

# **End-point assessment plan for Roofer apprenticeship** standard

	Apprenticeship standard level	Integrated approach
ST0270	2	N/A

#### **Contents**

Introduction and overview	2
EPA summary table	3
Length of end-point assessment period:	3
Order of assessment methods	3
Gateway	4
Assessment Methods	5
Reasonable adjustments	
Weighting of assessment methods	11
Grading	11
Re-sits and retakes	12
Roles and responsibilities	
Internal Quality Assurance (IQA)	13
Affordability	14
Mapping of Knowledge Skills and Behaviours	15
Grading descriptors	18

### Introduction and overview

This document sets out the requirements for end-point assessment (EPA) for the Roofer 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 Roofer apprentices, their employers and training providers.

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

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

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

The EPA must be completed within an EPA period typically lasting three-months, beginning when the apprentice has met the EPA gateway requirements.

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

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

Assessment method 1 – Knowledge test

- fail
- pass
- distinction

Assessment method 2 – Observation with questioning

- fail
- pass

Assessment method 3 – Interview, underpinned by portfolio of workplace evidence

- fail
- pass
- distinction

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

- fail
- pass
- distinction

### **EPA** summary table

On-programme (typically 18 months)	Training to develop the occupation standard's knowledge, skills and behaviours
End-point assessment gateway	Employer is satisfied the apprentice is consistently working at, or above, the level of the occupational standard
	Apprentice has achieved English and mathematics at Level 1 and taken the tests for level 2
	A portfolio compiled by the apprentice on-programme of workplace evidence, to underpin the EPA interview
End-point assessment (typically 3-months)	Assessment method 1: Knowledge test; graded fail, pass, distinction
	Assessment method 2: Observation with questioning; graded fail, pass.
	Assessment method 3: Interview, underpinned by portfolio of workplace evidence; graded fail, pass, distinction
	Overall EPA and apprenticeship graded fail, pass, distinction

### Length of end-point assessment period

The EPA (including all assessment methods) must typically be completed within three-months of the apprentice meeting the gateway requirements.

### Order of assessment methods

The knowledge test must be taken first as it contains critical health and safety questions which must be passed before an apprentice is allowed to work independently on site. At least a pass must be achieved before the apprentice can move onto the other methods. The result of the knowledge test must therefore be known before an apprentice starts the next method.

The remaining assessment methods can be taken in any order.

### **Gateway**

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

- apprentices without English and mathematics at level 2 must achieve level 1 English and mathematics and have taken the tests for level 2
  - 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 the English qualifications for which this is their primary language.
- for the interview, the apprentice must have completed and submitted a portfolio of workplace evidence see requirements below:

Portfolio of workplace evidence requirements:

- apprentices must compile a portfolio of workplace evidence during the on-programme period of the apprenticeship
- it must contain sufficient evidence to demonstrate and support assimilation of the Knowledge, Skills and Behaviours (KSBs) that will be assessed by the interview. The portfolio will typically include a minimum of 6 pieces of evidence and a maximum of 12 pieces of evidence.
- it must contain valid workplace evidence from various tasks and assignments e.g. different roof structures, sizes, construction types, locations and roof area covered.
- each item of evidence must be mapped against the KSBs by a cross reference sheet
- evidence may be used to demonstrate more than one KSB
- · evidence sources may include:
  - workplace documentation, for example job cards, job sheets, check sheets, quality check records, equipment check sheets, maintenance records, resource requisition sheets
  - annotated specifications, for example drawings, cutting lists, work instructions, annotated photographs
  - video clips with explanation (live voice feed from the apprentice), of activities (maximum duration in total 10-minutes). The apprentice must be in view while activities are recorded

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

- it should not include any methods of self-assessment and/or reflection
- any employer contributions should focus on direct observation of evidence (for example witness statements) of competence related to the KSBs in the standard rather than opinions

- the evidence provided must be valid and attributable to the apprentice, referenced to the standard; the portfolio of workplace evidence must contain a statement from the employer confirming this
- the portfolio of workplace evidence must be submitted to the EPAO at the gateway.

### **Assessment methods**

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

#### Overview

This assessment method has one component: Knowledge test.

The rationale for this assessment method is:

- it will determine knowledge of critical health and safety requirements
- · it allows for the efficient testing of knowledge where there is a right or wrong answer
- it does not require independent assessor time, reducing cost.

### **Delivery**

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

The test can be:

- computer based
- paper based.

It will consist of 45 multiple choice questions, of which 5 must be scenario based. All questions will have one correct answer from four response choices.

Each question answered correctly will be awarded one mark apart from the scenario questions which will be awarded 2 marks. Any incorrect or missing answers will be assigned zero marks.

Apprentices must have 90 minutes to complete the test.

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

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

Tests must be marked by independent assessors or markers employed by the EPAO following a marking guide produced by the EPAO, marking by computer is permissible where the test has been taken online.

When developing questions for the test, the EPAO 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 relevant occupational language.

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

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

### **Marking**

The following grade boundaries apply to the test:

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

#### Venue

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

The test can take place in any of the following:

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

### Supporting material

EPAOs must produce the following material to support this method:

- a test specification
- sample tests and mark schemes
- live tests and mark schemes
- analysis reports which show areas of weakness for completed tests
- an invigilation policy
- EPAOs must develop 'question banks' of sufficient size to prevent predictability and review
  them regularly (at least once a year) to ensure they, and the questions they contain, are fit for
  purpose.
- It is recommended that questions are developed in consultation with representative employers
  of this occupation. EPAOs must maintain the security and confidentiality of their questions
  when consulting employers.

### **Assessment method 2: Observation with questioning**

#### **Overview**

This assessment method has two components: Observation and Questioning.

The rationale for this assessment method is:

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

### **Delivery**

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

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

An independent assessor must only observe a maxmum of up to three apprentices at any one time, assessors must ensure apprentices are in line of sight to allow for quality and rigour. The independent assessor must be unobtrusive whilst conducting the Observation.

The observation should take ten hours +10% at the assessors discretion The Observation may be split into discrete sections held over a maximum of two working days. The length of a working day is typically considered to be 7.5 hours. There may be breaks during the Observation to allow the apprentice to move from one location to another as required.

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

The independent assessor should consider the level of English that the apprentice is working at and pitch questions using appropriate language to ensure inclusivity. Apprentices are expected to understand and use relevant occupational language.

The following activities must be observed during the Observation:

### **CORE**

- consideration of safety
- the formulation of an individual task plan
- the selection of materials and components
- manual handling of resources and materials
- interpretation of verbal and written work instructions
- working safely at height and the use of access equipment

#### **Option 1: Roof Slater and Tiler**

- measure, mark out, fit, finish, position and secure slates or tiles
- lay underlay, battens and related roofing components

### **Option 2: Waterproof Membrane Installer**

- measure, mark out, fit, finish, position and secure a waterproof system
- terminate waterproofing systems at the perimeter upstands and/or open edges to the given specification

### **Option 3: Roof Sheeter and Cladder**

- measure, mark out, fit, finish, position and secure cladding
- work around penetrations and upstands

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

Observation specifications prepared by the EPAO must be of equal complexity, so as to require a competent person ten hours to complete.

Questions must be asked during the observation when breaks occur in the work cycle on a one-toone basis. The independent assessor is responsible for ensuring the security of questions and that they are not overheard by other apprentices. The independent assessor is permitted to ask follow up questions where clarification is required. The independent assessor can ask each apprentice up to 6 questions. The main purpose of the questioning is to assess underpinning knowledge. The independent assessor should consider the level of English that the apprentice is working at and pitch questions using appropriate language to ensure inclusivity. Apprentices are expected to understand and use relevant occupational language. The independent assessor has the discretion to increase the time of the Observation by up to 10%, to allow the apprentice to complete their final task or their last answer.

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

The Independent assessor will make all grading decisions.

EPAOs must prepare an Observation specification for the core and each option and a set of example open questions. For resits and/or re-takes the independent assessor must use different Observation and Question specifications.

#### Venue

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

### **Supporting material**

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

- Observation specifications. The 'specification bank,' must be of sufficient size to prevent predictability and be reviewed regularly (at least once per year) to ensure they are fit for purpose.
- example open questions to assess related underpinning knowledge, skills and behaviours. The

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

- · assessment recording documentation.
- guidance for apprentices and employers.

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

#### **Overview**

This assessment method has one component: Interview.

The rationale for this assessment method is:

- it allows the apprentice to be assessed against KSBs that may not occur naturally on a daily basis and would take too long to observe or do not lend themselves to observation within the 10 hour period
- the Interview is underpinned by a portfolio of workplace evidence, enabling the apprentice to demonstrate the application of knowledge, skills and behaviours
- it allows for testing of responses where there are a number of potential answers that couldn't be tested through the Knowledge test
- it is cost effective, as it makes use of the employers premises and does not require additional resources

#### **Delivery**

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

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

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

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

The independent assessor must ask open, competence-based questions from their EPAO example question bank relating to the content of the portfolio of workplace evidence; follow up questions devised by the independent assessor may be used to seek clarification. The independent assessor should consider the level of English that the apprentice is working at and pitch questions using appropriate language to ensure inclusivity. Apprentices are expected to understand and use relevant occupational language.

The questions will focus on coverage of prior activity evidenced in the apprentice's portfolio of workplace evidence. Apprentices should refer to and illustrate their answers with evidence from their portfolio of workplace evidence. The portfolio of workplace evidence must be reviewed by the independent assessor prior to the Interview.

Questions must cover the grading criteria and KSBs (core and option) assigned to this assessment method (minimum of one question per criteria with opportunity for all apprentices to access the highest grade available)

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

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

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

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

#### Venue

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

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

Video conferencing can be used to conduct the Interview, but the EPAO must have processes in place to verify the identity of the apprentice and ensure the apprentice is not being aided.

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

### **Supporting material**

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

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

### Reasonable adjustments

The EPAO must have in place clear and fair arrangements for making Reasonable Adjustments for this occupational standard. This should include how an apprentice qualifies for Reasonable Adjustments 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

The Observation and questioning is graded pass or fail only, the Interview underpinned by a portfolio of workplace evidence and the knowledge test assessment methods determine whether a distinction grade is awarded.

### **Grading**

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

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

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

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

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

In order to achieve a 'distinction' overall apprentices must achieve a pass in the Observation with questioning, a distinction in the Interview, and a distinction in the Knowledge test.

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

Assessment method 1 – Knowledge test	Assessment method 2 – Observation with Questioning	Assessment method 3 – Interview, underpinned by portfolio	Overall grading
Any grade	Fail	Any grade	Fail
Any grade	Pass	Fail	Fail
Fail	Pass	Any grade	Fail
Pass	Pass	Pass	Pass
Pass	Pass	Distinction	Pass
Distinction	Pass	Pass	Pass
Distinction	Pass	Distinction	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, and therefore the EPA in the first instance, will be required to re-sit or re-take any failed assessment method(s) only.

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

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

The amount of re-sits and re-takes to be undertaken by an individual apprentice is at the discretion of the employer.

### Roles and responsibilities

Role	Responsibility
Apprentice	<ul> <li>complete the on-programme requirements of the apprenticeship</li> <li>prepare for and complete the EPA</li> </ul>
Employer	<ul> <li>identify when the apprentice has passed the gateway and is ready to undertake their EPA</li> <li>notify the EPAO that the apprentice has passed the gateway</li> </ul>
EPAO	As a minimum EPAOs should:

Independent	As a minimum an independent assessor should:
assessor	<ul> <li>be independent of the apprentice, their employer and training provider(s) i.e. there must be no conflict of interest</li> <li>meet the experience a requirements in accordance with this plan and have had training from their EPAO in terms of good assessment practice, operating the assessment tools and grading</li> <li>attend EPAOs standardisation and training events</li> <li>meet qualification requirements in accordance with the Internal Quality Assurance requirements of this plan</li> </ul>
Training provider	As a minimum the training provider should:  • work with the employer to ensure that the apprentice is given the opportunities to develop the KSBs outlined in the occupational standard and monitor their progress during the on-programme period  • advise the employer, upon request, on the apprentice's readiness for EPA prior to the gateway  • plays no part in the EPA itself

### **Internal Quality Assurance (IQA)**

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

- appoint independent assessors who have:
  - comprehensive experience of roofing i.e. three years or more experience in the sector of relevant experience of the occupation and sector i.e. worked in the sector in the last ten years or can demonstrate current knowledge and skills developed through continued professional development
  - hold a qualification as listed within 'Assessing and Assuring Quality of Assessment', either in the Regulated Qualification Framework (RQF) or the Scottish Credit and Qualifications Framework (SCQF) and may include:
    - Level 3 Certificate in Assessing Vocational Achievement (CAVA)
    - Level 3 Award in Assessing Competence in the Work Environment
    - Level 3 Award in Assessing Vocationally Related Achievement
    - Level 3 Award in Assessing Vocational Achievement or:
    - A1 Assess candidates using a range of methods
    - D32/33 Assess candidate performance using differing sources of evidence.

**Note:** Holders of A1 and D32/33 must assess to the current learning and development assessment criteria.

 provide training for independent assessors in terms of good assessment practice, operating the assessment tools and grading. Assessors must attend standardisation at least once per year.

- 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. EPAOs must ensure that independent
  assessors attend standardisation activity relevant to this occupational standard at least once
  per year.

### **Affordability**

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

- online testing
- using video conference to conduct the interview
- · using an employer's premises, equipment and resources for the Observation

Mapping of knowledge, skills and behaviours (KSBs)
Assessment method 1: Knowledge test

### **Core Knowledge**

- K1. The principles of health, safety and welfare, employment law, and how these are applied in the workplace
- K2. The different techniques and methods used to move, handle and store materials
- K3. How to interpret and use relevant product information and specifications
- K4. The standards and codes of practice that apply to roofing
- K5. How to calculate quantity, length, area and wastage of resources
- K6. The principles of condensation, the factors involved and standard methods of control in roofs
- K7. The principles of insulation and effects on heat loss in roofs
- K8. Basic drawings and how to calculate material quantities from given information
- K9. The principles relating to common defects, and the repair and maintenance of roofs
- K10. Why, when and how health and safety control equipment should be used when undertaking roofing work (e.g. personal protective equipment (PPE) and respiratory protective equipment (RPE)
- K11. How to use, maintain and store hand tools, power tools and associated equipment
- K12. How to work safely at height and use access equipment
- K13. The needs of other workers and how to work effectively with others
- K14. The characteristics, quality, uses, sustainability, limitations and defects associated with roofing products and components used in their own specialism and the wider roofing industry

### **Assessment method 2: Observation with questioning**

#### **Core Skills**

- S1. Work safely and be aware of key health, safety and welfare issues
- S2. Plan and carry out their work to commercial standards of quality and speed
- S3. Move, handle and store resources, complying with relevant legislation and guidance
- S4. Interpret and follow verbal and written work instructions from trade supervisors and site managers
- S5. Select the required materials and resources to carry out the work
- S7. Install related materials and components to a given specification
- S8. Use, maintain and store hand tools, power tools and associated equipment

S9. Access, interpret and use drawings and specifications to carry out work

#### Core Behaviours

- B5. Working effectively: undertake the work in a reliable and productive manner
- B6. Time management: use own time effectively to complete work on schedule

#### **Option 1 Roof Slater and Tiler Skills**

S10. Carry out a range of job tasks including measuring, marking out, fitting, finishing, positioning and securing

### **Option 1 Roof Slater and Tiler Knowledge**

- K17. How to strip and reclaim slates, tiles and fittings for re-use
- K18. How to check areas to be covered, including correct installation of cavity trays, fascia board height, barge boards, hip and valley construction, penetrations, and masonry

### **Option 2 Waterproof Membrane Installer Skills**

- S17. Carry out a range of job tasks including measuring, marking out, fitting, finishing, positioning and securing
- S21. Install reinforced bitumen, single-ply and liquid applied waterproofing systems

### **Option 2 Waterproof Membrane Installer Knowledge**

- K20. The principles of membrane waterproofing systems and how they are applied in routine tasks, such as, preparing surfaces, installing insulation, installing background materials, installing main roof coverings to include bitumen membranes, single ply and liquid applied systems, fixings, fittings and components, roof windows and lights
- K22. The differences between and the characteristics of warm, cold and inverted (waterproofing layer as the base) roofs

#### **Option 3 Roof Sheeter and Cladder Skills**

S26. Carry out a range of job tasks including measuring, marking out, fitting, finishing, positioning and securing

### **Option 3 Roof Sheeter and Cladder Knowledge**

- K23. The principles of sheeting and cladding and how they are applied in routine tasks, to include, assessing structures, removal of existing materials, installing insulation, installing main roof coverings to include composite, standing seam, secret fix, single-skin, fibre cement, and built up systems, flashings, fixings, fittings and components, ventilation systems and roof lights
- K25. How to requisition sheeting and cladding materials

### Assessment method 3: Interview, underpinned by portfolio

#### **Core Skills**

S6. Set up, check and operate plant and/or equipment

#### **Core Behaviours**

- B1. Effective communication: oral, written, listening, body language, presentation
- B2. Team work: work effectively with others with limited supervisions
- B3. Independent working: take responsibility for completing own work
- B4. Logical thinking: use clear and valid reasoning when making decisions
- B7. Adaptability: be able to adjust to changes to work instructions

#### **Option 1 Roof Slater and Tiler Skills**

- S11. Install plain tiles, interlocking tiles, natural slates and fibre-cement slates
- S12. Install underlay, battens and related roofing components
- S13. Install pre-formed lead and/or proprietary flashings
- S14. Install dry and wet fixed products to verges, hips, ridge and valleys
- S15. Install insulation and ventilation products for warm and cold roof construction
- S16. Install roof windows and flashing kits

### **Option 1 Roof Slater and Tiler Knowledge**

- K15. The principles of slating and tiling and how they are applied in routine tasks, such as, setting out roofs, installing insulation, underlay and other background materials, installing main roof coverings, fixings, fittings and components, ventilation and dry fix systems, roof windows, mixing and applying mortar and installing pre-formed lead and/or proprietary flashings
- K16. How to use key dimensions relating to batten gauges and minimum and maximum head lap
- K19. How to requisition slating and tiling materials, such as tiles, slates, underlay, battens, fixings and related materials, fittings and components

#### **Option 2 Waterproof Membrane Installer Skills**

- S18. Clean, dry and prepare surfaces for specified system
- S19. Install vapour control layers to prevent vapour coming through the building to protect insulation
- S20. Install mechanically fixed and/or adhered insulation as required by the given specification
- S22. Terminate waterproofing systems at the perimeter upstands and/or open edges to the given specification
- S23. Maintain and repair flat and/or pitched roofs (in excess of 10 degrees)
- S24. Install perimeter details (edge trims, counter flashings termination bars)
- S25. Work around outlets, pipes, soil and vent fittings, safety systems and roof lights

#### **Option 2 Waterproof Membrane Installer Knowledge**

K21. How to requisition membrane waterproofing materials, such as bitumen membranes, single-ply, liquid applied systems and related materials, fittings and components

Option 3 Roof Sheeter and Cladder Skills		
S27. Assess suitability of structure to receive cladding materials		
S28. Install built-up, standing seam, secret fix, composite and fibre-cement systems and rainwater goods		
S29. Maintain, repair and over-sheet existing roofs		
S30. Install flashings, vents, fittings and components as appropriate to the specification.		
S31. Work around penetrations and upstands		
Option 3 Roof Sheeter and Cladder Knowledge		

### K24. Asbestos awareness

### **Grading descriptors**

To achieve a Pass, the apprentice must meet all core pass requirements plus all pass requirements for their chosen Option.

If any of the pass requirements are not met the apprentice will be awarded a fail grade.

### **Assessment method 1: Knowledge Test**

The following grade boundaries apply to the knowledge test:

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

### **Assessment method 2: Observation with questioning**

KSBs	Pass	
To achieve a Pass, the apprentice must meet all core pass requirements plus all pass requirements for their chosen Option.		
CORE		

### Assessment method 3: Interview, underpinned by portfolio

KSBs	Pass	Distinction		
	To achieve a Pass, the apprentice must meet all core pass requirements plus all pass requirements for their chosen option.	To achieve a Distinction, in addition to the pass criteria the apprentice must also demonstrate all core distinction criteria plus at least 3 from their chosen option:		
	CORE			
S6	Describe the process for setting up, checking and operating plant and/or	Name and give an interpretation of the standards and codes of practice that apply to roofing (B3)		
B1 B2	equipment (S6) Explain what team work is including	Explain the principles relating to common defects and the repair and maintenance of roofs (B4)		

KSBs	Pass	Distinction
В3	how to work effectively with others with limited supervision (B2)	
B4 B7	Explain effective communication including oral, written, listening, body	
	language and presentation (B1)  Explain independent working and how to take responsibility for completing own work (B3)	
	Explain logical thinking and how to use clear and valid reasoning when making decisions (B4)	
	Describe an instance when they have adjusted their work plan to changes in work instructions (B7)	
OPTION 1: ROOF SLATER AND TILER		

S11	Explain how to install plain tiles, interlocking tiles, natural slates and	Describe how to shape, mold and install pre-formed lead and proprietary flashings (S13, K15)
S12 S13	fibre-cement slates (S11)  Explain how to install underlay, battens and related roofing components (S12)	Justify the use of dry and wet fixed products to verges, hips, ridge and valleys for various roof types (S14, K15)
S14	Explain how to install pre-formed lead and/or proprietary flashings (S13)	Describe the reasons why insulation and ventilation products are used in warm and cold roof construction
S15 S16	Explain how to install dry and wet fixed products to verges, hips, ridge and valleys (S14)	(S15, K15) State geometrical formula in explaining how to use key dimensions relating to batten gauges and
K15	Explain how to install insulation and ventilation products for warm and cold roof construction (S15)	minimum and maximum head lap (K15)
K16 K19	Explain how to install roof windows and flashing kits (S16)	
Kij	Describe the principles of slating and tiling and how they are applied in routine tasks (K15)	
	Explain how to use key dimensions relating to batten gauges and minimum and maximum head lap (K16)	
	Explain how to requisition slating and tiling materials, such as tiles, slates, underlay, battens, fixings and related materials, fittings and components	

KSBs	Pass	Distinction
	(K19)	
OPTION 2: WATERPROOF MEMBRANE INSTALLER		

	I <b>-</b>	
S18	Explain how to clean, dry and prepare surfaces for specified system (S18)	Describe the reasons why vapour control layers are installed and the consequences of incorrect
S19	Explain how to install vapour control	installation (S19,)
S20	layers to prevent vapour coming through the building to protect insulation (S19)	Describe why insulation would be required when applying waterproof membrane systems (S20)
S22	Explain how to install mechanically	Explain why waterproofing systems need to terminated at the perimeter upstands and open
S23	fixed and/or adhered insulation as required by the given specification (S20)	edges (S22,)  Describe why roof covered with waterproofing
S24	Explain how to terminate waterproofing	systems need to be maintained and give reasons for using specific repair technics with each system (S23)
S25	systems at the perimeter upstands and/or open edges to the given	
K21	specification (S22)	
	Explain how to maintain and repair flat and/or pitched roofs (in excess of 10 degrees) (S23)	
	Explain how to install perimeter details (edge trims, counter flashings termination bars) (S24)	
	Explain how to work around outlets, pipes, soil and vent fittings, safety systems and roof lights (S25)	
	Describe the requisition of membrane waterproofing materials (K21)	
	OPTION 2: POOF SH	EETER AND CLADDER
S27	Explain how to assess suitability of structure to receive cladding materials	State the criteria used to assess the suitability of a structure prior to installing cladding materials (S27)
S28	(S27)	Describe why roof sheeting and cladding needs to be
S29	Explain how to install built-up, standing seam, secret fix, composite and	maintained and how repairs can be completed for at least three common faults (S29)
S30	fibrecement systems and rainwater goods (S28)	Explains why they need to ensure the integrity of work around penetrations and upstands (S31)
S31	Explain how to maintain, repair and over-sheet existing roofs (S29)	
K24	Explain how to install flashings, vents, fittings and components as appropriate to the specification. (S30)	
KSBs	Pass	Distinction

Explain how to work around penetrations and upstands (S31)	
Describe the principles of asbestos awareness (K24)	