

Advanced Carpentry and Joinery at Level 3 Construction Assessment Plan

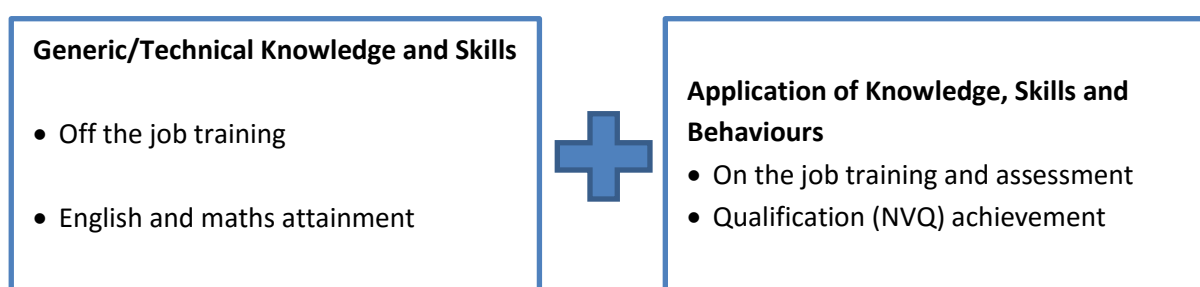
Contents	Page
1. Introduction and overview	3
2. Assessment Overview Diagram	3
3. Summary of Assessment	4
4. Assessment Overview	4
5. On-programme Assessment	4
5.1. Mandatory Qualifications	
6. Assessment Gateway	5
7. End-point Assessment	5-6
7.1. End-point Knowledge Test	
7.2. End-point Practical Test	
7.3. Test Criteria – Site Carpentry	
7.4. Test Criteria – Architectural Joinery	
7.5. Assessor Requirements	
8. End-point Assessment – Final Judgement	6/7
9. Independence/Impartiality	7
10. End-point – Summary of Roles and Responsibilities	7
11. Quality Assurance – Internal	8-9
12. Quality Assurance – External	9-12
13. End-point – Grading	12-13
14. Implementation	14
14.1. Affordability	
14.2. Professional Body Recognition	
14.3. Delivering Consistent Assessment Judgements	
14.4. Volume	
Annex A Methods of Assessment Grid	15-17

1. Introduction and overview

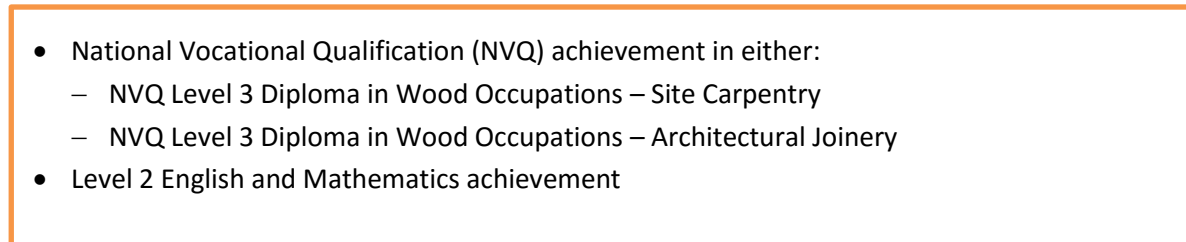
This assessment plan has been developed by employers, to accompany and underpin the delivery of the advanced carpentry and joinery in construction apprenticeship standard. The assessment plan incorporates the occupational requirements for both the advanced site carpentry and advanced architectural joinery pathways in the apprenticeship standard and how they will be tested. The plan will help to ensure, through the use of a combination of assessment methods, that the required knowledge, skills and behaviours have been achieved over the duration of the apprenticeship and that the apprentice is fully competent in the occupational job role at the end of the apprenticeship.

2. Assessment Overview Diagram

On-programme Assessment Approach

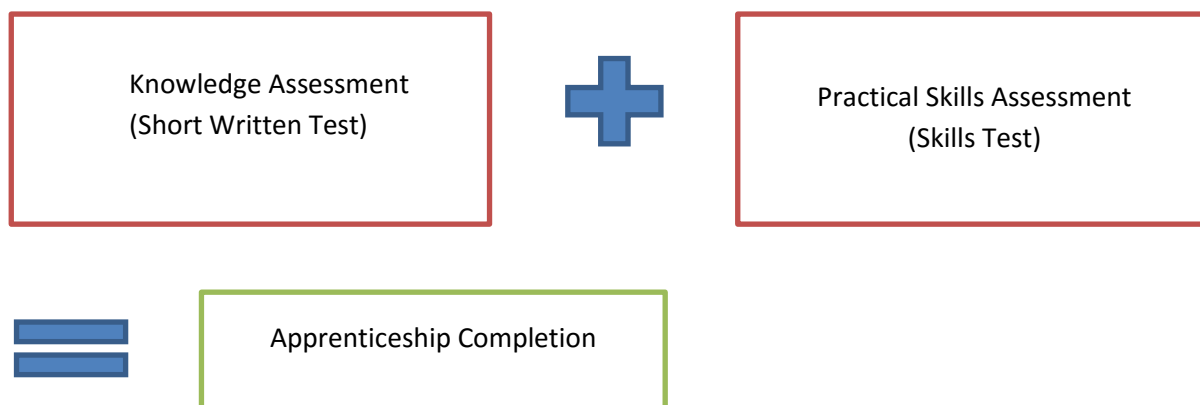


Assessment Gateway



End-point Assessment

(Fully co-ordinated and delivered by an Independent End-Point Assessment Organisation)



3. Summary of Assessment

- The apprentice must complete all elements of the on programme learning to achieve the assessment gateway requirements.
- The end-point assessment will assess the knowledge, skills and behaviours required to undertake the work of an advanced site carpenter or advanced architectural joiner.
- The employer, in consultation with the training provider will make the final decision on when the apprentice is ready to progress to the end-point assessment, based upon the achievement of the on-programme and assessment gateway requirements.
- The employer will make the necessary arrangements for the apprentice to undertake the end-point assessment.
- The apprentice must only undertake the end-point assessment following a minimum of 12 months of training.
- The end-point assessment will be provided by an Independent End-Point Assessment Organisation and will take place in the final 3 months of the apprenticeship. The total duration of the apprenticeship will typically be 12-15 months.
- Only Independent End-Point Assessment Organisations listed for this occupation on the register of apprenticeship assessment organisations may be used to deliver the end-point assessment.

4. Assessment Overview

Assessment Method	Assessment Points	Area Assessed	Assessed by	Grading
Synoptic knowledge assessment	End point	Synoptic Knowledge and behaviours	Independent End-Point Assessment Organisation	Fail/Pass/Merit /Distinction
Practical assessment		Synoptic skills, knowledge and behaviours	Independent End-Point Assessment Organisation	Fail/Pass/Merit/D istance

5. On-programme Assessment

5.1 Mandatory Qualifications

As a pre-requisite to undertaking the end-point assessment, the apprentice must achieve a National Vocational Qualification (NVQ) in their chosen job role from one of the following:

- NVQ Level 3 Diploma in Wood Occupations – Site Carpentry
- NVQ Level 3 Diploma in Wood Occupations – Architectural Joinery Level 2 English and Mathematics must also be achieved.

Requirements covering on-programme training and assessment can be found within the Employer Occupational Brief that accompanies this assessment plan which can be found at

<http://www.citb.co.uk/qualifications-standards/national-occupational-standards/national-occupational-standards-suites/wood-occupations/>.

6. Assessment Gateway

The employer in consultation with the training provider will make the judgement as to whether the apprentice is ready for end-point assessment through the achievement of the following:

- Level 3 National Vocational Qualification (NVQ) in Site Carpentry or Architectural Joinery.
- A recognised Level 2 English and Mathematics qualification.

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On conclusion that the assessment gateway requirements have been achieved, the apprentice will be able to proceed to the end-point assessment stage of the apprenticeship.

It is expected that apprentices will complete the assessment gateway requirements within three months of their planned apprenticeship completion.

7. End-point Assessment

The end-point assessment is intended to test the higher order skills as defined in the apprenticeship standard. It is expected that the knowledge and practical assessments will be developed by the Independent End-Point Assessment Organisation(s) in consultation with the employers working group. The end-point assessment consists of two key elements:

7.1 An end-point **knowledge assessment** - to consist of a short written test lasting 45 minutes, delivered in a controlled invigilated environment approved by the Independent End-Point Assessment Organisation, which could be at the employers place of work, at a training provider facility, or at an approved assessment centre. The test will consist of 35 questions, designed to assess the apprentice's understanding of the core and specific knowledge and behavioural requirements detailed in the advanced carpentry and joinery apprenticeship standard covering the following areas:

- 10 questions will test the core elements of the standard (e.g. health and safety, manual handling)
- 20 questions will test the specific elements of the chosen pathway in the standard (e.g. principles of site carpentry or architectural joinery)
- 5 questions will test the behavioural elements of the standard (e.g. effective communication, team working, logical thinking etc)

The assessment will be set, moderated and externally marked by the Independent End-Point Assessment Organisation

Grading is identified in the grading descriptors on page 10 of this assessment plan.

7.2 An end-point **practical assessment** - delivered in a controlled environment approved by the Independent End-Point Assessment Organisation, which could be at the employer's place of work, at a training provider facility, or at an approved assessment centre. The end-point practical assessment will be a skills test, designed and set by the independent end-point assessment organisation based on the requirements set out in this plan and in consultation with the employer group. Each Independent End-Point Assessment Organisation will be expected to develop multiple practical skills tests working in collaboration with the employer group. They will be expected to circulate the use of different tests with sufficient frequency to prevent 'teaching to the test'. A review of the appropriateness and consistency of practical skills tests will be carried out through internal and external quality assurance activity. The employer group has developed the following practical skills test criteria for site carpentry and architectural joinery as examples of a suitable approach.

The test will be supervised and marked by an independent assessor, and approved and moderated by the independent end-point assessment organisation. The end-point practical test specification [will](#) be made available to approved providers of the test by the Independent End-Point Assessment Organisation

The assessment will require the apprentice to successfully complete a practical activity, which will also include oral questioning where required to ensure the apprentice has the skills, supporting knowledge and behaviours required for the chosen job role. The test will be scored out of 100 marks, using a marking schedule designed and set by the Independent End-Point Assessment Organisation, and graded in conjunction with the practical test specification and assessment grading descriptors on pages 10 and 11 of this assessment plan. The test for both advanced site carpentry and advanced architectural joinery will take 6 hours to complete.

7.– Advanced Site Carpentry Example Test Criteria

The end-point practical test will consist of forming a section of a complex roof structure as detailed by a drawing and work specification. Skills, knowledge and behaviours will be tested when:

- Interpreting information
- Planning and organising work
- Setting out/marketing out
- Using tool skills including the use of hand and powered tools
- Producing work to specification in accordance with building requirements
- Working to deadlines
- Working safely

7.– Advanced Architectural Joinery Example Test Criteria

The end-point practical test will consist of setting out and producing a curved head frame with panel using a range of materials and preparing for finishing's as detailed by a drawing and work specification. Skills, knowledge and behaviours will be tested when:

- Interpreting information
- Planning and organising work
- Setting out/marketing out
- Using tool skills including the use of hand and powered tools
- Producing work to specification in accordance with building requirements
- Working to deadlines
- Working safely

7.5 Assessor Requirements

The Independent End-Point Assessment Organisation will appoint Independent Assessors for the practical assessment who have not been involved with the on programme training and independent from the employer, this will provide independence and impartiality The assessor requirements are detailed under Quality Assurance–Internal in this document

8. End-point Assessment – Final Judgement

The final judgement decision, made by the Independent End-Point Assessment Organisation will determine if the apprentice has achieved the full requirements of the apprenticeship and will be made considering the following:

- Has the apprentice successfully achieved all requirements of the assessment gateway?
- Has the apprentice successfully achieved all elements of the end point assessment?

The final apprenticeship achievement decision, and grading will be made by the Independent End-Point Assessment Organisation after consultation with the Independent Assessor and the marking schedule

9. Independence/Impartiality

Independence will be achieved throughout the apprenticeship assessment process in the following manner.

- The knowledge assessment will be set, moderated and externally marked by the Independent End-Point Assessment Organisation.
- The practical assessment will also be set and fully moderated by the Independent End-Point Assessment Organisation.
- The final judgement on achievement of the apprenticeship will also be made by the Independent End-Point Assessment Organisation.

The combination of these measures by the Independent End-Point Assessment Organisation throughout the End Point Assessment process will ensure the impartiality, robustness and fairness of judgements made.

10. End-point – Summary of roles and responsibilities

1. Employer	<p>The employer will:</p> <ul style="list-style-type: none"> • make the decision, in consultation with the training provider as to when the apprentice is ready to progress to the end-point assessment stage. • make the necessary arrangements for the apprentice to undertake the end-point assessment
2. Independent End-Point Assessment Organisation	<p>The Independent End-Point Assessment Organisation will:</p> <ul style="list-style-type: none"> • be responsible for the delivery of the end point assessment of the apprentice • ensure independence and impartiality into the assessment process • bring rigour and consistency through wider industry perspective, knowledge and experience

	<ul style="list-style-type: none"> • supply qualified assessor guidance and documentation for use in the end-point assessment process • apply grading to the end-point assessment • make the final judgement as to whether the apprentice has achieved the apprenticeship
3. Independent Assessor	<p>The Independent Assessor:</p> <ul style="list-style-type: none"> • holistically assesses the higher order skills, knowledge and behaviours in an integrated manner at the end-point assessment stage. • brings rigour and consistency to the assessment process through their wider industry perspective, knowledge and experience • brings an independent view as they have not been previously involved with the apprentice • informs the Independent End-Point Assessment Organisation of the pass/fail result achieved in the Practical Assessment
4. Training Provider	<p>The training Provider:</p> <ul style="list-style-type: none"> • Delivers and assesses on programme training • Supports the employer in deciding the timing and arranging the End point Assessment • Prepares the apprentices through training and guidance • Supports the employer if remedial training is required for re-sit or re-take of the End point Assessment

11. Quality Assurance - Internal

The responsibility for quality and robustness of the assessment process will be held by the Independent End-Point Assessment Organisation. The Independent End-Point Assessment Organisation responsibilities focussing on quality assurance are summarised below:

- Apply to become an approved Independent End-Point Assessment Organisation to offer end point assessment for Advanced Carpentry and Joinery at Level 3 in Construction
- Provide training and support to Independent Assessors for standardisation of End Point Assessment by holding twice yearly meetings to give updates ,best practice and CPD.
- Ensures that new materials are available for apprentices undertaking the End Point Assessment
- Ensures there are robust processes in place to deliver assessments to the required standard and that they are appropriate for the sector
- Develops and maintains a single set of assessment tools that are used by all to carry out assessments
- Offers an appeals process for any appeals that arise from assessment decisions
- Reports to the employer/training provider on any issues that arise on the apprenticeship assessment process

- Trains and certifies all individual assessors to be able to assess consistently against the Standard and assessment plan criteria, ensuring relevant qualifications have been achieved as detailed in the Assessor Minimum Requirements below

Assessor Minimum Requirements

End-point assessment organisations must ensure that assessors:

1. Have sufficient, verifiable, relevant current industry experience, knowledge and understanding of the occupational working area at, or above, the level being assessed. This must be of sufficient depth to be effective and reliable when judging candidates' competence. Assessors' experience, knowledge and understanding could be verified by a combination of:

- Curriculum vitae and employer endorsement
- References
- Possession of a relevant NVQ/SVQ, or vocationally related qualification
- Corporate membership of a relevant professional institution
- Interview

(The verification process must be recorded and available for audit)

2. Have sufficient occupational expertise so they have up to date experience, knowledge and understanding of the particular aspects of work they are assessing. This could be verified by records of continuing professional development achievements.

3. Only assess in their acknowledged area of occupational competence

4. Have a sound, in-depth knowledge of, and uphold the integrity of, the sector's NOS and this Assessment Strategy (this document)

5. Are prepared to participate in training activities for their continued professional development

6. Hold, or are working towards, a qualification as listed within 'Assessing and Assuring Quality of Assessment', either in the Qualifications and Credit Framework (QCF), or the Scottish Credit and Qualifications Framework (SCQF):

- Level 3 Award in Assessing Competence in the Work Environment
- Level 3 Certificate in Assessing Vocational Achievement
- SVQ (SCQF level) Assessing Competence in the Work Environment
- SVQ (SCQF level) Assessing Vocational Achievement

or hold one of the following

- A1 Assess candidates using a range of methods
- D32/33 Assess candidate performance, using differing sources of evidence

Holders of A1 and D32/33 must assess to the reviewed National Occupational Standards (NOS) for Learning and Development.

In taking on the lead role in assessment, it is strongly recommend that the Independent End-Point Assessment Organisation has:

- Understanding of the sector and the assessment requirements for the standard, together with the expertise to administer the assessment tools required.
- Capability to deliver assessments at the scale and with the levels of service required, giving confidence that this is a strategic part of their business.
- Geographical coverage required.

- Assessors with the requisite background and assessor qualifications to be both credible and effective.
- Robust internal verification and quality assurance processes that can ensure the end point assessment is of the required standard.

12. Quality Assurance – External

The external quality assurance option that has been chosen is the employer-led approach, working in partnership with the Construction Industry Training Board (CITB). The proposed responsibility for external quality assurance of the end-point assessments will rest with a representative (no-profit) board convened by the Construction Industry training Board (CITB).

13. End-point - Grading

The apprenticeship will have four grading levels, fail, pass, merit and distinction. A grading profile has been developed to articulate the ratios expected for a fail, pass, merit and distinction type apprentice. A pass will represent minimum acceptable standard for the industry, merit will represent a good standard for the industry, whilst distinction will represent a high standard for the industry. The overall final grade will be calculated depending on the grade achieved by the candidate for each of the graded assessment components. Decision on grading will be made by the Apprenticeship Assessment Organisation.

Grading Profile

Assessment Method	Fail	Pass	Merit	Distinction
Knowledge Assessment (including behaviours)	Less than 50%	50-60%	61-75%	76-100%
Practical Assessment (including behaviours)	Less than 50%	50-65%	66-79%	80-100%

Knowledge Assessment Grading Descriptors

Fail (less than 50%)	Pass (50-60%)	Merit (61-75%)	Distinction (76-100%)
Less than 35 marks out of a possible 70	Minimum of 35 marks out of a possible 70	Minimum of 43 marks out of a possible 70	Minimum of 53 marks out of a possible 70

Practical Assessment Grading Descriptors

Fail (less than 50%)	Pass (50-65%)	Merit (66-79%)	Distinction (80-100%)
Under 50 marks out of a possible 100	Minimum of 50 marks out of a possible 100	Minimum of 66 marks out of a possible 100	Minimum of 80 marks out of a possible 100
The apprentice has been unable to: <ul style="list-style-type: none"> • interpret the given information to carry out the task • plan actions and organise resources and 	The apprentice has: <ul style="list-style-type: none"> • interpreted the given information to carry out the task • planned appropriate actions and organised the suitable resources 	The apprentice has met all the pass criteria and has: <ul style="list-style-type: none"> • completed the task without requesting further materials or components caused by miscalculations during 	The apprentice has met all the pass and merit criteria and has: <ul style="list-style-type: none"> • completed the task in at least 10% less time than the allowed timeframe • produced the work with 80% of the work

<p>equipment required to undertake the task</p> <ul style="list-style-type: none"> • set out/mark out materials and components • demonstrate required tool and hand skills including the use of powered tools effectively • produce work to the given specification • completing work in the allocated time • work safely at all times using appropriate PPE and RPE where and when required 	<p>and equipment required to undertake the task</p> <ul style="list-style-type: none"> • set out/marked out materials and components from the supplied drawing to carry out the task • demonstrated the range of required tool and hand skills including the use of powered tools effectively • produce work to the given specification and drawing • completing the work in the allocated time • work safely at all times using appropriate PPE and RPE where and when required 	<p>the setting out/mark out process</p> <ul style="list-style-type: none"> • completed the task without requesting further materials caused by errors during the construction process • avoided damage to fittings and components, including tool marks and damage to prepared or finished surfaces • produced the work with 70% of the task completed to within the tolerances defined in the given work specification 	<p>completed to within the tolerances defined in the given work specification</p> <ul style="list-style-type: none"> • produced the work to a high standard and quality finish
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Overall apprenticeship grading: The overall final grade will be calculated depending on the grade achieved by the candidate for each of the graded assessment components. All assessments must be passed to achieve an overall pass graded apprenticeship. To achieve a merit, an apprentice must achieve a minimum of a merit for all assessment where it is available. To achieve a distinction, an apprentice must achieve a distinction for all assessment where it is available. In a situation where the apprentice fails initially and has to re-take the end-point assessment, standard grading rules will apply, meaning the apprentice will still be able to achieve pass, merit or distinction.

Grade	Knowledge Assessment	Practical Test
FAIL	Fail	Fail
FAIL	Fail	Pass/Merit/Distinction
FAIL	Pass/Merit/Distinction	Fail
PASS	Pass	Pass
PASS	Pass	Pass/Merit/Distinction
PASS	Pass/Merit/Distinction	Pass
MERIT	Merit	Merit
MERIT	Merit	Merit/Distinction
MERIT	Merit/Distinction	Merit
DISTINCTION	Distinction	Distinction

14. Implementation

14.1 Deliverability

All steps have been taken to ensure that this assessment plan approach remains simple, effective and affordable, utilising existing delivery and assessment methodologies wherever possible to reduce the need for significant additional costs or burden into the assessment process. It cannot be predicted at this stage what the precise costs of assessment will be to meet the requirements of the apprenticeship standard outcomes and this assessment plan. Existing practice in the delivery and assessment of existing frameworks suggests that the delivery and assessment of this apprenticeship will not be substantially different to existing frameworks. It is, however, predicted at this stage that the percentage cost of the end point assessment will equate to approximately 15% of the overall apprenticeship cost. This overall costing 15% is based upon

- Knowledge Testing, training of invigilators and test centre approval
- Venue costs for setting up the End Point Assessment and administration
- Material costs to ensure that new materials are available for each apprentice

14.2 Professional Body Recognition

Successful completion of the new apprenticeship standard will enable the apprentice to meet the requirements of the relevant industry competent person scheme(s), which are widely accepted as a 'licence to operate' in the construction sector.

14.3 Delivering Consistent Assessment Judgements

The synoptic end point assessments will be set, externally marked and verified by the Independent End-Point Assessment Organisations, against the requirements of the standard and occupational brief and will be administered and marked in a consistent manner across the country. This consistency will be delivered by:

- The Independent End-Point Assessment Organisation will provide training and support for Independent Assessors to ensure rigour and consistency
- Independent Assessors will attend at least two meetings per year arranged and managed by the Independent End-Point Assessment Organisation to improve consistency, rigour, technical ability and standardisation as part of CPD.

When any technical or assessment variation is identified the above will ensure a standard interpretation is established and approved by the Independent End-Point Assessment Organisation in consultation with the employer group.

The Independent End-Point Assessment Organisation will provide Independent Assessors with guidance on:

- Standardisation on assessment and questioning
- Marking Schedule
- Schedules to record the outcomes

14.4 Volume

It is expected that approximately 3000 apprentices will be recruited and trained each year against the advanced carpentry and joinery in construction apprenticeship standard.

Annex A**Method of Assessment Grid**

End point assessment Methods	Key
Knowledge Assessment	KA
Practical Skills Assessment	PSA

Core Skills to be Assessed	Assessment Method	
Work safely and pro-actively in the application of good health and safety practice in the work area, to protect self and others	PSA	KA
Comply with the programme and work schedule for the work and plan work accordingly	PSA	
Develop and maintain good working relationships with managers, supervisors and work colleagues		KA
Determine the best way of carrying out the work and ensure this is communicated clearly to colleagues	PSA	KA
Interpret technical specifications and ensure compliance with legislation/guidance relevant to the work being done	PSA	
Select the required quantity and quality of resources required for carrying out complex and non-standard work, including timber, tools and fixings	PSA	
Be prepared to take a lead when working in a team, especially when complex or non-standard work is involved		KA

Core Knowledge to be Assessed	Assessment Method	
Understand, in more detail, the key aspects of health, safety and welfare good practice and how to apply these to create a safe and healthy working environment		KA
Understand how to plan and carry out work effectively, taking into account complex environmental and task related challenges	PSA	KA
Understand how to develop and maintain excellent working relationships with others		KA
Understand how to access data needed to plan and execute work tasks accurately, including an understanding of Building Information Modelling (BIM) and its impact on construction projects		KA
Understand the broader responsibilities under current legislation and guidance in undertaking construction work		KA
Understand the importance of team working and being prepared to take a lead		KA

Core Behaviours to be Assessed	Assessment Method	
Effective communication: oral, written, listening, body language, presentation – especially when working with others	PSA	KA

Team work: work effectively without supervision and give leadership to others – being willing to lead a team	PSA	KA
Independent working: take responsibility for completing own work and monitoring the work of others	PSA	KA
Logical thinking: use clear and valid reasoning when making decisions and in achieving work goals with others	PSA	KA
Working effectively: undertake the work in a reliable and productive manner, lead others by example	PSA	KA
Time management: use own time effectively to complete the work on schedule and support effective team working	PSA	KA
Adaptability: be able to implement change and adjust existing requirements to meet the work instructions		KA

Advanced Site Carpentry Specific Skills to be Assessed	Assessment Method	
Utilise a range of advanced trade skills which allows for carrying out complex carpentry work to highly skilled standards and tolerances, to include measuring, marking out, fitting, cutting, splicing, finishing, positioning and securing	PSA	KA
Install complex and non-standard doors and window frames, shaped door and hatch linings, partitions with openings and changes of direction and staircases with turns	PSA	KA
Install accessible service encasements, bespoke wall/floor units, panelling and stair components (e.g. balustrades, handrails and spindles with turns)		KA
Erect inclined roofs with gables, roof verges and eaves, including finishing's, joists and roof coverings	PSA	KA
Repair and/or replace frames, mouldings, floor or flat roof joist coverings, door and window ironmongery, window components, structural joists and rafters, guttering and downpipes		KA

Advanced Site Carpentry Specific Knowledge to be Assessed	Assessment Method	
Understand the technical principles of advanced site carpentry, such as effective and appropriate installation practices, being able to apply this knowledge in preparing and fixing complex, non-standard timber based products and components, such as erecting inclined roofs, making, assembling and erecting complex roof structures, including hip and dormer cut roofs, maintaining and repairing non-standard joinery products	PSA	KA
Understand how to carry out advanced calculations and work out cutting angles for complex carpentry work such as using a roofing square to calculate roof spar lengths and using a sliding bevel to mark out splayed joints	PSA	KA
Understand how to form complex joints associated with advanced site carpentry work, such as splayed and plumb joints	PSA	KA

Advanced Architectural Joinery Specific Skills to be Assessed	Assessment Method	
Utilise advanced trade skills to carry out complex architectural joinery work to a high standard and to demanding tolerances	PSA	KA
Set out complex work tasks for non-standard architectural joinery products, including complex door sets, doors, windows, units and fitments, staircases (straight and with turns) and products with single/double curvature features	PSA	KA
Mark out accurately from setting out details for the manufacture of complex doors, opening windows, units and fitments and staircases	PSA	KA
Manufacture complex and non-standard architectural joinery products including doors, windows with opening lights, units and fitments, panelling/cladding, staircases (straight and with turns) and veneers	PSA	KA
Use, maintain and store marking and testing tools, hand tools, power tools and associated equipment required for advanced work	PSA	KA
Set up and use fixed machinery such as circular saws, planers, thicknessers, bandsaws, morticers, tenoners, spindle moulders, drills, grinders and sanders	PSA	KA
Optional (as determined by the employer)		
Produce computer aided design (CAD) setting out details and set out by CAD	PSA	KA
Produce wood and wood-based products using computer numerically controlled/numerically controlled (CNC/NC) machinery	PSA	KA

Advanced Architectural Joinery Specific Knowledge to be Assessed	Assessment Method	
Understand the technical principles of advanced architectural joinery, using this knowledge to set out and produce cutting lists for complex and non-standard products, marking, manufacturing, fitting and assembling complex, non-standard products	PSA	KA
Understand how to take complex site and workplace dimensions, such as measuring curved openings and ensuring that units fit obtuse/acute angled walls	PSA	KA
Understand how to form a proportion advanced wood joints associated with complex architectural joinery work, such as subbed rebate joints, stub mortice and tenon joints and bridle joints	PSA	KA
Understand how to set up, use and maintain fixed machinery used for complex joinery tasks, such as developing and using specialist jigs to manufacture curved timber products	PSA	KA
Optional (as determined by the employer)		
Understand the principles of computer aided design (CAD) and how to apply them to produce CAD setting out details and set out by CAD	PSA	KA
Understand how to set up and use computer numerically controlled/numerically controlled (CNC/NC) machinery to produce timber and timber-based products	PSA	KA