings)</b> AAJ : produce CAD drawings. Prepare and use fixed machinery to create shaped work including inspect and maintain the fixed machinery, develop specialist jigs to manufacture curved joinery products, use a narrow bandsaw, crosscut saw, re-saw, surface planer, thicknesser, morticer, spindle moulder, single end tenoner

Behaviours
<b>B3a</b> Independent working: take responsibility for completing own work

<b>B4a</b> Logical thinking: use clear and valid reasoning when making decisions and in achieving work targets.
<b>B5a</b> Working effectively: undertake the work in a reliable and productive manner
<b>B6a</b> Time management: use own time effectively to complete work on schedule

## Assessment method 3: Interview underpinned by portfolio of evidence

Knowledge
<b>K8</b> How to communicate and work with others effectively in the workplace
<b>K10 ('maintain and store' only)</b> Hand Tools: how to prepare, use and maintain hand tools including tool limitations and sharpening techniques e.g. chisels, planes, hand saws, hammers
<b>K11 ('maintain and store' only)</b> Power Tools: how to prepare, use, store and maintain power tools including the procedure for undertaking visual first use check e.g. multi-functional tool, portable circular saws, drills, saws, planers, routers, sanders, multi-functional tools and nail guns. How to produce jigs.
<b>K12</b> How to plan work activities for self and others in order to meet schedules and deadlines.
<b>K15</b> ASC: how to carry out complex first fixing work including how to install complex and non-standard timber frames, linings, floor coverings, flat roof decking, flights of stairs with turns and handrails and how to erect timber stud partitions.
<b>K16</b> ASC: how to carry out complex second fixing work including how to install service encasements, cladding, bespoke wall and floor units and fitments, side hung doors, ironmongery, timber mouldings, handrails and spindles to stairs with turns
<b>K17</b> ASC: how to carry out complex structural carcassing work including how to erect trussed rafter roof, how to fix verge and eave components, how to install floor joists, how to fit and fix joist coverings, how to form dormer windows to roofs and how to construct traditional cut roofs with hips and valleys
<b>K18</b> ASC: how to install and maintain structural and non-structural carpentry components including how to install and maintain doors, windows and structural timbers, how to replace glazing, how to reinstate surfaces
<b>K21</b> AAJ: advanced architectural joinery technology including the purpose and capabilities of software programmes used for architectural joinery work, how to use CAD to produce drawings and the process for programming, setting up and operating Computer Numerically Controlled (CNC) machinery.
<b>K24</b> AAJ: how to manufacture and repair shaped joinery products including how to interpret information related to the manufacture of shaped joinery products, how to prepare for the manufacture of shaped joinery, how to manufacture, assemble and finish shaped doors and frames, how to manufacture, assemble and finish straight stairs with turns

<b>K25</b> AAJ: how to take site measurements and site fix joinery products including doors, frames and windows and straight stairs with turns
<b>K26 ( 'maintenance' only)</b> AAJ: how to prepare and use fixed machinery to create shaped work including how to prepare and check prior to use, how to maintain and how to develop specialist jigs to manufacture curved joinery products. How to use, including the uses and limitations of narrow bandsaws, crosscut saws, re-saws, surface planers, thicknessers, morticers, spindle moulders and single end tenoners.

Skills
<b>S1</b> 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. 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
<b>S2 ( 'maintain and store' only)</b> Apply safe use, storage and maintenance of hand tools, power tools and equipment including the use of PPE, LEV and RPE.
<b>S8</b> ASC: carry out first fixing work including install complex and non-standard timber frames, linings, coverings, flat roof decking, non-structural stud partitions and flights of stairs with turns.
<b>S9</b> ASC: carry out second fixing work including service encasements, cladding, bespoke wall and floor units, tops, cornices and fitments, complex spindles and handrails to stairs with turns, side hung doors, ironmongery, timber mouldings, fire doors and door sets.
<b>S10</b> ASC: carry out complex structural timber stud partition work.
<b>S11</b> ASC: Erect complex trussed rafter roofs and bracings, verge and eave components, dormer windows to roofs.
<b>S12</b> ASC: Erect complex traditional roofs with trusses, purling, ridges, hips and valleys
<b>S13</b> ASC: Install floor joists including cut to fit, solid timber and coverings including planed, tongued and grooved (PTG) boards
<b>S14</b> ASC: maintain structural and non-structural carpentry work including doors, windows and structural timbers, replace glazing, reinstate surfaces, timber doors, window frames, mouldings, guttering and fixings and replace sash window cords
<b>S16</b> AAJ: manufacture, assemble, finish and repair shaped doors, fire doors, frames and straight stairs with turns
<b>S17</b> AAJ: site fix joinery products including doors, fire doors, frames and windows
<b>S18 (maintain fixed machinery and produce CAD drawings only)</b> AAJ: produce CAD drawings. Prepare and use fixed machinery to create shaped work including inspect and maintain the fixed machinery, develop specialist jigs to manufacture curved joinery products, use a narrow bandsaw, crosscut saw, re-saw, surface planer, thicknesser, morticer, spindle moulder, single end tenoner

Behaviours
<b>B1</b> Effective communication: oral, written, listening – especially in working with others

<b>B2</b> Team work: work effectively without supervision and give leadership to others – being willing to lead a team.
<b>B3b</b> Independent working: take responsibility monitoring the work of others.
<b>B4b</b> Logical thinking: use clear and valid reasoning when making decisions and in achieving work targets of others.
<b>B5b</b> Working effectively: lead others by example.
<b>B6b</b> Time management: use own time effectively to support effective team working.
<b>B7</b> Adaptability: be able to implement change and adjust existing requirements to meet the work instructions.