



# End-point assessment plan for Design and Construction Management (Degree) apprenticeship standard

Apprenticeship standard number	Level of this end point assessment (EPA)	Integrated
ST0044	6	No

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## Introduction and overview

This document sets out the requirements for end-point assessment (EPA) for the Design and Construction Management (Degree) 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 Design and Construction Manager apprentices, their employers and training providers.

Full time apprentices will typically spend 48 months on-programme (before the gateway) working towards the occupational standard, with a minimum of 20% off-the-job training. All apprentices will spend a minimum of 12 months on-programme.

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

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

As a gateway requirement and prior to taking the EPA, apprentices must complete all approved qualifications mandated in the Design and Construction Management standard.

These are:

BSc(Hons) Construction Engineering Management or BSc(Hons)/BA(Hons) Architectural Technology, or equivalent design and construction discipline Level 6 qualification

Industry certificates in Site Safety Plus Site Managers' Safety Training Scheme and Site Environmental Awareness Training Scheme which are required for safe operations in the workplace

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

The EPA must be completed within an EPA period lasting typically 6 month(s), beginning when the apprentice has passed the EPA gateway.

The EPA consists of 3 discrete assessment methods.

The individual assessment methods will have the following grades:

### **Assessment method 1:** Online test

- Pass
- Fail

### **Assessment method 2:** Project

- Pass
- Fail
- Distinction

### **Assessment method 3:** Professional discussion

- Pass
- Fail
- Distinction

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

- Pass
- Fail
- Distinction

## EPA summary table

<b>On-programme</b> (typically 48 months)	Training to develop the occupation standard's knowledge, skills and behaviours.
<b>End-point Assessment Gateway</b>	<ul style="list-style-type: none"> <li>• Employer is satisfied the apprentice is consistently working at, or above, the level of the occupational standard.</li> <li>• English and mathematics Level 2</li> </ul> <p>Apprentices must complete the following approved qualifications mandated in the standard:</p> <ul style="list-style-type: none"> <li>• BSc(Hons) Construction Engineering Management or BSc(Hons)/BA(Hons) Architectural Technology, or equivalent design and construction discipline Level 6 qualification</li> <li>• Site Safety Plus – Site Managers' Safety Training Scheme</li> <li>• Site Safety Plus – Site Environmental Awareness Training Scheme</li> </ul> <p>Apprentices must also complete:</p> <ul style="list-style-type: none"> <li>• An online or paper-based portfolio of evidence which demonstrates how the apprentice has met each of the knowledge, skills and behaviour statements in the standard. The portfolio can be used to help inform the employer that the apprentice is fully prepared to commence the End-point assessment process.</li> </ul>
<b>End Point Assessment</b> (which would typically take 6 months)	<p>Assessment Method 1: Online test</p> <p>With the following grades:</p> <ul style="list-style-type: none"> <li>• Pass</li> <li>• Fail</li> </ul> <p>Assessment Method 2: Project</p> <p>With the following grades:</p> <ul style="list-style-type: none"> <li>• Pass</li> <li>• Fail</li> <li>• Distinction</li> </ul> <p>Assessment Method 3: Professional discussion</p> <p>With the following grades:</p> <ul style="list-style-type: none"> <li>• Pass</li> <li>• Fail</li> <li>• Distinction</li> </ul>

## Length of end-point assessment period:

The EPA must be completed within an EPA period lasting typically 6 month(s), beginning when the apprentice has passed the EPA gateway.

The supporting materials defined on Page 3 are required in order to pass through the gateway.

If an EPA assessment method is failed, it should be retaken within the EPA period and in-line with the requirements set out in this assessment plan.

## Order of assessment methods

The assessment methods must be delivered in the following order:

- Online Test – The Online Test underpins the knowledge required to work as a Design and Construction Manager so it needs to be completed and passed as the first element of the End-point assessment process.
  - Ideally, the Online Test should be taken and achieved in Month 1 following the gateway.
- Project – Apprentices must pass the project before taking the professional discussion.
  - The Project's subject, title and scope is agreed at the gateway.
  - The Project is then submitted following achievement of the Online Test by the end of Month 4 following the gateway. The Project grade should be communicated to the apprentice no later than 2 weeks following submission and assessment.
- Professional Discussion –
  - Ideally, the Professional Discussion should be taken and achieved by the end of Month 5 following the gateway.
  - Month 6 will allow for any re-sits or re-takes that may be required; these must be taken during the EPA period

## 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 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:

English and mathematics at 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.

An online or paper-based portfolio of evidence which demonstrates how the apprentice has met each of the knowledge, skills and behaviour statements in the standard.

- There must be at least one piece of evidence relating to each knowledge, skill and behaviour in the standard.
- One piece of evidence can be referenced against more than one knowledge, skill or behavioural requirement.
- The portfolio will typically contain 40 pieces of evidence however a qualitative rather than quantitative approach is recommended.
- The portfolio should contain written accounts of real work activities and experience and be referenced against the knowledge, skills and behaviours, supported by appropriate evidence, including photographic evidence and work products, work instructions, safety documentation, company policies and procedures as appropriate to the activities. Progress review documentation should also be included.
- The portfolio must be verified by the apprentice's employer as being a true reflection of the apprentice's experience.
- The apprentice's Manager/Mentor will typically support the development of the portfolio in accordance with company policy and procedures.
- The portfolio produced must be the apprentice's work only; employer support should not extend to any direct contributions to the collation or production of the portfolio. Reflective accounts and self-evaluations should not be included as evidence.
- The portfolio is not assessed directly but informs the Summary of Experience which underpins the professional discussion.

Apprentices must complete the following approved qualifications as mandated in the standard:

- BSc(Hons) Construction Engineering Management or BSc(Hons)/BA(Hons) Architectural Technology, or equivalent design and construction discipline Level 6 qualification
- Site Safety Plus – Site Managers’ Safety Training Scheme
- Site Safety Plus – Site Environmental Awareness Training Scheme

For Online test:

- no specific requirements

For Project:

- The Project’s subject, title and scope will be agreed between the apprentice, the employer and the EPAO at the gateway

For Professional discussion, the apprentice will be required to submit:

- Apprentices will be required to provide a Summary of Experience in advance of the professional discussion. The Summary of Experience will typically be a 2700 word (with a 10% tolerance either way) written report. The report should be presented with an introduction explaining the purpose of the summary, then with a heading and a summary for each of the knowledge, skills and behaviours that will be assessed using this method, showing how each of these have been achieved. The Summary of Experience will be based upon the apprentice’s portfolio of evidence. The EPAO should ensure that the assessor has received the Summary of Experience at least 2 weeks prior to the agreed professional discussion date. The summary of experience will then be reviewed by an independent assessor prior to the professional discussion. Apprentices will also be able to use their Summary of Experience during the Professional Discussion to underpin and explain how they met the KSB requirements during their apprenticeship. The Summary of Experience will not be assessed directly but will underpin the Professional Discussion.

## Assessment methods

### Assessment Method 1: Online test (This Method has 1 component.)

#### Method 1 Component 1: Online test

##### Overview

The rationale for this assessment method is:

The Online Test will assess and underpin the knowledge required to work as a Design and Construction Manager.

The Online Test will cover the knowledge defined in the Mapping Section that will be assessed using this method. The online test will consist of 20 multiple choice questions. Each of the questions will be followed by 4 possible answers. Questions will also include scenario-based problems in the same multiple-choice format. The EPAO will develop a question bank large enough to mitigate predictability from which the 20 questions will be randomly selected.

## Test Format

The test will be:

- Computer based

It will consist of 20 questions. These questions will consist of:

- Questions will be multiple choice and will include a mix of knowledge and scenario-based questions. Of the 20 questions, 15 will relate to Health, Safety and Welfare regulatory obligations in construction [K2, K3] and 5 to risk and effect on project management [K11]. 14 of the 20 questions (11 relating to Health, Safety and Welfare regulatory obligations in construction, 3 to risk and effect on project management) will be scenario based.

## Test administration

Apprentices must have 40 minutes to complete the test.

The test will be 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 an 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/examination 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/examination.

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

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

## Marking

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

For each question, there will be four answers available. There will be 1 fully correct answer which accurately reflects industry practice and legal and regulatory requirements and is worth one mark.

Any wholly incorrect or missing answers must be assigned 0 marks.

## Question and resources development

Questions must be written by EPAOs and must be relevant to the occupation and employer settings. EPAOs must develop 'question banks' of sufficient size to prevent predictability and review them regularly (and at least once a year) to ensure they, and the questions they contain, are fit for purpose. Predictability of questions may also be reduced by the test being undertaken under controlled conditions either at an assessment centre operated by the EPAO or at the apprentice's place of work with former approval of the EPAO. This approval must include arrangements for independent invigilation. These arrangements must be in place before the test takes place. The EPAO will develop a question bank large enough to mitigate predictability from which 20 questions will be randomly selected.

## Required supporting material

As a minimum EPAOs will 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/exams and an invigilation policy.

## Assessment Method 2: Project (This Method has 1 component.)

### Method 2 Component 1: Project

#### Overview

The project is compiled after the apprentice has gone through the Gateway process.

The work-based project should be designed to ensure that the apprentice's work meets the needs of the business, is relevant to their role and allows the relevant KSBs to be demonstrated for the EPA. Therefore, the project's subject, title and scope will be agreed between the employer and the EPAO at the gateway. The employer will ensure it has a real business application and the EPAO will ensure it meets the requirements of the EPA (including suitable coverage of the KSBs assignment to this assessment method). The EPAO should sign-off the project subject, title and scope to confirm its suitability in agreement with the apprentice and employer at the gateway.

The project scope must include:

- 500 word synopsis, completed by the apprentice, including details of the apprentice's role and the relevance of the project to the KSB's assigned to the assessment method
- The timeline for the project
- The date of the proposed submission of the written project

The rationale for this assessment method is:

The Project will have a factual business application. The main duties and tasks associated with the Design and Construction Manager occupation are to manage design aspects of construction projects. Therefore, detailing a work-based project is relevant to the Design and Construction Manager working environment. The project should draw on the work the apprentice is doing, the standard of this work and how they are doing it including how they are approaching the work, dealing with any issues arising and applying any lessons learnt. Apprentices will undertake the project to cover the skills, knowledge and behaviour defined in the Mapping Section that will be assessed using this method.

#### Delivery

Apprentices will conduct a project in the form of a report.

The project is compiled after the apprentice has gone through the Gateway process. The apprentice will conduct their project and submit it to the EPAO after a maximum of 4 month(s) of the EPA start date. The project will have a typical duration of 3 months.

The employer will ensure the apprentice has sufficient time and the necessary resources, within this period, to plan and undertake the project.

Whilst completing the project, the apprentice should be subject to the supervision arrangements outlined below:

- Normal work-based supervisor or line manager

The project must be in the form of an electronic document

The project may be based on any of the following:

- An idea/opportunity; see some sample titles below and consider the necessary coverage of all KSB's:
- Construction Design Management – A strategic Overview
- Digital Technologies – Their Place in Design/Construction Management
- Construction Technology – Innovation versus Traditional

As a minimum all projects must include:

The project should be completed within four months of the agreement of the project by the EPAO. The project must cover the knowledge, skills and behaviours set out in Mapping Section and must be verified by the apprentice's employer that the project is a true reflection of the apprentice's involvement and the report is their own work.

The project will be presented as a 3000 word (with a 10% tolerance either way) written report, supported with appropriate imagery, with a clearly presented methodology including analysis and presentation of client requirements, risk assessment of designs, implementation of design solutions, control documentation, design information, quality inspection reports, suggestions for improvement with innovative solutions, measurement of progress against budget and identification and action plan of own development needs.

The project must also include the following, as a minimum:

- Background
- Project brief and objectives detailing targets
- Project research
- Project plan
- Implementation – how targets were achieved
- Risk analysis
- The role the apprentice played, the contribution made and the technical skills used
- Project Outcomes
- Challenges faced/lessons learnt by the apprentice
- The apprentice must provide supporting evidence relating to the project in an appendix. Evidence could include drawings, models, spreadsheets, financial reports, data reports, build specifications, quality/compliance records or fault reports, pictures or links to video clips. This list is not definitive and other relevant sources are permissible. The appendix must include a mapping of the evidence to the relevant KSBs for this assessment method. It is expected that some evidence may cover multiple KSBs. The annex must also include a statement from the employer authenticating the apprentice's evidence and achievements.

The project will be assessed by an independent assessor. The assessor will give a Fail, Pass or Distinction grade in accordance with the grading criteria in the Grading Section to give the apprentice's project grade. The assessor will award a Pass grade if the apprentice meets all the pass criteria and a Distinction grade if the apprentice meets all the pass criteria and all the distinction criteria. The project grade must be advised to

the apprentice within two weeks of submission of the project for assessment. This date must be at least two weeks before the date of the professional discussion. Apprentices must pass the project before taking the professional discussion. See the Re-takes/Re-sits Section for information regarding retakes/re-sits.

The project will have a word count of 3000. A tolerance on the word count of plus or minus 10% is allowed. Appendices, references, diagrams etc. will not be included in this total.

The project must map, in an appendix, how it evidences the relevant KSBs for this assessment method.

### Marking

The independent assessor will review and mark the project in a timely manner, as determined by the EPAO, and without extending the EPA unnecessarily. Similarly, all quality control processes will also be conducted in a timely manner, as determined by the EPAO.

### Required supporting material

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

Guidance document for apprentices describing the project requirements / parameters

Marking sheet to record evidence and gaps

Mark scheme document to mark the Project Fail, Pass or Distinction using the grading descriptors in the Grading Table

## Assessment Method 3: Professional discussion (This Method has 1 component.)

### Method 3 Component 1: Professional discussion

#### Overview

This assessment will take the form of a professional discussion, which must be appropriately structured to draw out the best of the apprentice's competence and excellence and cover the KSBs assigned to this assessment method. It will involve the questions that will focus on coverage of prior learning or activities.

The professional discussion can take place in any of the following:

- Employer's premises
- A suitable venue selected by the EPAO (e.g. a training provider's premises)

The rationale for this assessment method is:

Apprentices will undertake a Professional Discussion to cover the skills, knowledge and behaviours defined in the Mapping Section that will be assessed using this method.

Prior to the professional discussion, the apprentice will have submitted a summary of experience based upon their portfolio of evidence. The summary of experience will be reviewed by an assessor who will formulate the questions for the professional discussion. The summary of experience is not directly assessed. The questions must be consistent in terms of demand and level for all apprentices. Apprentices will also be able to use their summary of experience during the professional discussion to underpin and explain how they met the KSB requirements being assessed using this method, during their apprenticeship.

The professional discussion will be in the form of an interview with one assessor and will take one hour + 10% in order to allow for an answer that has already begun to be completed. The professional discussion can

be conducted face to face or via an online platform. The online platform must include a video link so that apprentices can see the assessor and the assessor can see the apprentice to ensure the apprentice is not being aided in some way. The identity of the apprentice must be checked and confirmed. The location or platform will be sourced by the EPAO. The professional discussion will explore with the apprentice what has been produced in the summary of experience. The assessor will:

- Clarify the evidence in the summary of experience
- Confirm and validate the behaviours and how they have been demonstrated
- Explore aspects of the work more fully including how it was carried out and the underpinning knowledge
- Explore the practical application of knowledge, skills and behaviours
- Give a Fail, Pass or Distinction grade in accordance with the grading criteria in the Grading Section to give the apprentice's professional discussion grade. The assessor will award a Pass grade if the apprentice meets all the pass criteria and a Distinction grade if the apprentice meets all the pass criteria and all the distinction criteria.

### Delivery

An independent assessor will conduct and assess the professional discussion.

The professional discussion must last for 60 minutes. The independent assessor has the discretion to increase the time of the professional discussion by up to 10% to allow the apprentice to complete their last answer. Further time may be granted for apprentices with appropriate needs, in-line with the EPAO's Reasonable Adjustments policy.

During this method, independent assessors must use the questions that have been developed by the EPAO for the Professional Discussion. Assessors can also generate and record their own questions, to rephrase questions when further clarification is required by the apprentice.

The professional discussion will be conducted as set out here:

Video conferencing can be used to conduct the professional discussion, 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.

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

The independent assessor will make all grading decisions.

### Venue

The professional discussion should take place in a quiet room, free from distractions and influence.

### Other relevant information

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

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

Independent assessors must be developed and trained by the EPAO in the conduct of carrying out a professional discussion and reaching a consistent judgement.

The professional discussion may be observed by people who will play the following role(s):

N/A

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

Example template for summary of experience shown in Appendix A

Guidance document for apprentices describing the professional discussion requirements / parameters

Marking sheet to record evidence and gaps

Mark scheme document to mark the professional discussion Fail, Pass or Distinction using the grading descriptors in the Grading Table.

## Weighting of assessment methods

Independent assessors will grade apprentices as Fail, Pass or Distinction using all the information gained in the EPA process described above and with reference to the grading criteria defined in the Grading section. The overall apprenticeship grade will be based on the outcomes of the three EPA components: the online test, the project and the professional discussion as detailed in the overall EPA grading section. These components are equally weighted.

A Pass represents achievement of at least the minimum standard for the industry and for which apprentices have achieved all the knowledge and skills required within the standard and demonstrated a consistent level of behaviours.

## Grading

### Assessment method 1: Online test

KSBs	Fail	Pass
K2 K3 K11	Apprentice achieves a score of <15 for the online test.	Apprentice achieves a score of $\geq 15$ to $\leq 20$ for the online test.

### Assessment method 2: Project

KSBs	Fail	Pass	Distinction
K1 K4 K5 K7 K8 K9  S1 S2 S3 S4 S6 S7 S8 S9 S10 S11  B6	<b>Does not meet the pass criteria</b>	<p><b>Meets all the pass criteria defined below:</b></p> <p>Identifies, assesses and challenges client requirements considering user factors, as well as evaluating resources and assessing any environmental impact. Conducts feasibility studies so that the design reflects client needs whilst managing threats and hazards to optimise project opportunities (K1, S1, S10)</p> <p>Prepare, present and agree proposals for project briefs, make recommendations, develop programmes and develop detailed designs for construction. (K4, S6)</p> <p>Select and form a design team, agreeing responsibilities and</p>	<p><b>Meets all the pass criteria plus all the distinction criteria defined below:</b></p> <p>Critically evaluates designs to maximise opportunities for the client and identifies future innovations to solve complex problems, whilst continuously monitoring threats and hazards to minimise risks to the client and business (K1, S1, S10)</p> <p>Leads a design team to prepare, present, successfully implement and evaluate a full design solution based on client requirements (K4, S6, S4, K7, S7, B6,)</p> <p>Leads the project handover following completion (S11)</p>

		<p>processes prior to construction. Monitor the design team's working methods during construction, including the preparation of design and construction programmes. (K5, S4)</p> <p>Identify and prepare detailed designs and manage the project model (BIM), including integrating, evaluating, managing expectations and recommending changes for improvements whilst ensuring document controls are in place (K7, S7, B6)</p> <p>Evaluate and select materials, components and systems in order to generate design solutions and plan associated construction activities (K8)</p> <p>Select from various procurement methods and contracts, understanding their relative merits (K9)</p> <p>Identifies, assesses and manages sustainable solutions to client requirements as well as manages hazards and risks to minimise environmental impact of project over building lifecycle (S2, S3)</p> <p>Select and evaluate tenders, choose and agree appropriate specialist contractors and control contractual compliance during construction (S8)</p> <p>Work with the project team to enhance value and/or reduce costs while meeting the project brief (S9)</p> <p>Manage project handover and completion and assemble operations and Maintenance Manuals for the building's end users (S11)</p>	
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## Assessment method 3: Professional discussion

S5 Be able to assess, advise and meet statutory regulations and legal constraints.

KSBs	Fail	Pass	Distinction
K6 K10 S5 B1 B2 B3 B4 B5 B7	<b>Does not meet the pass criteria</b>	<b>Meets all the pass criteria defined below:</b> Demonstrate working in collaborative teams, both at project and organisational levels and how to lead others towards common goals. Demonstrates communication and negotiation in developing and maintaining relationships with other stakeholders and the application of personal strengths and weaknesses in group situations (K6, B4, B5) Explains value management including value engineering so that a project's value for money is maximized (K10) Explains how they assess, advise and meet statutory regulations and legal constraints within construction projects (S5) Works within own level of competence and knows when to seek advice from others and when to be able to advise clients (B1) Demonstrates the ability to work within the Chartered Institute of Architectural Technology's or Chartered Institute of Building (CIOB) code of conduct and demonstrate integrity and professionalism in all activities (B2) Demonstrates a focus on areas for process improvement and learns from innovative solutions. Challenges current practice and is open minded about how to	<b>Meets all the pass criteria plus all the distinction criteria defined below:</b> Demonstrates the ability to lead an effective team through a consultative approach. Maximises own strengths while complimenting own weaknesses with other team members strengths. Actively encourages continuous feedback for both team and self-improvement (K6, B1, B4, B5, B7) Leads by example as a practitioner of value management and value engineering (K10) Leads a team through regular discussions focusing on areas for process improvement and implementing innovative solutions where required. Evaluates current ways of working and challenges at all levels, working with the project team and client to improve and implement new ways of working where required (B3)

		<p>improve and implement a new way of working (B3)</p> <p>Identifies own development needs and takes appropriate action to meet those needs. Uses own knowledge and expertise for the benefit of others (B7)</p>	
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## Overall EPA grading

To achieve a pass or higher grade the apprentice must achieve a minimum of a pass in each of the end point assessment components. Grades from individual assessment methods should be combined in the following way to determine the grade of the EPA as a whole:

Assessment method 1 Online test	Assessment method 2 Project	Assessment method 3 Professional discussion	Overall grading
Fail	Any grade	Any grade	<b>Fail</b>
Any grade	Fail	Any grade	<b>Fail</b>
Any grade	Any grade	Fail	<b>Fail</b>
Pass	Pass	Pass	<b>Pass</b>
Pass	Pass	Distinction	<b>Pass</b>
Pass	Distinction	Pass	<b>Pass</b>
Pass	Distinction	Distinction	<b>Distinction</b>

## Roles and responsibilities

Role	Responsibility
Apprentice	<ul style="list-style-type: none"> <li>Participate in development opportunities to improve their knowledge skills and behaviours as outlined in the standard</li> <li>Meet all gateway requirements when advised by the employer</li> <li>Understand the purpose and importance of EPA and undertake EPA</li> </ul>
Employer	<ul style="list-style-type: none"> <li>Support the apprentice to achieve the KSBs outlined in the standard to their best ability</li> <li>Determine when the apprentice is working at or above the level outlined in the standard and is ready for EPA</li> <li>Select the EPAO</li> <li>Confirm all EPA gateway requirements have been met</li> <li>Confirm arrangements with EPAO for the EPA (who, when, where) in a timely manner</li> </ul>

	<ul style="list-style-type: none"> <li>• Ensure apprentices are well prepared for the EPA</li> </ul>
EPAO	<p>As a minimum EPAOs should:</p> <p>The EPAO will internally provide quality assurance by:</p> <ul style="list-style-type: none"> <li>• Provide assessor training at least once a year</li> <li>• Arrange new assessors to undertake mock assessments</li> <li>• Sample assessment decisions. A minimum of 20% of assessment decisions to be sampled. Sampling should be of all elements of the entire process of assessment including submissions and assessor feedback and should be used to review consistency of feedback and approach by assessors</li> <li>• Require assessors to attend at least one standardisation event per year and deliver standardisation events</li> <li>• Undertake moderation of assessment decisions. The method used must ensure consistency of grading between assessors. Moderation should review all marks of all assessors to enable consideration of the overall standard and to enable comparison of the marking standards applied by different assessors and for different components of the EPA.</li> <li>• Adopt a performance management process for assessors and use training to address poor performance</li> <li>• Undertake annual performance appraisals of assessors</li> <li>• Appoint internal verifiers</li> </ul>
Independent assessor	<p>As a minimum an Independent assessor should:</p> <ul style="list-style-type: none"> <li>• Understand the standard and assessment plan</li> <li>• Deliver the end-point assessment in-line with the EPA plan</li> <li>• Comply to the IQA requirements of the EPAO</li> <li>• Be independent of the apprentice, their employer and training provider(s) i.e. there must be no conflict of interest</li> <li>• Satisfy the criteria outlined in this EPA plan</li> <li>• Hold or be working towards an independent assessor qualification e.g. A1 and have had training from their EPAO in terms of good assessment practice, operating the assessment tools and grading</li> <li>• 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)</li> <li>• Have a minimum of 3 years post professional qualification experience</li> <li>• Be a chartered professional of the CIAT, CIOB or other recognised professional body</li> <li>• Have evidence of up to date CPD (as required by the relevant professional body)</li> <li>• Have experience of assessing learners or willingness to undertake training</li> </ul>
Training provider	<p>As a minimum the training provider should:</p> <ul style="list-style-type: none"> <li>• Work with the employer to ensure that the apprentice is given the opportunities to develop the KSBs outlined in the standard and monitor their progress during the on-programme period</li> </ul>

- |  |   |
|--|---|
|  | <ul style="list-style-type: none"> <li>• Advise the employer, upon request, on the apprentice's readiness for EPA prior to the gateway</li> <li>• Play no part in the EPA itself</li> </ul> |
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## Internal Quality Assurance (IQA)

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

- The EPAO will provide independent assessment of the apprentice's knowledge, skills and behaviour through the computer marked online test and assessment of the project and professional discussion. All EPAOs must be on the Register of Apprentice Assessment Organisations.
- Appoint independent assessors who are members of relevant professional bodies.
- Provide training for independent assessors in terms of good assessment practice, operating the assessment tools and grading
- Have robust quality assurance systems and procedures that support fair, reliable and consistent assessment across the organisation and over time.
- Operate induction training and standardisation events for independent assessors when they begin working for the EPAO on this standard and before they deliver an updated assessment method for the first time.
- Comply with the standardisation and moderation requirements as defined with the Roles and Responsibilities table.

## 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/re-take any failed assessment methods only.

Any assessment method re-sit or re-take must be taken during the EPA period, 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.

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.

## Affordability

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

- Online assessment
- Using an employer's premises

## Professional body recognition

This Apprenticeship will include the knowledge, skills and behaviours typically required to achieve full member or chartered status with the industry's recognised professional bodies. The final assessment process for this Apprenticeship will typically be partly representative of the review process required for professional registration.

## Reasonable adjustments

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

# Mapping of knowledge, skills and behaviours (KSBs)

## Assessment method 1: Online test

Knowledge
<b>K2</b> Know how to identify control and mitigate hazards and risks and incorporate health and safety considerations into design at an early stage and ensure compliance with associated regulations.
<b>K3</b> Know how to assess and advise on regulatory and legal requirements and constraints including Construction Design and Management (CDM) Regulations and Building Regulations.
<b>K11</b> Understand the nature of risk and its effect on the management of a project

## Assessment method 2: Project

Knowledge
<b>K1</b> Know how to identify, assess and challenge client requirements and user factors, evaluate resources and assess environmental impact.
<b>K4</b> Know how to prepare, present and agree proposals for client briefs and develop design programmes to meet the requirements of the brief.
<b>K5</b> Know how to select and form a design team and agree responsibilities and processes prior to construction and monitor design team's working methods during construction, including the preparation of design and construction programmes.
<b>K7</b> Know how to create and manage design information and the control of documentation associated with design.
<b>K8</b> Know how to evaluate and select materials, components and systems. To be able to generate design solutions and plan associated construction activities.
<b>K9</b> Know how to select from various procurement methods and contracts, understanding their relative merits.

Skills
<b>S1</b> Be able to identify and assess client and user requirements and conduct feasibility studies so that the design reflects client needs.
<b>S2</b> Be able to identify, assess and manage sustainable solutions to client requirements and minimise environmental impact of project over building lifecycle.
<b>S3</b> Be able to identify, assess and manage hazards and risks throughout the project lifecycle.
<b>S4</b> Be able to select, form and manage the project team and agree responsibilities and processes
<b>S6</b> Be able to prepare, present and agree proposals for project briefs, make recommendations, develop programmes and develop detailed designs for construction.

<b>S7</b> Be able to identify and prepare detailed designs and manage the project model (BIM), including integrating, evaluating and recommending changes.
<b>S8</b> Be able to select and evaluate tenders, choose and agree appropriate specialist contractors and control contractual compliance during construction.
<b>S9</b> Be able to work with the project team to enhance value and/or reduce costs while meeting the project brief.
<b>S10</b> Be able to identify, assess and manage threats and hazards while optimising project opportunities
<b>S11</b> Be able to manage project handover and completion and assemble operations and Maintenance Manuals for the building's end users.

### Behaviours

**B6** Demonstrate knowledge and ability to manage expectations and identify improvements

## Assessment method 3: Professional discussion

### Knowledge

**K6** Understand the importance of working in teams and how to lead others towards common goals. Know how to develop and maintain relationships with other stakeholders.

**K10** Understand and be a practitioner of value management including value engineering so that the project's value for money is maximised.

### Skills

**S5** Be able to assess, advise and meet statutory regulations and legal constraints.

### Behaviours

**B1** Be able to work within own level of competence and know when to seek advice from others and when to be able to advise clients.

**B2** Work within the Chartered Institute of Architectural Technology's or Chartered Institute of Building (CIOB) or equivalent professional body's code of conduct and demonstrate integrity and professionalism in all activities.

**B3** Focus on areas for process improvement and learn from innovative solutions. Challenge current practice and be open minded about how to improve and implement a new way of working.

**B4** Understand the existence of team dynamics and application of personal strengths and weaknesses in group situations. Awareness of collaborative frameworks and contract / organisational level of collaboration.

**B5** Be able to work with others towards common goals and understand different techniques for communication and negotiation.

**B7** Identify own development needs and take appropriate action to meet those needs. Use own knowledge and expertise for the benefit of others.

## Appendix A: Example Template for the Summary of Experience

The Summary of Experience should reflect the role and level of the activities undertaken by the apprentice in the KSBs below

<b>KNOWLEDGE</b>	<b>APPRENTICE STATEMENT OF HOW KNOWLEDGE HAS BEEN GAINED</b> <i>(approximately 250 words per area of knowledge)</i>	<b>EXAMPLES OF WORK TASKS UNDERTAKEN THAT HAVE USED THIS KNOWLEDGE</b> <i>(approximately 50 words per area of knowledge)</i>
<b>K6 Teamwork</b> Understand the importance of working in teams and how to lead others towards common goals. Know how to develop and maintain relationships with other stakeholders.		
<b>K10 Value Management</b> Understand and be a practitioner of value management including value engineering so that the project's value for money is maximised.		
<b>SKILL</b>	<b>APPRENTICE STATEMENT OF HOW KNOWLEDGE HAS BEEN GAINED</b> <i>(approximately 250 words per area of knowledge)</i>	<b>EXAMPLES OF WORK TASKS UNDERTAKEN THAT HAVE USED THIS KNOWLEDGE</b> <i>(approximately 50 words per area of knowledge)</i>
<b>S5 Regulations</b> Be able to assess, advise and meet statutory regulations and legal constraints.		

<b>BEHAVIOURS</b>	<b>APPRENTICE STATEMENT OF HOW BEHAVIOUR HAS BEEN DEMONSTRATED THROUGH LEARNING AND WORK EXPERIENCE (approximately 250 words per</b>	<b>EXAMPLES OF WORK WHERE BEHAVIOUR HAS BEEN ADOPTED (approximately 50 words per behaviour)</b>
<p><b>B1 Exercise Professional Judgement</b></p> <p>Be able to work within own level of competence and know when to seek advice from others and when to be able to advise clients.</p>		
<p><b>B2 Demonstrate Commitment to Code of Ethics</b></p> <p>Work within the Chartered Institute of Architectural Technology's or Chartered Institute of Building (CIOB) code of conduct and demonstrate integrity and professionalism in all activities.</p>		
<p><b>B3 Innovation</b></p> <p>Focus on areas for process improvement and learn from innovative solutions. Challenge current practice and be open minded about how to improve and implement a new way of working.</p>		
<p><b>B4 Collaboration</b></p> <p>Understand the existence of team dynamics and application of personal strengths and weaknesses in group situations. Awareness of collaborative frameworks and contract / organisational level of collaboration.</p>		
<p><b>B5 Teamworking and communication</b></p> <p>Be able to work with others towards common goals and understand different techniques for communication and negotiation.</p>		

**B7 Maintain CPD**

Identify own development needs and take appropriate action to meet those needs. Use own knowledge and expertise for the benefit of others.