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



End-point assessment plan for wood product manufacturing operative apprenticeship standard

Apprenticeship standard reference number	Apprenticeship standard level	Integrated end-point assessment
ST0531	2	No

Contents

Introduction and overview	2
EPA summary table	4
Length of end-point assessment period	5
Order of assessment methods	5
Gateway	5
Assessment methods	6
Reasonable adjustments	10
Weighting of assessment methods	11
Overall EPA grading	12
Re-sits and re-takes	12
Roles and responsibilities	13
Internal Quality Assurance (IAQ)	14
Affordability	15
Mapping of KSBs	16
Cradina descriptors	20

Introduction and overview

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

Full time apprentices will typically spend 24-months on-programme (before the gateway) working towards the occupational standard, with a minimum of 20% off-the-job training. Apprentices must require and spend a minimum of 12-months on-programme.

The EPA period should only start, and the EPA be arranged, once all of the pre-requisite gateway requirements for EPA have been met and that they can be evidenced to an EPAO. The employer must be satisfied that the apprentice is consistently working at or above the level set out in the occupational standard. Apprentices must have compiled a portfolio of evidence, which will underpin the EPA interview. In addition, for level 2 apprenticeships, apprentices without English and mathematics at level 2 must achieve level 1 English and mathematics and take the tests for level 2 prior to taking their EPA¹.

The EPA will typically be completed within a period of two-months, after the apprentice has met the EPA gateway requirements.

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

The EPA consists of three discrete assessment methods:

- · workplace observation and questioning
- interview, underpinned by portfolio of evidence
- multiple-choice test

The individual assessment methods will have the following grades.

Assessment method 1 – workplace observation and questioning:

- fail
- pass
- distinction

¹ For those with an education, health and care plan or a legacy statement the apprenticeship's English and mathematics minimum requirement is Entry Level 3 and British Sign Language qualifications are an alternative to English qualifications for whom this is their primary language.

Assessment method 2 – interview, underpinned by portfolio of evidence:

- fail
- pass

Assessment method 3 – multiple-choice test:

- fail
- pass

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

- fail
- pass
- distinction

EPA summary table

On-programme (typically 24 months)	Training to develop the occupation standard's knowledge, skills and behaviours (KSBs)	
(3) [Training for English and mathematics level 1 and 2, if required	
	Compilation of portfolio of evidence, to underpin EPA interview	
End-point assessment gateway	Employer is satisfied the apprentice is consistently working at, or above, the level of the occupational standard	
	Achieved English/mathematics at Level 1, and taken tests for Level 2, as a minimum. For those with an education, health and care plan or a legacy statement the apprenticeship's English and mathematics minimum requirement is Entry Level 3 and British Sign Language qualifications are an alternative to English qualifications for whom this is their primary language.	
	Compiled a portfolio of evidence during the on-programme period of the apprenticeship, containing sufficient evidence to demonstrate the knowledge, skills and behaviours (KSBs) that will be assessed by the interview	
End-point assessment	Assessment methods:	
(typically 2-months)	 workplace observation and questioning, graded fail, pass or distinction interview, underpinned by portfolio, graded fail or pass multiple-choice test, graded fail or pass 	
	EPA graded:	
	• fail	
	passdistinction	

Length of end-point assessment period

All assessment methods will typically be completed within two-months of the end-point assessment gateway.

Order of assessment methods

The assessment methods can be delivered in any order. The result of one assessment method does not need to be known before taking another. It is anticipated that the observation and questioning, and interview underpinned by portfolio assessment methods will be completed on the same day, to aide efficiency however, this is not a requirement.

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 to the employer's confirmation that the apprentice is working at or above the level in the occupational standard, the apprentice must have completed the following gateway requirements prior to beginning EPA:

- Achieved English and mathematics Level 1 English and taken the tests for level 2. 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.
- Compiled and submitted a portfolio of evidence, to underpin the EPA interview see requirements below

Portfolio of evidence requirements:

- apprentices must compile a portfolio of evidence during the on-programme period of the apprenticeship
- it must contain sufficient evidence to demonstrate the KSBs that will be assessed by the interview; it is anticipated there will typically be 10 pieces of evidence
- evidence must be mapped against the KSBs
- evidence may be used to demonstrate more than one KSB; a qualitative as opposed to quantitative approach is required
- evidence sources may include:

- job cards/job sheets
- check sheets/quality check records
- o annotated specifications, for example drawings, cutting lists, work instructions
- annotated photographs
- video clips (maximum duration in total 10-minutes)
- equipment checks records

This is not a definitive list, other evidence sources are allowable

- it cannot include any methods of self-assessment
- any employer contributions should focus on direct observation of evidence (for example witness statements) rather than opinions
- the evidence provided must be valid and attributable to the apprentice; the portfolio of evidence must contain a statement from the employer confirming this
- the portfolio of evidence must be submitted to the EPAO at the gateway point

Assessment methods

Assessment method 1: workplace observation and questioning

This assessment method has two components: observation and questioning.

Rationale for this assessment method

The rationale for using this assessment method is:

- this is a practical role, best demonstrated through observation
- observation allows the assessment of work tasks in the apprentice's normal place of work, using tools and equipment with which they are familiar, which is likely to enable the apprentice to perform at their best
- observation is a cost-effective assessment method, as it makes use of the employers premises and resources
- the tasks chosen to reflect something that would be completed by wood manufacturing operatives in every company; tasks not necessarily completed in all workplaces are assessed via the interview underpinned by portfolio
- questioning component enables the checking of underpinning knowledge

Delivery

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

The EPAO will make arrangements for this assessment method with the apprentice's employer. They must agree with the employer what will be observed and the timing of the observation, taking into account workplace operations and schedules. The employer must ensure the correct assessment conditions, materials and equipment/tools are available. The employer may not participate in or influence the content of the task.

An independent assessor must conduct the observation and questioning, on a one-to-one basis.

The assessment must take place in the apprentice's normal workplace, under normal working conditions using equipment and tools with which they are familiar.

The duration of the observation must be three-hours. The assessment may be split into discrete sections held over a maximum of one working day; for example, to allow the apprentice to move to different parts of the workplace, without the movement time counting towards the assessment duration. The length of a working day is typically considered to be 7.5 hours. Apprentices must be supervised during any breaks in the assessment and must not communicate with anyone else. The independent assessor has the discretion to increase the time of the assessment by up to 10%, to allow the apprentice to complete a task.

In advance of the assessment, apprentices must be provided with information on the format of the assessment, including timescales.

During the observation, apprentices must complete five tasks:

- 1. Completing a risk assessment.
- 2. Cutting and laying out of materials to meet specification requirements. The specification must require four different types of material or ancillary items, for example MDF, hard wood, softwood, door fixings, seals, glass or ironmongery and selection. The task must require the apprentice to select and use of a range of machinery, equipment, power and hand tools, and calibrated measuring equipment.
- 3. Assembling components and finishing (sanding and de-nibbing) to meet specification requirements; including installation of fixtures or fittings, for example ironmongery, seals, ancillary metal work and fixings, nail plates and staples. The product must require the assembly of 8-10 different components.
- 4. Packing and storing of finished product.
- 5. Completing documentation.

The tasks may relate to the same product or different products.

The independent assessor must be unobtrusive whilst conducting the observation.

Questions may be asked after the observation is complete or after each section of the observation.

The questioning must be conducted under controlled conditions, in a quiet space free from distraction and influence. It is anticipated that the employer's premises will be used to reduce cost; however, other venues may be sourced if necessary.

The independent assessor must ask a minimum of five questions. They may ask follow up questions where clarification is required, in the time allowed. The purpose of the questioning is to assess underpinning knowledge. The duration for the questioning must be 15-minutes. The independent assessor has the discretion to increase the time of the assessment by up to 10%, to allow the apprentice to complete their last answer. Independent assessors will use set questions supplied by the EPAO however, they can be adapted based on what they have observed. The independent assessor should consider the level of English that the apprentice is working at and pitch questions using appropriate language to ensure inclusivity. Apprentices are expected to understand and use relevant occupational language.

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

Evidence from the observation and questioning must be assessed holistically using the grading criteria for this assessment method. The independent assessor will make all grading decisions. The observation and questioning will be graded fail, pass or distinction.

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

Support material

As a minimum, EPAOs must produce the following material to support this assessment method:

- observation specifications, including set questions, which must be of sufficient size to
 prevent predictability and reviewed regularly (at least once per year) to ensure they and
 the questions they contain are fit for purpose
- assessment recording documentation
- guidance for apprentices and employers

Assessment method 2: interview, underpinned by portfolio

This assessment method has one component: interview.

Rationale for this assessment method

The rationale for using this assessment method is:

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

Delivery

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

The EPAO will make arrangements for this assessment method with the apprentice's employer.

The interview must be conducted under controlled conditions, in a quiet space free from distraction and influence. It is anticipated that the employer's premises will be used to reduce cost; however, other venues may be sourced if necessary – for example, a training provider's premises. Video conferencing may 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.

An independent assessor must conduct and assess the interview on a one-to-one basis.

The interview must be appropriately structured to draw out the best of the apprentice's competence.

The duration of the interview must be 45-minutes. The independent assessor has the discretion to increase the time of the interview by up to 10%, to allow the apprentice to complete their last answer. Further time may be granted for apprentices with appropriate needs, for example where signing services are required.

The independent assessor must ask a minimum of six open, competence-based questions. Independent assessor may use questions from their EPAO question bank and/or generate their own following a review of the apprentice's portfolio. Assessors may ask follow up questions to seek clarification, within the time allowed. The independent assessor should consider the level of English that the apprentice is working at and pitch questions using appropriate language to ensure inclusivity. Apprentices are expected to understand and use relevant occupational language.

Questions must cover the following themes:

- Commercial operations
- Fault investigation and rectification
- Glazing operations
- Application of finishes to wood products (stains, sealers, basecoats and paint finishes)
- Computer Numerically Controlled (CNC)
- Adaptability and collaboration

Apprentices can refer to and illustrate their answers with evidence from their portfolio however, the portfolio evidence will not be directly assessed.

The interview may be recorded on an audio recording device for validation and moderation.

The independent assessor must document the interview, using their EPAO's documentation.

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

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

Gateway requirement

Portfolio of evidence – see requirements in gateway section

Support material

As a minimum, EPAOs must produce the following material to support this assessment method:

- set questions, a question bank must be developed by EPAOs. The 'question bank' must be of sufficient size to prevent predictability and review it regularly (and at least once a year) to ensure that it, and its content, are fit for purpose
- assessment recording documentation
- guidance for apprentices and employers

Assessment method 3: multiple-choice test

This assessment method has one component: multiple-choice test.

Rationale for this assessment method

The rationale for using this assessment method is:

- allows for the efficient testing of knowledge where there is a right or wrong answer
- does not require independent assessor time, reducing cost; the multiple-choice test can to administered, invigilated and marked by an independent person appointed by the EPAO

Delivery

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

The multiple-choice test can be:

- computer based
- paper based

It must consist of 30 closed response multiple-choice questions, testing knowledge.

Apprentices must choose one correct answer from a choice of four.

Each question answered correctly will be awarded one mark. Any incorrect or missing answers will be assigned nil marks.

Apprentices must have 60-minutes to complete the multiple-choice test.

Crown copyright 2020 You may re-use this information (not including logos) free of charge in any format or medium, under the terms of the Open Government Licence. Visit www.nationalarchives.gov.uk/doc/open-government-licence

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

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

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.

Support material

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

- '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. Questions must be written by EPAOs and must be relevant to the occupation and employer settings. It is recommended that this be done in consultation with employers of this occupation. EPAOs must maintain the security and confidentiality of their questions when consulting employers.
- · a test specification
- sample tests and mark schemes
- live tests and mark schemes

Reasonable adjustments

EPAOs must have in place clear and fair arrangements for making reasonable adjustments for this EPA. 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 plan.

Weighting of assessment methods

All assessment methods are weighted equally in their contribution to the overall EPA pass grade. The observation and questioning determines whether a distinction grade is awarded.

Overall EPA grading

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

Independent assessors must individually grade each assessment method, according to the requirements set out in this plan. Restrictions on grading apply where apprentices re-sit/re-take an assessment method – see the re-sit/re-take section.

EPAOs must combine the individual assessment method grades to determine the overall EPA grade.

Apprentices who fail one or more assessment method will be awarded an EPA 'fail.'

In order to 'pass' apprentices must achieve a pass in all three assessment methods.

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

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

Re-sits and re-takes

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

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

An apprentice who fails an assessment method(s), and therefore the EPA in the first instance, will be required to re-take/re-sit any failed assessment method(s) only.

Any assessment method re-sit or re-take must be taken within six-months of the fail notification, otherwise the entire EPA must be taken again, unless in the opinion of the EPAO exceptional circumstances apply outside the control of the apprentice or their employer.

Re-sits and re-takes are not offered to apprentices wishing to move from pass to distinction, unless the EPAO determines there are exceptional circumstances.

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	 participate in training to develop the knowledge, skills and behaviours, and English and mathematics requirements as outlined in the occupational standard meet all gateway requirements understand the purpose and importance of EPA undertake EPA
Employer	 support the apprentice to achieve the KSBs outlined in the occupational standard to their best ability determine when the apprentice is working at or above the level outlined in the occupational standard and is ready for EPA select the EPAO confirm all EPA gateway requirements have been met confirm arrangements with EPAO for the EPA (who, when, where) in a timely manner ensure apprentice is well prepared for the EPA
EPAO	As a minimum, EPAOs should: • appoint independent assessors to assess and grade the EPA • provide training and continuing professional development (CPD) to their independent assessors • provide adequate information, advice and guidance documentation to enable apprentices, employers and training providers to prepare for the EPA • deliver the EPA as outlined in this plan in a timely manner • prepare and provide all required material and resources required for delivery of the EPA in-line with best practice • use appropriate assessment recording documentation to ensure a clear and auditable mechanism for

Crown copyright 2020 You may re-use this information (not including logos) free of charge in any format or medium, under the terms of the Open Government Licence. Visit www.nationalarchives.gov.uk/doc/open-government-licence

	providing assessment decision feedback to the apprentice • have no direct connection with the apprentice, their employer or training provider i.e. there must be no conflict of interest • maintain robust internal quality assurance (IQA) procedures and processes, and conducts these on a regular basis • conform to the requirements of the nominated external quality assurance body • organise standardisation events and activities in accordance with this plan's IQA section • organise and conduct moderation of independent assessors 'decisions in accordance with this plan's IQA section • have, and operate, an appeals and complaints process • arrange for certification with the relevant training provider
Independent assessor	As a minimum an independent assessor should: • understand the occupational standard and end-point assessment plan • deliver the EPA in-line with this plan • comply to the IQA requirements of the EPAO • be independent of the apprentice, their employer and training provider(s) i.e. there must be no conflict of interest • satisfy the assessor requirements outlined in this EPA plan • have the capability to assess the apprentice at this level • attend the required number of EPAOs standardisation and training events per year (as defined in the IQA section)
Independent administrator, invigilator and/or maker for the multiple-choice test	be independent of the apprentice, their employer and training provider(s) i.e. there must be no conflict of interest
Training provider	As a minimum the training provider should: • work with the employer to ensure that the apprentice is given the opportunities to develop the KSBs outlined

in the occupational standard and monitor their progress during the on-programme period
advise the employer, upon request, on the
apprentice's readiness for EPA prior to the gateway
play no part in the EPA itself

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 relevant experience of the occupation/sector at least one level above the apprentice and worked in the sector in the last three-years or can demonstrate currency of knowledge and skills, for example through CPD; and have or are working towards an assessor award, for example TAQA (Training & Assessment Quality Assurance)
- provide training for independent assessors in terms of good assessment practice, operating the assessment tools and grading
- have robust quality assurance systems and procedures that support fair, reliable and consistent assessment across the organisation and over time
- operate induction training and standardisation events for independent assessors when they begin working for the EPAO on this apprenticeship standard and before they deliver an updated assessment method for the first time
- operate regular standardisation events that enable assessors to attend a minimum of two-days per year
- operate moderation of assessment activity and decisions, through examination of documentation and observation of activity, with a minimum of 20% of each independent assessors' assessments moderated
- have and operate an appeals and complaints process

Affordability

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

- using an employer's premises, equipment and resources
- apprentices may be contributing to workplace operations during the observation
- the multiple-choice test can be taken on-line, reducing travel costs
- the interview, underpinned by portfolio of evidence can be conducted remotely, reducing travel costs

Mapping of knowledge, skills and behaviours (KSBs)

Assessment method 1: Workplace observation and questioning

Knowledge

- **K3** Manufacturing processes used to produce the end-product, such as selecting and using the appropriate machinery to perform the task/operation required, sequence of the production process including finishing, packaging and storing products.
- **K9** Procedures for the safe handling and storage of wood components, products and glazing systems.
- **K10** Environmental and sustainability considerations, regulations and good practice, for example the appropriate disposal of waste, recycling of materials and efficient use of resources.
- K13 Work and product specifications, what they are and how to use them.
- K14 Checking and clarifying work requirements, including what needs checking and why.
- K16 Techniques for measuring and cutting components and products.
- **K17** Assembly methods, how a product is assembled using prepared components from the manufacturing process, appropriate jointing and fixing methods to use and why (mortice and tenonning, butt jointing, screws, dowels, glues etc).
- **K18** Techniques for installing fixtures and fittings to wood products, for example ironmongery, seals, ancillary metal work and fixings, nail plates and staples, glazing.
- **K23** Processes for handover to other manufacturing process functions, for example component production to assembly.
- **K24** Documentation requirements; written and verbal communication techniques.

Skills

- **S1** Complying with health, safety and environmental requirements, for example safe use of personal and respiratory protective equipment, local exhaust ventilation, statutory regulations and industry standards/codes of practice.
- **S2** Identifying risks and hazards in the workplace and apply appropriate control measures.
- **S3** Complying with organisational and statutory environmental and sustainability considerations, for example disposal of waste, recycling of materials and efficient use of resources.
- **S4** Communicating, for example with colleagues and/or customers.
- **S5** Planning work to undertake wood product manufacturing operations.

- **S6** Reading and interpreting specifications, diagrams and work instructions, and following these instructions.
- **S7** Selecting the correct type and quantity of components and materials.
- **S8** Preparing the work area before undertaking the work.
- **\$10** Packing and storing products and components.
- **S11** Selecting, setting up and operating machinery, tools and equipment used to produce wood components.
- **\$14** Positioning wood components and applying manual and mechanical cramps to ensure products are secured and in accordance with the work specification.
- **\$15** Assembling wood components to the work specification and given tolerances.
- \$16 Sanding materials and de-nibbing.
- **\$17** Applying adhesives to wood components.
- **\$19** Installing fixtures and fittings to wood products, for example ironmongery, seals, ancillary metal work and fixings, nail plates and staples.
- **S21** Checking and and inspecting work to ensure it meets the work specification; undertaking rectification or rework where necessary
- \$22 Reporting work outcomes and/or problems.
- **\$23** Completing the handover process to other manufacturing process functions/teams.
- **\$24** Completing work documentation, for example job sheets, time cards.

Behaviours

- **B1** Safety first attitude, for example applies a safety-first attitude when undertaking the work.
- **B4** Pride in the workplace, for example organises work space efficiently and effectively.
- B5 Self-motivated, for example manages own time effectively.
- **B6** Quality workmanship, for example works to agreed quality targets and standards.

Assessment method 2 Interview underpinned by portfolio

Knowledge

- **K2** Commercial operations and how they contribute; key functions involved in the wood product manufacturing process.
- **K4** Types of customers (for example supplier, client) and customer requirements in terms of product quality, packaging and delivery, for example satisfactory quality, fit for purpose and as described.
- **K12** Principles and uses of Computer Numerically Controlled (CNC) machinery in wood product manufacturing, their programming requirements and associated tooling.
- **K15** Types of faults and errors that do occur, investigation and rectification techniques.
- **K21** Techniques for applying specified finishes to components and products.
- **K22** Requirements for glazing wood products, for example, windows, door leaves, balustrading.

Skills

- **S9** Identify faults and issues, for example incorrect or defective wood, defective machinery; and applying solutions.
- **\$12** Preparing and operating Computer Numerically Controlled (CNC) equipment.
- **\$13** Using and maintaining jigs and templates for wood product manufacturing operations.
- **\$18** Applying finishes to wood products, for example stains, sealers, basecoats and paint finishes.
- **\$20** Carrying out glazing operations.

Behaviours

- **B2** Adaptable, for example willing to accept changing priorities and working requirements.
- **B3** Collaborates, for example works with others.

Assessment method 3: multiple-choice test

Knowledge

K1 The wood product manufacturing industry, its background and importance.

K5 Quality standards and product accreditation processes for wood product manufacture, for example ISO 9001:2, independent third-party accreditation.

K6 Health and safety, including the safe use of personal and respiratory protective equipment, local exhaust ventilation, compliance with the Health and Safety at Work Act, Provision and Use of Work Equipment Regulations (PUWER), Control of Substances Hazardous to Health (COSHH), organisational and statutory safe systems of work, controlling dust and manual handling.

K7 Different materials used to manufacture wood products and components, including different species and types of wood, composite panels (for example, Medium Density Fibreboard (MDF), plywood), adhesives, glass, ironmongery, fixings; their properties, characteristics, how they interrelate and the use of appropriate joining methods.

K8 How different products, for example doors, door-sets, windows, staircases and interior joinery are expected to perform, and how they interact with the wider built environment.

K10 Environmental and sustainability considerations, regulations and good practice, for example the appropriate disposal of waste, recycling of materials and efficient use of resources.

K11 Machines, equipment and tools used in wood product manufacturing including static machinery, portable powered tools and hand tools, what they are used for and their capabilities, correct set-up, use and storage, checks and adjustments, start-up and shutdown procedures.

K19 Different grit sizes and the sequence of sanding for full finish paint and stain systems.

K20 Different types of adhesives, and processes for their use including application methods.

Grading descriptors

Assessment method 1: workplace observation and questioning

KSBs	Pass, apprentices must demonstrate all of the following	Distinction, in addition to the pass criteria apprentices must
		demonstrate four of the following
K3 K9 K10 K13 K14 K16 K17	Works in a way that ensures health & safety of self and others, for example correct Personal Protective	Planning optimises time, for example grouping tasks for efficiency, multitasking
K18 K23 K24	Equipment worn, no trip hazards, correct storage of hazardous materials, recognises risks and	Explains how to maximise machine efficiency and effectiveness
S1 S2 S3	applies control measures, follows	No gaps or defects
S4 S5 S6 S7 S8 S10 S11 S14	procedures for handling and storage of wood components, products and glazing systems	Demonstrates on-going checking of work
S15 S16 S17 S19	Demonstrates consideration of the environment in ways of working, for example correctly disposes of waste, identifies material for recycling, efficient use of materials	Explains consequences of not meeting specification requirements
S21 S22 S23 S24		Explains consequents of not following manufacturer's/employer's instructions in relation to equipment
B6		and tools
	Demonstrates planning of tasks, with work completed in time allowed; provides reasoned rationale for sequence of work followed	
	Work area clean, tidy and organised, for example storage of tools when not in use	
	Work meets at least the minimum specification requirements, for example, within stated tolerances, correct adhesive used, fixtures and fillings installed correctly; sanding/denibbing completed, final product check completed, correct packaging	

material used, product correctly stored	
Identifies customer/product requirements that underpin the specification; seeks clarification where necessary	
Completes documentation required for the task accurately, legibly and full	
Explains correct process for hando to other functions	ver
Communication can be understood by the audience; industry terminold used correctly	
Fail – does not meet all of the pass criteria	

Assessment method 2: interview underpinned by portfolio

KSBs	Pass, apprentices must demonstrate all of the following
K2 K4 K12 K15	Explains at least two ways in which their work affects profitability
K21 K22 S9 S12 S13 S18	Identifies how they interact with at least one other function specified, their role and consequence of not working collaboratively
S20 B2 B3	Identifies the requirements of two different customers for example product quality, packaging and delivery; explains the consequences of not meeting these requirements
	Identifies adaptable action in relation to a specified change in circumstances, for example changing approach to task, finding substitute materials
	Explains how to correctly prepare and operate CNC machinery for a specified task
	Identifies logical process for fault investigation and rectification for a specified problem
	Explains correct requirements for specified glazing operation
	Explains correct techniques for applying at least two specified finishes, for example stains, sealers, basecoats or paint finishes
	Explains correct use of maintenance of jigs and templates
Fail – does not mee	t all of the pass criteria

Assessment method 3: multiple-choice test

The following grade boundaries apply to the test:

Grade	Minimum score	Maximum score
Pass	21	30
Fail	0	20