City & Guilds Level 2 Technical Award in Constructing and Maintaining the Built Environment (6720-24)

Version 1.3 (April 2024)

Qualification Handbook

Qualification at a glance

Industry area	Construction
City & Guilds qualification number	6720-24
Age group	14 – 16 (Key Stage 4)
Assessment	This qualification will be assessed through, • One externally set, externally moderated assignment • One externally set, externally marked exam, sat under examination conditions
Grading	This qualification is graded Pass/Merit/Distinction/Distinction* For more information on grading, please see Section 6: Grading.
Approvals	This qualification requires full centre and qualification approval
Support materials	Sample assessments Guidance for delivery Guidance on use of marking grids
Registration and certification	Registration and certification of this qualification is through the Walled Garden and is subject to end dates.
External quality assurance	This qualification is externally quality assured by City & Guilds. Internally marked assignments are subject to external moderation. There is no direct claim status available for this qualification.

Title and level	Size (GLH)	TQT	City & Guilds qualification number	Ofqual accreditation number
City & Guilds Level 2 Technical Award in Constructing and Maintaining the Built Environment	120	160	6720-24	610/0657/9

Version and date	Change detail	Section
1.0 May 2022	Initial version.	All
1.1 July 2022	Cap on number of resits removed.	Administration
1.2 March 2024	Change to reference of grade scale from X/P/M/D to U/P/M/D	6. Grading
1.3 April 2024	Revision to UMS scores in UMS grade table	6. Grading

Contents

1	**Introduction**	**6**
	What is this qualification about?	6
	Qualification structure	8
	Total qualification time (TQT)	8
	Assessment requirements	8
2	**Centre requirements**	**9**
	Approval	9
	Resource requirements	9
	Learner entry requirements	9
3	**Delivering technical qualifications**	**10**
	Delivering a Technical Award – Key tips	10
	Support materials	11
4	**Assessment**	**12**
	Summary of assessment methods and conditions	12
	What is synoptic assessment?	13
	How the assignment is synoptic for this qualification	13
	External exam for stretch, challenge and integration	13
	Terminal assessment	13
	Assessment objectives	14
	Exam specification	16
5	**Moderation and standardisation of assessment**	**17**
	Supervision and authentication of internally assessed work	17
	Internal standardisation	17
	Internal appeal	17
	Moderation	17
	Post-moderation procedures	18
	Centres retaining evidence	18
6	**Grading**	**19**
	Awarding individual assessments	19
	Grade descriptors	19
	Awarding grades and reporting results	20
7	**Administration**	**22**
	External quality assurance	22
	Enquiries about results	22
	Re-sits and shelf-life of assessment results	23
	Factors affecting individual learners	23
	Malpractice	23
	Access arrangements and special consideration	23
Unit 201	**Working in the built environment**	**25**

	What is this unit about?	25
	Learning outcomes	25
	Scope of content	26
	Guidance for delivery	27
Unit 202	**Construction methods and materials**	**29**
	What is this unit about?	29
	Learning outcomes	29
	Scope of content	30
	Guidance for delivery	32
Unit 203	**Maintenance, repair and refurbishment of buildings**	**34**
	What is this unit about?	34
	Learning outcomes	34
	Scope of content	35
	Guidance for delivery	37
Unit 204	**Using tools to construct and maintain buildings**	**38**
	What is this unit about?	38
	Learning outcomes	38
	Scope of content	39
	Guidance for delivery	42
Appendix 1	**Sources of general information**	**43**

1 Introduction

What is this qualification about?

The following purpose statement relates to the **City & Guilds Level 2 Technical Award in Constructing and Maintaining the Built Environment.**

Area	Description
OVERVIEW	
Who is this qualification for?	This qualification allows you to explore the construction and built environment industry. If you enjoy practical, hands-on tasks but also want to discover how buildings are constructed and what happens when they require repair, maintenance or refurbishment then this qualification is for you.
What will the student study as part of this qualification?	You will explore the structure of the construction and built environment industry in terms of how different people work together to deliver construction projects. You will develop an understanding of what makes a building and how the selection of different materials, affects the overall look and feel. You will have the opportunity to carry out a selection of realistic practical construction tasks related to the repair, maintenance and refurbishment of a building. The qualification has four units: • Working in the built environment • Construction methods and materials • Maintenance, repair and refurbishment of buildings • Using tools to construct and maintain buildings
What knowledge and skills will the student develop as part of this qualification and how might these be of use and value in further studies?	The qualification develops the following knowledge, understanding and skills: • how people in the construction industry work together to deliver projects • an understanding of how and why different materials are used in the construction of buildings • how to interpret sources of information used in construction projects • producing plans and recommending actions for remedial action for buildings that require repair, maintenance and refurbishment • the importance of working safely on construction projects • different skills and techniques used in construction projects

	• how to evaluate skills and techniques. The understanding developed is fundamental to an introduction to any aspect of Construction and Building Services, including: • Design and Planning • Civil Engineering • Construction project management • Building services engineering specific qualifications (eg Electrical Services, Plumbing) • Construction craft qualifications Your understanding and skills can be developed further through progression to other qualifications, such as A levels or specific to a sector, including: • T Level Technical Qualification in Construction: On-site Construction (Level 3) (delivered by City & Guilds) • City & Guilds Level 2 Technical Certificates in Architectural Joinery/Bricklaying/Painting and Decorating/Plastering/Site Carpentry • City & Guilds Level 3 Advanced Technicals in Architectural Joinery/Bricklaying/Painting and Decorating/Plastering/Site Carpentry You will also find your understanding and skills useful to progress to an apprenticeship related to construction or building services engineering.
Which subjects will complement this course?	GCSEs in English, Maths, Science and Design and Technology will complement this qualification.

Qualification structure

For the **City & Guilds Level 2 Technical Award in Constructing and Maintaining the Built Environment** the teaching programme must cover the content detailed in the structure below:

Unit number	Unit title	GLH
201	Working in the built environment	15
202	Construction methods and materials	40
203	Maintenance, repair and refurbishment of buildings	25
204	Using tools to create the built environment	40

Total qualification time (TQT)

Total Qualification Time (TQT) is the total amount of time, in hours, expected to be spent by a Learner to achieve a qualification. It includes both guided learning hours (which are listed separately) and hours spent in preparation, study and assessment.

Title and level	Size (GLH)	TQT
City & Guilds Level 2 Technical Award in Constructing and Maintaining the Built Environment	120	160

Assessment requirements

To achieve the **City & Guilds Level 2 Technical Award in Constructing and Maintaining the Built Environment** candidates must complete **both** mandatory assessment components.

Component number	Title
005	Level 2 Constructing and Maintaining the Built Environment - Synoptic assignment
505	Level 2 Constructing and Maintaining the Built Environment - Theory exam

2 Centre requirements

Approval

New centres will need to gain centre approval. Existing centres who wish to offer this qualification must go through City & Guilds' **full** Qualification Approval Process. There is no fast track approval for this qualification. Please refer to the City & Guilds website for further information on the approval process: **www.cityandguilds.com**

Resource requirements

Centre staff should familiarise themselves with the structure, content and assessment requirements of the qualification before designing a course programme.

Centre staffing

Staff delivering this qualification must be able to demonstrate that they meet the following requirements:

- be technically competent in the areas in which they are delivering
- be able to deliver across the breadth and depth of the content of the qualification being taught
- have recent relevant teaching and assessment experience in the specific area they will be teaching, or be working towards this
- demonstrate continuing CPD.

Physical resources

Centres must be able to demonstrate that they have access to the equipment and technical resources required to deliver this qualification and its assessments. Centres must be able to provide the required tools, equipment, materials and personal protective equipment required for practical activities. Practical tasks must be performed in properly equipped workshops that allow the learners to practise, and then demonstrate, their skills in a safe and effective manner.

Internal Quality Assurance

Internal quality assurance is key to ensuring accuracy and consistency of assessment being marked by tutors. Internal Quality Assurers (IQAs) monitor the work of all tutors involved with a qualification to ensure they are applying standards consistently throughout assessment activities. IQAs must have, and maintain, an appropriate level of technical competence and be qualified to make both marking and quality assurance decisions through a teaching qualification or recent, relevant experience.

Learner entry requirements

Centres must ensure that all learners have the opportunity to gain the qualification through appropriate study and training, and that any prerequisites stated in the *What is this qualification about?* section are met when registering on this qualification.

Age restrictions

This qualification is approved for learners aged 14 – 16.

3 Delivering technical qualifications

Delivering a Technical Award – Key tips

Our Technical Awards are high-quality qualifications that give learners a broad introduction to their chosen industry sector. The **City & Guilds Level 2 Technical Award in Constructing and Maintaining the Built Environment** provides learners with exciting opportunities to develop both their applied knowledge and theoretical understanding, alongside their development of key practical and technical skills within the Construction and Built Environment sector.

Taking a holistic approach to delivery

Tutors are encouraged to take a holistic approach to the delivery of topics and themes from across the units that make up this Technical Award. Linking key related concepts from across different units will help to develop learners' understanding of the connections between the different elements of knowledge and skills, as well as preparing them to complete the synoptic assessment requirements.

Engaging with employers to develop links between theory and practice

The use of employers and valuable work-related learning contexts are beneficial in developing links between theory and practice. Trips and visits to a range of industry sector providers can help bring concepts to life, enabling learners to apply and deepen their understanding of;

- how key terms, processes and models can be applied in different contexts
- the scale and scope of their industry sector
- the local skills gaps and needs that may exist.

Use of learning technologies

The use of learning technologies can be useful in developing learners' independent learning skills. Online learning content, provided through a virtual learning environment or similar platform, can offer valuable opportunities for reinforcing key concepts and extending learning outside the classroom. Learners should be challenged to develop both their industry related technical knowledge and understanding along with skills in digital literacy and applied English and mathematics. For example, the safe and appropriate use of online discussion forums may help learners to develop their critical evaluation skills when sharing key resources or debating a key concept or process. Smart devices, audio-visual tools and social media should be harnessed, to support learners in researching and recording industry related practices.

Development of learning and thinking skills

Learners should be encouraged to develop confidence in their independent research skills, making effective use of both online and offline information sources. Relevant industry magazines and trade journals, along with good quality websites should be signposted as key sources of sector information. Teaching activities should promote the evaluation of different information sources to consider their validity and reliability.

Tutors are encouraged to use creative and collaborative learning activities which inspire and engage learners to confidently apply and evaluate their developing technical knowledge and skills. Learners should be encouraged to take responsibility for their own learning and development; drawing on their own experiences where possible. Meaningful self and peer-assessment activities are encouraged to develop learners' self-awareness and reflective practice as independent, critical thinkers. Inclusive learning activities which challenge

stereotypes and develop learners' awareness of diversity in their industry sector are particularly important.

Support materials

The following resources are available for this qualification:

Description	How to access
Sample assessments Guidance for delivery Guidance on use of marking grids	Available on the qualification pages on the City & Guilds Website: **www.cityandguilds.com**

4 Assessment

Summary of assessment methods and conditions

Component numbers	Assessment method	Description and conditions
005	Externally moderated synoptic assignment	The synoptic assignment is **externally set, internally marked and externally moderated.** The assignment requires candidates to identify and use effectively in an integrated way an appropriate selection of skills, techniques, concepts, theories, and knowledge from across the content area. Candidates will be judged against the assessment objectives. Assignments will be released to centres as per dates indicated in the Assessment and Examination timetable published on our website. Centres will be required to maintain the security of all live assessment materials. Assignments will be password protected and released to centres through a secure method. Please note that for externally set assignments City & Guilds provides guidance and support to centres on the marking and moderation.
505	Externally marked exam	The exam is **externally set and externally marked** and will be taken as a paper-based test. The exam is designed to assess the candidate's depth and breadth of understanding across content in the qualification at the end of the period of learning, using a range of question types and will be sat under invigilated examination conditions. See JCQ requirements for details: **http://www.jcq.org.uk/exams-office/ice---instructions-for-conducting-examinations** The exam specification shows the coverage of the exam across the qualification content. For exam dates, please refer to the Assessment and Examination timetable.

What is synoptic assessment?

Technical qualifications are based around the development of a toolkit of knowledge, understanding and skills that an individual needs in order to have the capability to work in a particular industry or occupational area. Individuals in all technical areas are expected to be able to apply their knowledge, understanding and skills in decision making to solve problems and achieve given outcomes independently and confidently.

City & Guilds technical qualifications require candidates to draw together their learning from across the qualification to solve problems or achieve specific outcomes by explicitly assessing this through the synoptic assignment component.

In this externally set, internally marked and externally moderated assessment the focus is on bringing together, selecting and applying learning from across the qualification rather than demonstrating achievement against units or subsets of the qualification content. The candidate will be given an appropriately levelled, substantial, occupationally relevant problem to solve or outcome to achieve. For example this might be in the form of a briefing from a client, leaving the candidate with the scope to select and carry out the processes required to achieve the client's wishes, as they would in the workplace.

Candidates will be marked against assessment objectives (AOs) such as their breadth and accuracy of knowledge, understanding of concepts, and the quality of their technical skills as well as their ability to use what they have learned in an integrated way to achieve a considered and high quality outcome.

How the assignment is synoptic for this qualification

The typical assignment brief could be to develop a plan for the repair, maintenance and refurbishment of a building.

This will require the candidate to identify and plan the types of activities that will need to be carried out, who needs to be involved, the sequence of activities using their understanding of the structure of the construction industry and how activities are integrated. They will need to develop appropriate documentation e.g. Gantt charts, and carry out calculations for specific aspects of the project. They will need to recommend actions for repair and maintenance work based on specific scenarios including the use of appropriate methods and materials using their understanding of how buildings are structured and how properties of materials affect their use. Learners will also have the opportunity to carry out a selection of practical activities that are typically carried out in the industry. This will demonstrate their understanding of the importance of working safely, how tools and equipment are used for specific tasks and their ability to evaluate their own performance.

External exam for stretch, challenge and integration

The external assessment will draw from across the full content of the qualification, using a range of shorter questions to confirm breadth of knowledge and understanding. Extended response questions are included, giving candidates the opportunity to demonstrate higher level understanding and integration through discussion, analysis and evaluation, and ensuring the assessment can differentiate between 'just able' and higher achieving candidates.

Terminal assessment

For the KS4 2024 Performance table qualifications, Ofqual introduced the requirement for a 'terminal rule' relating to the examination which specifies:

> "An assessment by examination must be taken at the end of a pupil's course of study ("terminal assessment") and this must contribute at least 40% of the total marks

available for the qualification. Ofqual's QLCs require that pupils must use towards their final overall grade the result of the assessment by examination sat in the series in which they are completing the course. This should typically lead to candidates sitting the assessment by examination at the end of year 11."

For this qualification, due to its assessment structure, this means that both the examination and synoptic assessment must take place at the end of the programme. Details of assessment dates are published in the assessment and examination timetable. To allow candidates to certificate within the KS4 year if they fail the examination on their first attempt, we have amended the grading arrangements (see *Grading* section); removing the requirement to pass the assessments for certification.

Assessment objectives

The assessments for this qualification are set against a set of assessment objectives (AOs) which are used across all City & Guilds Technicals to promote consistency among qualifications of a similar purpose. They are designed to allow judgement of the candidate to be made across a number of different categories of performance.

Each assessment for the qualification has been allocated a set number of marks against these AOs based on weightings recommended by stakeholders of the qualification. This mark allocation remains the same for all versions of the assessments, ensuring consistency across assessment versions and over time.

The following table explains all AOs in detail, including weightings for the synoptic assignments. Weightings for exam (AOs 1, 2 and 4 only) can be found with the exam specification.

Assessment objective	City & Guilds Level 2 Technical Award in Constructing and Maintaining the Built Environment Typical expected evidence of knowledge, understanding and skills	Approximate weighting
AO1 Recalls knowledge from across the breadth of the qualification.	Types of work done by organisations in the construction and built environment sector; roles, responsibilities and interactions in such organisations; knowledge of substructure, superstructure and internal construction processes; properties of construction materials; processes involved in the repair, maintenance and refurbishment of buildings; recognition of building defects and techniques used to remediate same; craft operations; health and safety legislation; tools, equipment and materials used in construction and building services craft operations	25%
AO2 Demonstrates understanding of concepts, theories and processes from across the breadth of the qualification.	Effective sequencing of construction operations; interaction of procedures used for substructure, superstructure, internal construction and building services; specification of external walls, floors, roofs, partitions, finishes, fixtures and fittings; informed specification of construction materials based on their properties; difference between repair, maintenance and refurbishment; selection	25%

	of appropriate actions to remediate defects; calculations of material quantities; using information to support safe working in construction; evaluating own performance	
AO3 Demonstrates technical skills from across the breadth of the qualification.	Interpretation of technical information relating to construction; working safely in construction; complying with risk assessments; carrying out practical construction tasks to given specifications.	20%
AO4 Applies knowledge, understanding and skills from across the breadth of the qualification in an integrated and holistic way to achieve specified purposes.	Application of technical knowledge and understanding to particular construction situations; justifying decisions regarding processes used to produce specifications and undertake remediation; evaluation of own work in performing craft tasks	20%
AO5 Demonstrates perseverance in achieving high standards and attention to detail while showing an understanding of wider impact of their actions.	Meeting requirements of construction and maintenance tasks especially in terms of specifications and working to given tolerances, attention to detail when working, regular checks on quality of construction work; correcting errors as they arise; taking advice and acting upon it.	10%

Exam specification

AO weightings per exam

AO	Exam weighting (approx. %)
AO1 Recalls knowledge from across the breadth of the qualification.	50
AO2 Demonstrates understanding of concepts, theories and processes from across the breadth of the qualification.	35
AO4 Applies knowledge, understanding and skills from across the breadth of the qualification in an integrated and holistic way to achieve specified purposes.	15

The way the exam covers the content of the qualification is laid out in the table below:

Assessment type: Examiner marked, written exam delivered on paper
Assessment conditions: Invigilated examination conditions*
Grading: U/P/M/D

Exam 505	Duration: 2 hours		
Unit	**Unit Title**	**Number of marks**	**%**
201	Working in the built environment	6	10
202	Construction methods and materials	18	30
203	Maintenance, repair and refurbishment of buildings	14	23
204	Using tools to create the built environment	13	22
N/A	Integration across the units	9	15
	Total	**60**	**100**

*These exams are sat under invigilated examination conditions, as defined by the JCQ: **http://www.jcq.org.uk/exams-office/ice---instructions-for-conducting-examinations**.

Entry for exams can be made through the City & Guilds Walled Garden.

5 Moderation and standardisation of assessment

City & Guilds' externally set assignments for technical qualifications are designed to draw from across the qualifications' content, and to contribute a significant proportion towards the learner's final qualification grade. They are subject to a rigorous external quality assurance process known as external moderation. This process is outlined below. For more detailed information, please refer to 'Marking and moderation - Technicals centre guidance' available to download on the City & Guilds website.

It is vital that centres familiarise themselves with this process, and how it impacts on their delivery plan within the academic year.

Supervision and authentication of internally assessed work

The Head of Centre is responsible for ensuring that internally assessed work is conducted in accordance with City & Guilds' requirements.

City & Guilds requires both tutors and candidates to sign declarations of authenticity. If the tutor is unable to sign the authentication statement for a particular candidate, then the candidate's work cannot be accepted for assessment.

Internal standardisation

For internally marked work[1] the centre is required to conduct internal standardisation to ensure that all work at the centre has been marked to the same standard. It is the Internal Quality Assurer's (IQA's) responsibility to ensure that standardisation has taken place, and that the training includes the use of reference and archive materials such as work from previous years as appropriate.

Internal appeal

Centres must have an internal process in place for candidates to appeal the marking of internally marked components, ie the synoptic assignment and any optional unit assignments. This must take place before the submission of marks for moderation. The internal process must include candidates being informed of the marks (or grades) the centre has given for internally assessed components, as they will need these to make the decision about whether or not to appeal.

Centres cannot appeal the outcome of moderation for individual candidates, only the moderation process itself. A request for a review of the moderation process should be made to **appeals@cityandguilds.com**.

Moderation

Moderation is the process where external markers are standardised to a national standard in order to review centre marking of internally marked assessments. These markers are referred to as 'moderators'. Moderators will mark a representative sample of candidates' work from every centre. Their marks act as a benchmark to inform City & Guilds whether centre marking is in line with City & Guilds' standard.

[1] For any internally assessed optional unit assignments, the same process must be followed where assessors must standardise their interpretation of the assessment and grading criteria.

Where moderation shows that the centre is applying the marking criteria correctly, centre marks for the whole cohort will be accepted.

Where moderation shows that the centre is either consistently too lenient or consistently too harsh in comparison to the national standard, an appropriate adjustment will be made to the marks of the whole cohort, retaining the centre's rank ordering.

Where centre application of the marking criteria is inconsistent, an appropriate adjustment for the whole cohort may not be possible on the basis of the sample of candidate work. In these instances a complete remark of the candidate work may be necessary. This may be carried out by the centre based on feedback provided by the moderator, or carried out by the moderator directly.

Moderation applies to all internally marked assignments. Following standardisation and marking, the centre submits all marks and candidate work to City & Guilds via the moderation platform. The deadline for submission of evidence will be available on Walled Garden. See the *Marking and moderation - Technicals Centre Guidance* document for full details of the requirements and process.

In most cases candidate work will be submitted directly to the moderator for moderation. This includes written work, photographic and pictorial evidence, or video and audio evidence. For some qualifications there will be a requirement for moderators to visit centres to observe practical assessments being undertaken. This will be for qualifications where the assessment of essential learner skills can only be demonstrated through live observation. The purpose of these visits is to ensure that the centre is assessing the practical skills to the required standards, and to provide the moderators with additional evidence to be used during moderation. These visits will be planned in advance with the centre for all relevant qualifications.

Post-moderation procedures

Once the moderation process has been completed, the confirmed marks for the cohort are provided to the centre along with feedback from the moderator on the standard of marking at the centre, highlighting areas of good practice, and potential areas for improvement. This will inform future marking and internal standardisation activities.

City & Guilds will then carry out awarding, the process by which grade boundaries are set with reference to the candidate evidence available on the platform.

Centres retaining evidence

Centres must retain assessment records for each candidate for a minimum of three years. To help prevent plagiarism or unfair advantage in future versions, candidate work may not be returned to candidates. Samples may however be retained by the centre as examples for future standardisation of marking.

6 Grading

Awarding individual assessments

Individual assessments will be graded as pass/merit/distinction where relevant. The grade boundaries for pass and distinction for each assessment will be set through a process of professional judgement by technical experts. Merit will usually be set at the midpoint between pass and distinction. The grade descriptors for pass and distinction, and other relevant information (eg archived samples of candidate work and statistical evidence) will be used to determine the mark at which candidate performance in the assessment best aligns with the grade descriptor in the context of the qualification's purpose. Boundaries will be set for each version of each assessment to take into account relative difficulty.

Please note that as the Merit grade will usually be set at the arithmetical midpoint between pass and distinction, there are no descriptors for the Merit grade for the qualification overall.

Grade descriptors

To achieve a pass, a candidate will be able to

- Demonstrate the broad knowledge and understanding related to the industry/occupational/ technical area, its key principles, practices and legislation.
- Describe some of the main factors impacting on the industry/occupational/technical area to show good awareness of how the industry/occupational/technical area is shaped by the social, environmental, and business environment it operates within.
- Use the broad technical and specific terminology commonly used in the industry/occupational/technical area with accuracy.
- Demonstrate the application of relevant theory and understanding to solve straightforward problems.
- Interpret briefs for routine tasks, attending to the key aspects, and showing a secure understanding of the main concepts and themes across the industry/occupational/technical area.
- Carry out routine planning which shows an ability to identify the relevant information in the brief and use broad knowledge and understanding from across the qualification (including basic technical information) to interpret what a fit for purpose outcome would be, developing a plausible plan to achieve it.
- Achieve an outcome which meets the key requirements of the brief with some success.
- Identify and reflect on the most obvious measures of success for the task and evaluate how successful they have been in meeting the intentions of the plan.
- Work safely throughout, independently carrying out routine tasks and procedures, and having some confidence in attempting more complex tasks.

To achieve a distinction, a candidate will be able to

- Demonstrate an excellent knowledge and understanding related to the industry/occupational/technical area, its key principles, practices and legislation.
- Analyse the impact of different factors on the industry/occupational/technical area to show good understanding of how it is shaped by the social, environmental, and business environment it operates within.
- Use technical and industry/occupation specific terminology commonly used in the industry area accurately and with confidence.
- Demonstrate the application of relevant theory and understanding to solve problems which are sometimes non-routine.

- Analyse the brief in detail, showing confident understanding of concepts and themes from across the qualification content, bringing these together to develop a clear and stretching plan that would credibly achieve a fit for purpose outcome.
- Achieve an outcome which shows an attention to detail in its planning, development and completion, so that it meets the brief completely and to a high quality.
- Carry out an evaluation focussing on relevant quality points, identifying areas of development/ improvement as well as assessing the fitness for purpose of the outcome.

Awarding grades and reporting results

The overall qualification grade will be calculated based on aggregation of the candidate's achievement in each of the assessments for the mandatory units, taking into account the assessments' weighting. The **City & Guilds Level 2 Technical Award in Constructing and Maintaining the Built Environment** will be reported on a four grade scale: Pass, Merit, Distinction, Distinction*.

The approximate pass grade boundary for the synoptic assignment in this qualification is:

Synoptic Assignment	Pass Mark (%)
005	42

Please note that each synoptic assignment is subject to an awarding process before final grade boundaries are confirmed.

The contribution of assessments towards the overall qualification grade is as follows:

Assessment method	Grade scale	% contribution	UMS
Synoptic Assignment (005)	U/P/M/D	60%	144
Exam (505)	U/P/M/D	40%	96

Both synoptic assignments and exams are awarded in every series (see 'Awarding individual assessments', at the start of Section 6, above) to identify the raw mark representing the boundary pass merit and distinction standards. These raw mark boundaries are used to make the conversion of raw marks onto a uniform mark scale (UMS). Using a UMS approach allows all of the candidate's marks count when taken into the aggregation process, and ensures their uniform mark has the same value in each series, allowing aggregation of assessments from different series where necessary.

After the conversion of the candidate's raw scores into uniform marks for both the examination and the synoptic assignment, they are added together to give the total uniform mark for the candidate.

There is no minimum mark requirement for either the exam or the synoptic assignment as long as both assessments have been attempted.

The candidate's qualification grade is determined by comparing their total UMS mark to the mark ranges given in the table that follows.

Total UMS	Qualification Grade	% of UMS boundary set at
0 - 95	U	n/a
96 - 131	P	40
132 - 167	M	55
168 – 203	D	70
204 - 240	D*	85

7 Administration

Approved centres must have effective quality assurance systems to ensure valid and reliable delivery and assessment of qualifications. Quality assurance includes initial centre registration by City & Guilds and the centre's own internal procedures for monitoring quality assurance procedures.

Consistent quality assurance requires City & Guilds and its associated centres to work together closely; our Quality Assurance Model encompasses both internal quality assurance (activities and processes undertaken within centres) and external quality assurance (activities and processes undertaken by City & Guilds).

For this qualification, standards and rigorous quality assurance are maintained by the use of:

- internal quality assurance
- City & Guilds external moderation.

In order to carry out the quality assurance role, Internal Quality Assurers (IQAs) must have and maintain an appropriate level of technical competence and have recent relevant assessment experience. For more information on the requirements, refer to *Section 2: Centre requirements* in this handbook.

To meet the quality assurance criteria for this qualification, the centre must ensure that the following procedures are followed:

- suitable training of staff involved in the assessment of the qualification to ensure they understand the process of marking and standardisation
- completion by the person responsible for internal standardisation of the Centre Declaration Sheet to confirm that internal standardisation has taken place
- the completion by candidates and supervisors/tutors of the record form for each candidate's work.

External quality assurance

City & Guilds will undertake external moderation activities to ensure that the quality assurance criteria for this qualification are being met. Centres must ensure that they co-operate with City & Guilds staff and representatives when undertaking these activities.

City & Guilds requires the Head of Centre to

- facilitate any inspection of the centre which is undertaken on behalf of City & Guilds
- make secure arrangements to receive, check and keep assessment material secure at all times, maintain the security of City & Guilds confidential material from receipt to the time when it is no longer confidential and keep completed assignment work and examination scripts secure from the time they are collected from the candidates to their dispatch to City & Guilds.

Enquiries about results

The services available for enquiries about results include a review of marking for exam results and review of moderation for internally marked assessments.

For further details on enquiries and appeals process and for copies of the application forms, please visit the **appeals page** of the City & Guilds website at **www.cityandguilds.com.**

Re-sits and shelf-life of assessment results

Candidates who have failed an assessment or wish to re-take it in an attempt to improve their grade, can re-sit assessments. For the exam, the most recent result will count towards the final qualification due to the terminal rule. For the synoptic assignment, the best result will count. In a situation where a learner resits the synoptic assignment after certification and in an attempt to improve their grade, then this will require the exam to be resat and the result of this sitting will be used to towards their qualification grade. See guidance on individual assessment types in Section 5.

Factors affecting individual learners

If work is lost, City & Guilds should be notified immediately of the date of the loss, how it occurred, and who was responsible for the loss. Centres should use the JCQ form, JCQ/LCW, to inform City & Guilds Customer Services of the circumstances.

Learners who move from one centre to another during the course may require individual attention. Possible courses of action depend on the stage at which the move takes place. Centres should contact City & Guilds at the earliest possible stage for advice about appropriate arrangements in individual cases.

Malpractice

Please refer to the City & Guilds guidance notes *Managing cases of suspected malpractice in examinations and assessments*. This document sets out the procedures to be followed in identifying and reporting malpractice by candidates and/or centre staff and the actions which City & Guilds may subsequently take. The document includes examples of candidate and centre malpractice and explains the responsibilities of centre staff to report actual or suspected malpractice. Centres can access this document on the City & Guilds website.

Examples of candidate malpractice are detailed below (please note that this is not an exhaustive list):

- falsification of assessment evidence or results documentation
- plagiarism of any nature
- collusion with others
- copying from another candidate (including the use of ICT to aid copying), or allowing work to be copied
- deliberate destruction of another's work
- false declaration of authenticity in relation to assessments
- impersonation.

These actions constitute malpractice, for which a penalty (eg disqualification from the assessment) will be applied.

Where suspected malpractice is identified by a centre after the candidate has signed the declaration of authentication, the Head of Centre must submit full details of the case to City & Guilds at the earliest opportunity. Please refer to the form in the document *Managing cases of suspected malpractice in examinations and assessments*.

Access arrangements and special consideration

Access arrangements are adjustments that allow candidates with disabilities, special educational needs and temporary injuries to access the assessment and demonstrate their

skills and knowledge without changing the demands of the assessment. These arrangements must be made before assessment takes place.

It is the responsibility of the centre to ensure at the start of a programme of learning that candidates will be able to access the requirements of the qualification.

Please refer to the *JCQ access arrangements and reasonable adjustments and Access arrangements - when and how applications need to be made to City & Guilds* for more information. Both are available on the City & Guilds website:
https://www.cityandguilds.com/delivering-our-qualifications/centre-development/centre-document-library

Special consideration
We can give special consideration to candidates who have had a temporary illness, injury or indisposition at the time of the examination. Where we do this, it is given after the examination.

Applications for either access arrangements or special consideration should be submitted to City & Guilds by the Examinations Officer at the centre. For more information please consult the current version of the JCQ document, *A guide to the special consideration process*. This document is available on the City & Guilds website:
https://www.cityandguilds.com/delivering-our-qualifications/centre-development/centre-document-library

Unit 201 Working in the built environment

UAN:	R/507/6972
Level:	2
GLH:	15

What is this unit about?

The purpose of this unit is for learners to understand how the construction and built environment industry is structured and how individuals work together to plan and deliver projects. This understanding will enable learners to establish who needs to be involved in specific tasks within construction projects, what they will do, and when.

The unit provides an overview of the size and complexity of the industry and the types of activities undertaken by those working in it. Learners will find out how activities are integrated in construction projects and the key job roles that may be involved. They will also appreciate the different types of clients that are involved and how this may affect the final outcome of the project.

Learners will be encouraged to explore important issues, such as who pays for the work to be done, who decides what is to be done, who does what and when, and how the work can be done most effectively.

Learning outcomes

In this unit, learners will be able to:

1. Understand the structure of the construction and built environment industry
2. Understand how construction projects are planned

Scope of content

This section gives details of the scope of content to be covered in the teaching of the unit to ensure that all the learning outcomes can be achieved.

Learning outcome:

1. Understand the structure of the construction and built environment industry

Topics

1.1 Range of work and types of organisation

1.2 Types of client

Topic 1.1

Learners will understand how the construction industry is structured and the breadth of areas it covers including new build, maintenance, repair and refurbishment projects. For example, a building firm might specialise in the construction of new build work. Learners must recognise the differences in the way the industry is structured in relation to:

- Areas of work (building, civil engineering, building services engineering)
- Types of work (new build, maintenance and repair, refurbishment and adaptation, demolition)
- Building cycle (design, planning, estimating, tendering, construction, decommissioning)
- Types of organisation (sole traders, partnerships, small and medium enterprises, large contractors)

Topic 1.2

Learners will understand the nature of the different types of clients that the construction industry works with. Types of client will include:

- Public (for example: national and local government, NHS, schools)
- Private (for example: independent companies, charities, individuals)

Learning outcome:

2. Understand how construction projects are planned

Topics

2.1 Roles and responsibilities in construction projects

2.2 Interactions between individuals in construction projects

2.3 Planning construction projects

Topic 2.1

Learners will understand that there are professional and craft roles within the construction industry, the differences between these roles and what the different roles do in construction projects.

- Professional roles:
  - designer
  - planner
  - surveyor
  - manager
  - supervisor
- Craft roles:

- carpenter
- joiner
- plumber
- electrician
- bricklayer
- general construction operative (e.g. concreter, drain layer, paviour)
- painter and decorator
- roofer
- plasterer

Topic 2.2

Learners will understand how the different roles in 2.1 work together to ensure effective completion of construction projects.

Learners will understand that effective communication is a key aspect of working together, and how instructions and information are passed downwards from professionals to craft operatives and how issues concerning construction methods and materials are passed back to professionals and managers.

This includes formal and informal methods of communication including:

- Verbal communication:
  - Tool box talks
  - Site meetings
- Written communication:
  - Emails
  - Project plans
  - Written instructions.

Topic 2.3

Learners will understand how different trade activities and construction tasks are integrated into construction projects. Learners will understand the need to sequence craft operations logically and sensibly when constructing or maintaining a building, in order to save time and money and optimise the use of resources.

Learners will understand the use of and produce:

- Gantt charts
- Precendence diagrams
- Flow charts.

Guidance for delivery

Staff delivering this unit have opportunities to use a wide range of techniques and relate the content to different areas of construction so that learners can compare the type of organisations and the work that that they do.

Where possible, visits to local construction companies and projects would be useful, as would guest speakers drawn from local employers, trade unions and professional associations. Such guest speakers will bring up-to-date experience of working in today's built environment sector.

Teaching and learning strategies must help learners to develop a clear understanding of how the construction industry functions. This can be done by examining the industry from a variety of perspectives, breaking the knowledge down into bite-sized pieces and then asking the

learners to work out how they fit together to form a united whole. This should be based on real-life case studies.

Learners should have the opportunity to look at examples of real construction project planning documentation including Gantt charts, flow charts and precedence diagrams.

Unit 202 Construction methods and materials

UAN:	Y/507/6973
Level:	2
GLH:	40

What is this unit about?

Everything in the built environment is made out of one or more materials. These materials may be natural or may have been manufactured from naturally-occurring raw materials. Each material will have its own physical and chemical properties that will make it useful for some tasks but not for others, and so the selection of a material for a given task will depend upon its properties.

The purpose of this unit is for learners to understand the methods used to construct buildings and why certain materials are used instead of others in the construction and maintenance of buildings.

The topics covered in this unit include construction methods and processes, the materials that are generally used in these processes and how their properties affect their use. Learners will have an awareness of how the right materials are specified for the right jobs and used safely.

Learning outcomes

In this unit, learners will be able to:

1. Understand substructure processes
2. Understand superstructure processes
3. Understand internal construction processes
4. Understand the properties of construction materials

Scope of content

This section gives details of the scope of content to be covered in the teaching of the unit to ensure that all the learning outcomes can be achieved.

Learning outcome:

1. Understand substructure processes

Topics

1.1 Site preparation

1.2 Excavations and foundations

1.3 Building services

Topic 1.1

Learners will understand what the standard procedures are and the order in which they are carried out. This will include:

- Securing the site (fencing, hoardings, signage)
- Site clearance and layout (access, storage, accommodation, temporary services)
- Setting out (outline, checking diagonals, surface strip, trenches)

Topic 1.2

Learners will understand the stages of the excavation process including the purpose of oversite concrete and the use of different types of foundation. Learners will sketch foundations, to include

- Excavation to surface strip, cut and fill, trenches and safe trench support techniques
- Foundations:
    - Types: strip, raft, pad and pile
    - Purpose

Topic 1.3

Learners will understand the differences between the types of below ground drainage and the purpose of each. Learners will sketch the form and layout of each as they apply to low-rise domestic construction. They should also be aware of the provisions made for cold water, electricity and gas to enter buildings through the substructure and the principles that underpin such provision:

- Below ground surface water drainage
- Below ground foul water drainage
- Subsoil water drainage
- Entry of cold water, electricity and gas into buildings

Learning outcome:

2. Understand superstructure processes

Topics

2.1 External walls

2.2 Floors

2.3 Roofs

Topic 2.1

Learners will understand the characteristics of each of the elements below (eg that the primary purpose of cavity walls is to reduce damp penetration, but that they also improve the thermal and sound insulation). Learners will produce simple sketches of the elements.

- Traditional masonry walling and modern framed structures (timber or steel) with cladding.
- Cavity wall construction (purpose, structure, components)
- Formation of openings in walls for doors and windows (arrangements for load-bearing and water exclusion)

Topic 2.2

Learners will understand the forms of floor construction used in low-rise domestic buildings. Simple sketches are required to enhance evidence of understanding, to include

- Solid concrete ground floors
- Suspended ground floors (timber, pre-cast concrete)
- Suspended upper floors (timber)

Topic 2.3

Learners will understand the forms of roof construction used in low-rise domestic buildings. Simple sketches are required to enhance evidence of understanding, to include

- Flat roofs (warm deck and cold deck construction)
- Pitched roofs (modern trussed rafter construction)
- Roof coverings (waterproof membranes, slates, clay and concrete tiles)

Learning outcome:

3. Understand internal construction processes

Topics

3.1 Partitions

3.2 Wall and floor finishes

3.3 Fixtures and fittings

Topic 3.1

Learners will understand how, why and where the following types of internal partition are used in low-rise domestic buildings. Simple sketches are required to enhance evidence of understanding, to include

- Load bearing (brick or block)
- Non-load bearing stud partitions (timber and metal)

Topic 3.2

Learners will understand the differences between wet and dry finishes, including where each might be used, and the advantages and disadvantages of the different kinds of finish in general use:

- Wet finishes (plasters, screeds, paints)
- Dry finishes (boards, tiles, laminates)

Topic 3.3

Learners will understand what is meant by the term ‘fixtures and fittings’ in relation to their use in modern forms of off-site prefabrication and the difference between the two:

- Stairs, door frames, door linings, skirting and architraves
- Fitted furniture (kitchens, bathrooms, wardrobes)

Learning outcome:

4. Understand the properties of construction materials

Topics

4.1 Construction and building services materials in general use

4.2 Properties of construction materials

Topic 4.1

Learners will understand the differences between the following materials and the uses to which they are generally put:

- Timber
- Masonry
- Metals
- Plastics
- Concrete
- Paints
- Plasters
- Glass
- Ceramics
- Insulating materials

Topic 4.2

Learners will understand how the properties of materials influence the way in which they are used. They must understand how the common construction materials identified in 4.1 perform in use in terms of their:

- Strength
- Density
- Porosity and water absorption
- Durability
- Thermal properties
- Electrical properties

Guidance for delivery

Staff delivering this unit will have the opportunity to use a variety of techniques. Visits to real-life construction sites would be extremely beneficial, for example, a site where a building of traditional design and construction is being refurbished, another where a building is being constructed using newer methods, techniques and materials and a third where a new building is being constructed on sustainable principles.

Particular attention should be paid to the methods, techniques, plant and equipment in use. The more mechanised the site is, the better it will lend itself to prefabrication techniques and off-site construction methods. If the construction company has risk assessments or method statements that they are willing to release to the teacher before the visit, these can be discussed prior to the visit and good practice will be more easily recognised.

Learners could be provided with a separate checklist for each visit. These checklists should separately identify the characteristics of traditional, modern and sustainable methods, at different stages of construction, in a 'tick-box plus comments' format. After the schedule of visits has been completed learners can produce posters and/or electronic presentations that compare what they have seen in terms of the:

- stage of construction the work was at when they visited the site

- methods, techniques, plant, tools and equipment in use
- construction trades on site
- different methods and techniques used on different sites
- use of any off-site construction techniques
- control measures taken to reduce risks

Learners could review ‘test’ results of construction materials, both traditional and sustainable. , and use the results of such tests to establish which materials would be appropriate for specific tasks. Structural materials such as timber, steel, brick and concrete (at various water-cement ratios) could be tested for strength; porous materials such as timber, brick and concrete for water absorption; metals for elasticity; metals and plastics for thermal movement; timber and bricks for moisture movement and concretes for workability on site.

The results do not have to be precisely accurate as long as they are relative. This might include the following: steel is stronger than timber but timber is lighter; plastics produce the greatest thermal movement; high water-cement ratios mean weaker concrete mixes; common bricks are more porous than engineering bricks, and so forth.

The built environment comprises more than houses, and learners need to consider the materials used for other buildings such as offices, factories, supermarkets, schools and hospitals and structures such as bridges, dams, towers, retaining walls and the like. Visits to design studios and offices, planning departments and to buildings and structures either during the construction period or post-construction will engage the learners more thoroughly than any amount of classroom work.

Such visits will also offer opportunities to compare traditional and modern methods of construction and the materials used in each. Visits by, and presentations from, design, planning and construction personnel at appropriate stages of the unit are strongly recommended.

Learners should be encouraged to develop individual portfolios of photographs, pictures and images of local buildings and structures. These should be annotated with details of the materials specified by the designers and used in the construction. These can be used to support class presentations and discussions. Learners should be encouraged to consider the materials that are not visible to the naked eye. For example, they should not assume that a steel-framed building with brick cladding is entirely made out of brick.

Unit 203 Maintenance, repair and refurbishment of buildings

UAN:	D/507/6974
Level:	2
GLH:	25

What is this unit about?

People use buildings every day - large ones, small ones, new ones and old ones. These buildings have one thing in common – they will need to be maintained and repaired at some point. Until such time as we can design and build truly maintenance-free buildings, there will always be a need for maintenance. In addition to requiring repair and maintenance, the form of buildings will also change over time. The needs of society constantly changes and so will the preferred style, type and size of buildings.

The purpose of this unit is to provide learners with an understanding of the need for maintenance and repair of buildings. They will understand the differences between maintenance, repair and refurbishment and be able to recommend actions for the repair, maintenance and refurbishment of a building as part of a construction project.

Learners will be given the opportunity to ask questions such as:

- what do we need to do to keep a building fit-for-purpose?
- who should be involved?
- how should we plan the maintenance or refurbishment of a building?
- how can we assess the defects in a building?
- what techniques should we use to address those defects?

Learning outcomes

In this unit, learners will be able to:

1. Understand the characteristics of repair, maintenance and refurbishment of buildings
2. Understand the methods used to repair, maintain and refurbish buildings
3. Recommend actions for the repair, maintenance and refurbishment of buildings

Scope of content

This section gives details of the scope of content to be covered in the teaching of the unit to ensure that all the learning outcomes can be achieved.

Learning outcome:

1. Understand the characteristics of repair, maintenance and refurbishment of buildings

Topics

1.1 Reasons for property repair and maintenance

1.2 Reasons for property refurbishment

Topic 1.1

Learners will understand why buildings may require repair and maintenance over time. Learners will understand that the materials used in construction will deteriorate over time, what causes that deterioration and the different factors that can result in a building having to be repaired and/or maintained.

Factors will include:

- Weather
- General wear and tear
- Vandalism
- Bad design
- Bad workmanship

Topic 1.2

Learners will understand that buildings may be refurbished for a number of reasons, and the level of intervention required will depend on the specific reason for the refurbishment.
Reasons for refurbishment will include:

- Building obsolescence
- Old houses not meeting modern standards
- Changes in legislation
- Individual needs or wishes

Learners will understand the above in the context of the following types of refurbishment projects:

- Decoration and small-scale works
- Changes designed to improve living standards
- Internal structural alterations
- Creating a waterproof structure

Learning outcome:

2. Understand the methods used to repair, maintain and refurbish buildings

Topics

2.1 Types of maintenance and repair

2.2 Sources of information used in the maintenance and repair of buildings

Topic 2.1

Learners will understand the difference between types and levels of maintenance and repair and why preventive maintenance methods are preferable to responsive and reactive methods.

Maintenance methods will include:

- Preventive maintenance
- Planned maintenance
- Emergency maintenance

Topic 2.2

Learners will understand how the following sources of information are used to identify and record defects in buildings:

- Maintenance inspection reports
- Condition surveys.

Learners will understand how the above sources of information are used to establish and implement corrective measures.

Learning outcome:

3. Recommend actions for the repair, maintenance and refurbishment of buildings

Topics

3.1 Sources of information to recommend actions

3.2 Planning repair, maintenance refurbishment of buildings

Topic 3.1

Learners will interpret maintenance inspection reports and condition surveys to determine defects, remedial action, priorities and timescales for the following:

- Roof structure
- Walls (internal, external)
- Doors and windows
- Floors
- Services (electric, gas, water, drainage, telecoms) – note the requirement for 'competent persons' to inspect gas and electrical work

Topic 3.2

Learners will plan for the repair, maintenance and refurbishment of buildings including:

- Defects found
- Justification for the work
- Who needs to be involved
- Specification of materials required
- Calculations of quantities of resources, materials, tools, equipment, labour using linear dimensions, plane areas, surface areas and volumes
- Determination of VAT, profit, overheads, allowances for cutting, wastage and breakage

Guidance for delivery

The delivery of this unit should encourage learners to analyse existing properties that have been refurbished and consider the ongoing maintenance of properties with which they are familiar. They could for example, consider their own home, their school or college building.

Learners should also be encouraged to explore the links between good design, good workmanship and building maintenance. This should include knowledge and understanding of how poor design and bad workmanship will generally result in building defects.

Learners should be given the opportunity to view actual examples of common building defects and should be given clear explanations of how the defect can come about. Basic maintenance procedures designed to address these defects should also be explained and demonstrated in a safe, workshop or simulated working environment. Wherever possible the learners should shadow the school/college site maintenance staff, in the performance of a condition survey of the building to identify any building defects.

Learners should be encouraged to think about how repair, maintenance and refurbishment work is planned and the types of materials that should be used.

Unit 204 Using tools to construct and maintain buildings

UAN:	H/507/6975
Level:	2
GLH:	40

What is this unit about?

The purpose of this unit is for learners to understand the breadth of practical skills that are performed in the construction industry and the different tools and techniques that are used.

Learners will develop an understanding of the importance of tools in a wider sense, and the specific uses to which each tool is put. Learners will need to ask questions about the nature of the skills required, the order in which the tasks must be done, which craftsperson will use which tools, what the tools will be used for and how the tools can be used safely.

Topics covered in this unit include how to work safely on construction projects including the use of sources of information such as legislation and risk assessments. Learners will understand how risk assessments are used to identify hazards, assess risks and propose control measures where necessary.

The unit also provides the opportunity for learners to develop a small number of practical skills and techniques and to evaluate their own performance when carrying out practical tasks.

Learning outcomes

In this unit, learners will be able to:

1. Understand the work carried out by construction and building services craft operatives
2. Understand how to work safely on construction projects
3. Develop technical skills required for construction craft tasks

Scope of content

This section gives details of the scope of content to be covered in the teaching of the unit to ensure that all the learning outcomes can be achieved.

Learning outcome:

1. Understand the work carried out by construction and building services craft operatives

Topics

1.1 Work carried out by construction and building services craft operatives

Topic 1.1

Learners will understand the typical jobs that comprise the work done by various trades and be able to distinguish between each type of job.

Carpenters:

- First fix (floors, roofs, studwork, frames)
- Second fix (hanging doors, fixing mouldings, fitting units)

Joiners:

- Making doors and frames, windows, units, stairs

Painters and decorators:

- Preparing surfaces
- Applying paint systems
- Hanging wallpaper

Bricklayers:

- Foundations (concrete, substructure)
- Walls (brick and block laying)

Plasterers:

- Rendering (sand and cement)
- Plastering (gypsum)

Plumbers:

- Hot and cold water supply
- Central heating
- Bathroom installation
- Drainage

Electricians:

- Lighting wiring
- Power supply wiring
- Maintenance

Learning outcome:

2. Understand how to work safely on construction projects

Topics

2.1 Legislation in the construction industry

2.2 Sources of information to support safe working practices

Topic 2.1

Learners will understand the importance and main purposes of the following key pieces of legislation used in the construction industry:

- Health and Safety at Work Act 1974:
  - main purpose
  - how it is used
  - who it applies to
- Control of Substances Hazardous to Health Regulations 2002 (COSHH):
  - the affect of improper use, handling and storage of common building materials.
- Construction Design and Management Regulations 2007:
  - main purpose in terms of how it defines responsibilities in construction projects

Topic 2.2

Learners will understand sources of information used on construction projects to support safe working practices, including:

- risk assessments
- method statements

Learners will understand what information is contained in a risk assessment and a method statement, how they are used on construction projects and be able to interpret them.

Learners will understand that only after risks have been minimised as far as is reasonably practicable, should control measures be employed to protect operatives from accidents. Any deviation from good practice must be corrected immediately and work must stop if there appears to be non-compliance with a risk assessment that might threaten the health and safety of any person in the area.

Learning outcome:

3. Develop technical skills required for construction craft tasks

Topics

3.1 Tools, equipment, materials and PPE

3.2 Perform construction craft tasks

Topic 3.1

Learners will understand how to use tools, equipment, materials and PPE required for specific construction tasks and how they are used to complete specific techniques.

Standard tools and equipment in relation to the following construction craft tasks should be learnt:

- carpentry and joinery
- bricklaying
- plastering
- painting and decorating
- plumbing work
- electrical installation

Materials:

- timber and board materials
- bricks, blocks and mortar
- plaster and render

- fillers, paint and wallpaper
- copper tube, plastic pipes and plumbing fittings
- light fittings, power sockets, cables and conduit

Personal protective equipment (PPE):

- respirators
- masks
- safety footwear
- high viz
- gloves
- protective headwear
- hearing protection
- barrier cream
- protective clothing
- insulated tools
- sun protection.

Topic 3.2

Learners carry out operations from at least two different crafts:

- fixing studwork, flooring or roof timbers
- making a jointed frame in timber
- fitting a frame, timber mouldings
- laying bricks or lightweight blocks, using wall connectors
- forming pipework with bends, push fit and compression joints
- electrical installation e.g. simple lighting systems and socket power outlets
- plastering e.g. applying plaster board, skimming
- painting e.g. applying emulsion to a surface, glossing a panelled door
- wall papering e.g. an internal door corner or around a switch

Learners will evaluate their performance when performing construction craft tasks. This should include the quality of the outcome against the brief and any specified tolerances:

- what went well
- what went less well
- what can be done differently.

Guidance for delivery

The delivery of this unit could include where possible, visits to college workshops, training providers and construction sites to show learners real example of construction practical tasks being carried out.

Learners must however receive adequate preparation for site visits in advance. For example, staff could arrange for the company's health and safety officer to come to the centre beforehand to present a health and safety induction to the specific site or workplace being visited. Staff should note that centres will have to comply with their own health and safety workplace policy *and* that of the site being visited, and that COSHH regulations must be adhered to when carrying out practical activities in workshops.

Following any site visit, the learners could identify potential hazards and risks, and could produce a risk assessment as part of their learning. They could explore the factors behind a real construction site accident and suggest what caused it and how it might have been avoided. A developer or contractor could be asked to give learners a copy of a method statement or a risk assessment, and then describe to the learners a craft operation, and ask them to develop their own method statement.

Appendix 1 Sources of general information

The following documents contain essential information for centres delivering City & Guilds qualifications. They should be referred to in conjunction with this handbook. To download the documents and to find other useful documents, go to the ***Centre Document Library*** on ***www.cityandguilds.com*** or click on the links below:

Quality Assurance Standards: Centre Handbook
This document is for all approved centres and provides guidance to support their delivery of our qualifications. It includes information on

- Centre quality assurance criteria and monitoring activities
- Administration and assessment systems
- Centre-facing support teams at City & Guilds / ILM
- Centre quality assurance roles and responsibilities.

The Centre Handbook should be used to ensure compliance with the terms and conditions of the Centre Contract.

Quality Assurance Standards: Centre Assessment
This document sets out the minimum common quality assurance requirements for our regulated and non-regulated qualifications that feature centre assessed components. Specific guidance will also be included in relevant qualification handbooks and/or assessment documentation.

It incorporates our expectations for centre internal quality assurance and the external quality assurance methods we use to ensure that assessment standards are met and upheld. It also details the range of sanctions that may be put in place when centres do not comply with our requirements, or actions that will be taken to align centre marking/assessment to required standards. Additionally, it provides detailed guidance on the secure and valid administration of centre-assessments.

Access arrangements - When and how applications need to be made to City & Guilds
provides full details of the arrangements that may be made to facilitate access to assessments and qualifications for candidates who are eligible for adjustments in assessment.

The ***Centre Document Library*** also contains useful information on such things as:

- Conducting examinations
- Registering learners
- Appeals and malpractice

Useful contacts

Please visit the Contact Us section of the City & Guilds website, ***Contact us***

About City & Guilds

As the UK's leading vocational education organisation, City & Guilds is leading the talent revolution by inspiring people to unlock their potential and develop their skills. We offer over 500 qualifications across 28 industries through 8500 centres worldwide and award around two million certificates every year. City & Guilds is recognised and respected by employers across the world as a sign of quality and exceptional training.

City & Guilds Group

The City & Guilds Group is a leader in global skills development. Our purpose is to help people, organisations and economies develop their skills for growth. We work with education providers, employers and governments in over 100 countries across the world to help people, businesses and economies grow by shaping skills systems and supporting skills development.

The Group is made up of City & Guilds, ILM, Kineo, The Oxford Group, Gen2, and Intertrain. Together we set the standard for professional and technical education and corporate learning and development around the world.

Copyright

The content of this document is, unless otherwise indicated, © City & Guilds Limited and may not be copied, reproduced or distributed without prior written consent. However, approved City & Guilds centres and learners studying for City & Guilds qualifications may photocopy this document free of charge and/or include a PDF version of it on centre intranets on the following conditions:

- centre staff may copy the material only for the purpose of teaching learners working towards a City & Guilds qualification, or for internal administration purposes
- learners may copy the material only for their own use when working towards a City & Guilds qualification

The Standard Copying Conditions (see the City & Guilds website) also apply.

Published by City & Guilds Limited, a company registered in England and Wales (company number 16513878)

City & Guilds Limited
Giltspur House
5-6 Giltspur Street
London
EC1A 9DE

cityandguildsgroup.com