



# WJEC LEVEL 1/2 VOCATIONAL AWARD IN CONSTRUCTION AND THE BUILT ENVIRONMENT (TECHNICAL AWARD)

GUIDANCE FOR TEACHING

UNIT 3 GUIDE

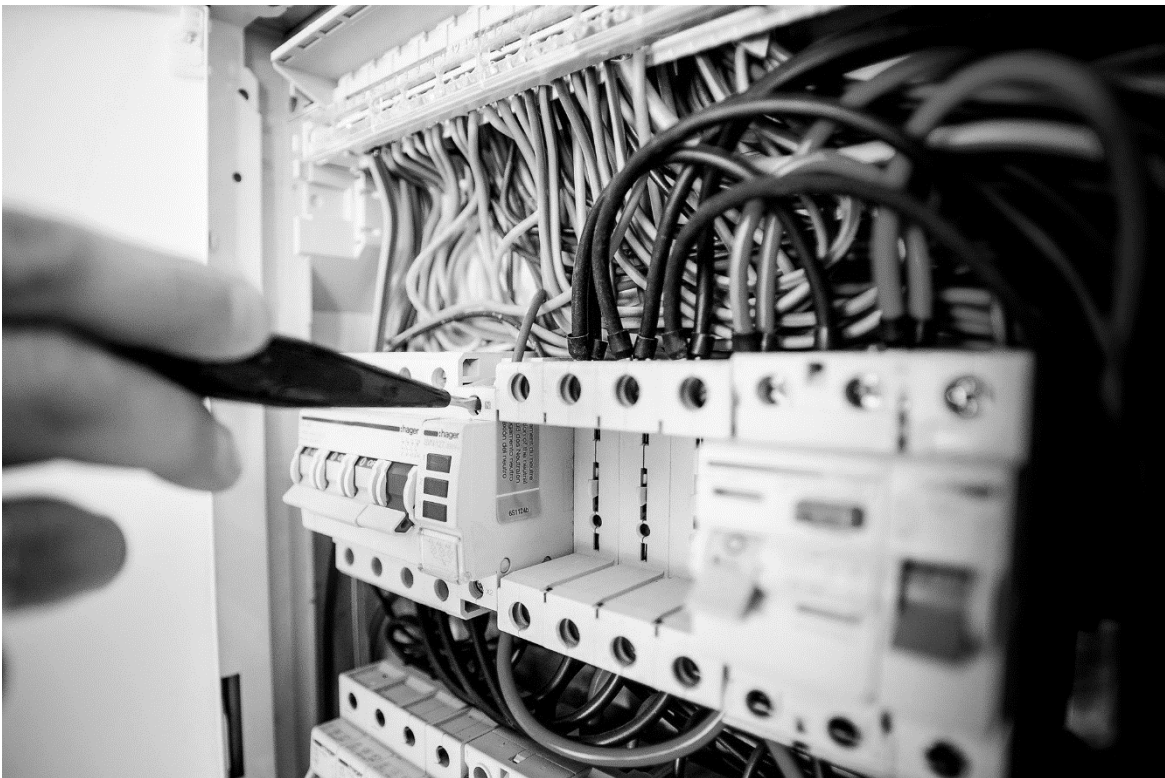


## AIMS OF THE GUIDANCE FOR TEACHING

The principal aim of the Guidance for Teaching is to support teachers in the delivery of the WJEC Level 1/2 Vocational Qualification in Construction and the Built Environment (Technical Award) and to offer guidance on the requirements of the qualification and the assessment process. The Guidance for Teaching is **not intended as a comprehensive reference**, but as support for professional teachers to develop stimulating and exciting courses tailored to the needs and skills of their own learners in their particular institutions.

## AIMS OF THE UNIT GUIDE

The principal aim of the Unit Guide is to support teaching and learning and act as a companion to the Specification. Each Unit Guide will offer detailed explanation of key points in the Specification and aim to explain complex areas of subject content. An overview of the whole course can be found in the Delivery Guide.



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## INTRODUCTION

The WJEC Level 1/2 Vocational Award in Construction and the Built Environment (Technical Award), approved by Ofqual and DfE for performance qualification tables in 2024 (first teaching from September 2022), is available to:

- all schools and colleges in England
- subject to local agreement, it is also available to centres outside England, for example in Northern Ireland, the crown dependencies of the Isle of Man and the Channel Islands, and in British overseas territories, and to British forces schools overseas. It is not available to other overseas centres or in Wales.

It will be awarded for the first time in January 2024, using grades Level 1 Pass, Level 1 Merit, Level 1 Distinction, Level 1 Distinction\*, Level 2 Pass, Level 2 Merit, Level 2 Distinction, Level 2 Distinction\*.

## ADDITIONAL WAYS THAT WJEC/EDUQAS CAN OFFER SUPPORT:

- sample assessment materials and mark schemes
- exemplar materials
- face-to-face CPD events
- examiners' reports on each question paper
- direct access to the subject officer
- free online resources
- Exam Results Analysis
- Online Examination Review
- Regional Support team.

## PATHWAYS

The table below shows the possible routes to a Level 1/2 Construction and the Built Environment qualification.

	Unit 1	Unit2	Unit 3
WJEC Level 1/2 Construction in the Built Environment (Design)	✓	✓	
OR			
WJEC Level 1/2 Construction in the Built Environment (Construction)	✓		✓

## OVERVIEW OF UNIT 3

### Constructing the Built Environment (60% of the qualification)

This unit is an optional unit that learners will study in addition to Unit 1 **unless** Unit 2 is studied.

#### Overview of the unit

In this unit, learners are required to develop knowledge, skills and understanding in **three** areas, selected from:

- textiles
- wood
- brick
- plaster
- decoration
- tiles
- electrical
- plumbing
- heritage.

3.1	Interpreting technical sources of information
3.2	Planning and organising work
3.3	Identifying resource requirements
3.4	Calculating the materials required
3.5	Writing and setting success criteria
3.6	Prepare for construction tasks
3.7	Carrying out techniques
3.8	Removing and disposing of materials
3.9	Working practices that promote health and safety
3.10	Evaluating construction tasks

## HOW TO READ THE SPECIFICATION

WJEC/Eduqas Vocational Award (Technical Awards) specifications are written to be transparent and easy to understand.

The amplification provided uses the following four stems:

- 'Learners should know' has been used for the recall of facts such as: legislation and definitions.
- 'Learners should know and understand' has been used for the majority of the unit content where knowledge needs to lead to a sense of understanding.
- 'Learners should be aware of' has been used when the volume of content is quite extensive, and learners do not need to understand all aspects in detail.
- 'Learners should be able to' has been used when learners need to apply their knowledge to a scenario or practical situation.

The amplification provided includes all of the assessable content for the relevant section, unless it states, '*e.g.*,' '*including*' or '*such as*'. In these cases, the amplification lists relevant content, which should be expanded upon in an appropriate way, taking account of learners' needs and interests. The use of the word '*including*' indicates compulsion (i.e., a question could be specifically set on that aspect). The use of the words '*e.g.*,' or '*such as*' are for guidance only, and an alternative can be chosen.

## UNIT 3 TEACHER GUIDANCE

## 3.1 Interpreting technical sources of information

Content Amplification		Teacher Guidance
3.1.1	<p>Learners should be aware that:</p> <ul style="list-style-type: none"> <li>• specifications are precise details of requirements, presented in textual form, and/or drawings using international standard symbols and terminology which must be interpreted before construction begins</li> <li>• specifications include: <ul style="list-style-type: none"> <li>• materials</li> <li>• scope of work</li> <li>• installation process</li> <li>• quality.</li> </ul> </li> </ul>	<p>Learners should be aware that a specification is usually utilised in conjunction with working drawings, and is a written document that describes in detail:</p> <ul style="list-style-type: none"> <li>• the scope of work</li> <li>• materials to be used</li> <li>• methods of installation, construction</li> <li>• quality of workmanship for the project</li> <li>• pricing and estimating.</li> </ul>
3.1.2	<p>Learners should be aware that building regulations:</p> <ul style="list-style-type: none"> <li>• protect people's safety, health and welfare in and around buildings</li> <li>• improve conservation of fuel and power, protect and enhance the environment and promote sustainable development</li> <li>• cover the construction and extension of buildings</li> <li>• may also cover alteration projects so it is important to check before work begins.</li> </ul>	<p>The Building Regulations may apply in and around buildings. These requirements are intended to protect people's safety, health and welfare. They also set standards for accessibility, water use, energy use and security.</p> <p>It is important to make reference to approved documentation.</p>

3.1.3	<p>Learners should be aware that:</p> <ul style="list-style-type: none"> <li>• drawings produced to recognised (British Standards) scales as specified in BS 1192 are generally: <ul style="list-style-type: none"> <li>• 1:1, 1:5 and 1:10 for construction details</li> <li>• 1:50, 1:100, 1:200 for layout and site plans</li> <li>• 1:1250 for location plans</li> </ul> </li> <li>• drawings may be 2D or 3D and include constructional details and the location of components.</li> </ul>	<p>The specification lists a range of scales, types, and drawing conventions required to be adhered to British Standards 1192 [BS 1192] when producing drawings.</p> <p>The standards set out a method for managing the:</p> <ul style="list-style-type: none"> <li>• production</li> <li>• distribution</li> <li>• quality of construction information.</li> </ul> <p>This includes construction information produced using CAD systems. Learners should be encouraged to make reference to BS 1192 and use this in the production of their work.</p> <p>Learners should be able to identify the datum point of the drawing as it will usually be annotated with the level it has been established from.</p> <p>Drawings may need to be interpreted and understood by a range of stakeholders.</p>
3.1.4	<p>Learners should be aware that a design brief for a construction project:</p> <ul style="list-style-type: none"> <li>• is developed by the project designer/design team in consultation with the client</li> <li>• outlines the deliverables and the scope of the project including any products or works, the timeline and budget.</li> </ul>	<p>Learners need to be aware that there are a number of key participants of a construction project and their roles need to be considered when a design brief is drawn up.</p>





## UNIT 3 TEACHER GUIDANCE

## 3.2 Planning and organising work

Content Amplification	Teacher Guidance
<p>3.2.1 Learners should be aware that:</p> <ul style="list-style-type: none"> <li>• in construction projects the sequencing is linked to the specification, the design brief and the drawings.</li> <li>• sequencing is time-framed and needs to meet building regulations and health and safety requirements.</li> <li>• sequencing of work needs to consider the essential stages of any activity undertaken. This includes having the right tools, equipment and personal protective equipment (PPE) as well as the correct materials to complete the activity.</li> <li>• a well-designed sequence of work will create a logical and efficient flow of work which takes account of the time taken to complete specific tasks and when one task is dependent on another being completed first.</li> </ul>	<p>In this section, learners must be aware that there is a need for accurate project planning and that this can be vital to gain a successful outcome.</p> <p>The specification stresses the need for sequencing of work, which should be realistic and viable. The use of planning tools could assist the learner, the traditional planning Gantt chart or work schedule could prove to be helpful, together with the use of computer-based programs.</p> <p>Learners need to be aware of the types of contingencies, milestones and the use of Critical Path Analysis (CPA).</p>

## UNIT 3 TEACHER GUIDANCE

## 3.3 Identifying resource requirements

Content Amplification	Teacher Guidance
<p>3.3.1 Learners should understand:</p> <ul style="list-style-type: none"> <li>• that the tools, equipment, PPE and materials required will be dependent on the trade areas selected in addition to the tasks to be undertaken in those areas</li> <li>• that a list of all tools required should be completed before working on a construction task, to ensure that every stage of the task can be undertaken as efficiently and effectively as possible</li> <li>• that the list of tools should cover all stages of the construction task, including preparation and finishing of materials</li> <li>• how and why each tool is used and the safety considerations for each item.</li> </ul>	<p>This section has some links with 3.2, for planning and organisation regarding the following is very important:</p> <ul style="list-style-type: none"> <li>• collation of tools, equipment and availability</li> <li>• collation of PPE</li> <li>• correct use of PPE</li> <li>• an awareness of the skill set of tradespeople</li> <li>• timescales</li> <li>• start – hand over date</li> <li>• fit for purpose, materials, tools and staffing/availability.</li> </ul>
<p>3.3.2 Learners should understand:</p> <ul style="list-style-type: none"> <li>• that a list of all equipment required should be completed before working on a construction task to ensure that every stage of the task can be undertaken as efficiently and effectively as possible</li> <li>• that the list of equipment should cover all stages of the construction task including preparation and finishing of materials</li> <li>• how and why each piece of equipment is suitable for the scale and nature of the task, and the safety considerations for each item.</li> </ul>	<p>It is vital that learners are familiar with the tools and equipment that they will have access to, and that learners undertake appropriate training which must include safety training.</p> <p>In the case of certain services trades, such as Gas, Plumbing, Fire Safety and Electrical, appropriate training and suitable qualifications are required to certificate the completed work.</p> <p>Gas – Gas Safe registration  Plumbing – Enclosed and pressurised hot water systems and Cold Water Regulations  Electrical – Certification Body registration.</p>

3.3.3	<p>Learners should know and understand that:</p> <ul style="list-style-type: none"> <li>the selection and correct use of appropriate personal protective equipment is essential when undertaking a construction task</li> <li>depending on the task being undertaken, and the materials and processes being used, personal protective equipment may be required for: <ul style="list-style-type: none"> <li>respiratory protection</li> <li>eye protection</li> <li>hearing protection</li> <li>hand protection</li> <li>head protection</li> <li>fall-arresting.</li> </ul> </li> </ul>	<p>No task should be undertaken without the learner displaying confident use in the operation of the selected tools and tooling or equipment.</p> <p>Appropriate PPE must be used when carrying out all tasks.</p> <p>Safety equipment should be identified for building services work:</p> <ul style="list-style-type: none"> <li>gas – the use of gas analysers</li> <li>plumbing – the use of pressure and flow gauges</li> <li>electrical and fire systems – the use of test meters and functional testing equipment.</li> </ul>
3.3.4	Materials based on:	
<ul style="list-style-type: none"> <li>Characteristics</li> </ul>	<p>Learners should know and understand that:</p> <ul style="list-style-type: none"> <li>the selection of materials is based on their fitness for purpose for the construction task, taking account of the requirements within the specification</li> <li>relevant characteristics may include: <ul style="list-style-type: none"> <li>physical properties</li> <li>mechanical properties</li> <li>thermal properties.</li> </ul> </li> </ul>	<p>Fitness for purpose can be easily overlooked and learners need to seriously consider the most suitable materials and equipment when planning for the project.</p> <p>Referring to the design brief when making these decisions is very important to the success of the project.</p>
<ul style="list-style-type: none"> <li>Qualities</li> </ul>	<p>Learners should be aware that relevant qualities of materials may be linked to the project's:</p> <ul style="list-style-type: none"> <li>quality objectives</li> <li>budget.</li> </ul>	<p>Materials are often available in different levels of quality. Higher quality materials may have superior characteristics but may also be more expensive. Design briefs may specify certain levels of quality and for certain materials this can be expressed as 'grades'. For example, busy areas of buildings such as corridors will benefit from higher graded flooring.</p>

<ul style="list-style-type: none"> <li>• Sustainability</li> </ul>	<p>Learners should be aware that:</p> <ul style="list-style-type: none"> <li>• sustainability is an increasingly important consideration in the selection of materials, taking into account their environmental impact in terms of:             <ul style="list-style-type: none"> <li>• production</li> <li>• placing</li> <li>• maintenance</li> </ul> </li> <li>• a long-term view may also consider how the materials may be recycled.</li> </ul>	<p>Minimising the impact of construction work on the environment is an important consideration for all stakeholders who are developing construction projects.</p> <p>Learners should be mindful of the fact that certain materials have superior 'green credentials'. Considering the environmental impact of materials should span the lifecycle of those materials from sourcing to recycling or re-use.</p>
<ul style="list-style-type: none"> <li>• Limitations</li> </ul>	<p>Learners should be aware that limitations may be related to:</p> <ul style="list-style-type: none"> <li>• cost</li> <li>• availability</li> <li>• characteristics/properties</li> <li>• regulations.</li> </ul>	<p>Learners should be aware that limitations, if not seriously considered, will have an effect on the successful outcome of the project.</p> <p>The design brief of a project will specify material requirements which will need to conform with regulations and offer appropriate characteristics and properties. The cost of materials is a limiting factor as budgets will need to be adhered to. The lack of availability of specified materials within a reasonable time frame may prompt the need for suitable substitutes. Simple phrases such as 'to match existing' (often used in refurbishment work) can prove very difficult when production of those exact materials has ceased.</p> <p>Limitations due to regulations could include environmental regulations.</p>

## UNIT 3 TEACHER GUIDANCE

## 3.4 Calculating the materials required

Content Amplification		Teacher Guidance
3.4.1	<p>Learners should know and understand that calculations of quantities of materials required to complete construction tasks should be accurate and allow for rounding up and acceptable wastage.</p> <p>Learners should know how to calculate volumes to quantify materials required, such as:</p> <ul style="list-style-type: none"> <li>the volume of concrete.</li> </ul>	<p>Learners should be able to accurately calculate quantities so as to ensure that there is minimal waste and to reduce production cost (which also applies to time and staffing). This may be achieved by using a well-thought-out method of calculating the requirements.</p> <p>Learners should understand that very often materials are not available in singular forms or part quantities. They may be forced to purchase in multiples or batches, e.g., full bags of plaster or full tins of paint. Full purchase may be required even though only part quantities will be used. Learners need to be aware that quantities may need to be 'rounded up' and that the effects of rounding up waste and cost need to be considered when making calculations.</p> <p>However, learners need to be aware that mistakes can be costly, not only financially, such as in failing to meet deadlines, but can also affect the environment. Sustainability and recycling must be considered while addressing this section and when developing any project.</p>
3.4.2	<p>Learners should know how to calculate areas to quantify materials required, such as:</p> <ul style="list-style-type: none"> <li>tins of paint</li> <li>bags of plaster</li> <li>rolls of wallpaper</li> <li>carpet tiles.</li> </ul>	<p>Learners should become familiar with the use of a Bill of Quantities and how it is used to minimise waste and control costs.</p> <p>Learners will be assessed on their ability to make calculations related to the three trade areas selected. Teaching should be focused accordingly.</p>
3.4.3	<p>Learners should know how to calculate perimeters to quantify materials required, such as:</p> <ul style="list-style-type: none"> <li>fencing</li> <li>cabling.</li> </ul>	
3.4.4	<p>Learners should know how to calculate the time required to complete tasks, taking into account:</p> <ul style="list-style-type: none"> <li>the number of people working on the task</li> <li>the complexity of the task</li> <li>time-dependent factors such as drying time.</li> </ul>	

3.4.5	<p>Learners should know how to calculate the volume/proportion of different components required to complete a whole, such as mixing:</p> <ul style="list-style-type: none"><li>• concrete</li><li>• plaster</li><li>• mortar.</li></ul> <p>Learners should be aware that the result may be expressed as a percentage or ratio.</p>	
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## UNIT 3 TEACHER GUIDANCE

## 3.5 Writing and setting success criteria

Content Amplification		Teacher Guidance
3.5.1	<p>Learners should be aware that project tolerance may involve:</p> <ul style="list-style-type: none"> <li>• increase or decrease from planned cost or time</li> <li>• deviations from quality and scope.</li> </ul> <p>Learners should be aware that construction tolerance may involve allowable variations that are not considered to be defects, in terms of:</p> <ul style="list-style-type: none"> <li>• dimensions</li> <li>• strength, stability, mix and performance.</li> </ul>	<p>This section of the specification is concerned with establishing the success of a project by using focused predetermined criteria. The realisation of a project success can be subjective and objective. Learners should be encouraged to contemplate the following points and their related tolerances:</p> <ul style="list-style-type: none"> <li>• time</li> <li>• cost</li> <li>• quality</li> <li>• safety</li> <li>• client's satisfaction</li> <li>• employees' satisfaction</li> <li>• cash-flow management</li> <li>• profitability</li> <li>• environment</li> <li>• performance</li> <li>• learning and development.</li> </ul> <p>In simple terms, learners need to consider the requirements of the assignment brief, the associated quality requirements and the time allowance.</p>
3.5.2	<p>Learners should know and understand that a critical success factor for a project is to meet the deadline.</p> <p>Learners should be aware of the following project management techniques designed to help achieve deadlines:</p> <ul style="list-style-type: none"> <li>• setting of realistic timescales</li> <li>• development of plans and Gantt charts</li> <li>• critical path analysis</li> <li>• resource allocation</li> <li>• setting of milestones</li> <li>• use of contingencies.</li> </ul>	

Learners should know and understand that construction projects are a balance between cost, time and quality.

Learners should be aware that in relation to products and materials, quality can be defined by:

- reference to standards
- specification of attributes
- nominating suppliers.

Learners should be aware that in relation to standard of workmanship, quality can be defined by:

- compliance with manufacturers' requirements
- reference to a code of practice or standards
- approval of samples
- testing and inspection.

Testing links into the evaluation of the success of the outcomes of a product/project and can often be seen as a tool in establishing its 'fitness for purpose'.

Learners should understand the responsibilities of those who are tasked with checking the quality of the work and the product. They should be aware that that process starts with the acceptance of the product and/or equipment and goes through each role to the architect who has ultimate responsibility.



## UNIT 3 TEACHER GUIDANCE

## 3.6 Prepare for construction tasks

Content Amplification	Teacher Guidance
<p>3.6.1 Learners should be able to prepare materials, which may be:</p> <ul style="list-style-type: none"> <li>• textiles</li> <li>• wood</li> <li>• brick</li> <li>• plaster</li> <li>• decorations</li> <li>• tiles</li> <li>• electrical</li> <li>• plumbing</li> <li>• heritage</li> </ul> <p>to undertake construction tasks in the <b>three</b> selected trade areas.</p> <p>Learners should be aware that the nature of the preparation will depend on the areas chosen and the tasks themselves.</p> <p>Learners should be able to undertake appropriate preparatory work, which may typically involve:</p> <ul style="list-style-type: none"> <li>• selecting materials</li> <li>• checking quantity</li> <li>• checking for defects</li> <li>• organising materials</li> <li>• measuring</li> <li>• marking out</li> <li>• cutting</li> <li>• setting out.</li> </ul>	<p>Learners must be able to consider the requirements of the tasks ahead. The specification lists a range of materials from textiles to heritage work, the preparation time and suitable support resources will differ for each task; this needs to be considered long before embarking on a particular task.</p> <p>It is imperative that learners are given the appropriate amount of preparatory time to successfully gather the necessary resources and prepare materials required to proceed with their selected trade tasks.</p> <p>This must be in conjunction with the undertaking of an appropriate standard of training to ensure competency in using the tools and equipment, and the appropriate associated PPE.</p>

Learners should know and understand that preparation needs to be undertaken with regard to:

- the main properties of the materials involved
- stock forms, types and sizes in order to determine the quantity of materials or components required
- some tasks may require the pre-mixing of materials so that they are ready for use (e.g., plaster).

## UNIT 3 TEACHER GUIDANCE

## 3.7 Carrying out techniques

Content Amplification	Teacher Guidance
<p>3.7.1 Learners should be able to carry out simple construction tasks<sup>1</sup> which may involve the use of any of the following trade areas. (An example of a simple construction task is shown in brackets in each case. These are provided as examples only, to illustrate the expected level of demand. Centres are free to choose construction tasks from those given in the Unit 3 controlled assessment assignment brief to suit their resources and learners' needs and interests).</p> <ul style="list-style-type: none"> <li>• textiles (cut fabric to size, finish edges, including a means of hanging, to make a pair of pleated curtains)</li> <li>• wood (cut wood to size, to make section of stud partition with 3 vertical studs, sole plate, intermediate noggin, head plate and horizontal section of standard door lining to one edge, with architrave over plasterboard to one side)</li> <li>• brick (mix mortar and construct brickwork panel, approximately 900 x 450 mm, to required wall thickness, using specified bond and pointing)</li> <li>• plaster (prepare surface, fit edge beads and apply 2 coat gypsum plaster with skim finish suitable for painting)</li> <li>• decorations (prepare, prime, and decorate new plaster wall surface, approx. 1 m<sup>2</sup>, with 2 coats emulsion, including cutting in at edges)</li> <li>• tiles (prepare, set out and tile wall area of approx. 1 m<sup>2</sup>, with balanced cut tiles to sides and grout in contrasting colour)</li> <li>• electrical (run cable between an imaginary supply and a wall socket; a light switch and lamp holder)</li> </ul>	<p>There are a wide range of tasks from which learners/centres may choose. It is very important that serious deliberation should take place within centres in selecting the most suitable tasks to suit their resources and learners' needs and interests, and to allow learners to fully address assessment requirements.</p>

<sup>1</sup> relevant to the **three** selected trade areas

- plumbing (cut and join four lengths of copper tube using a selection of end feed fittings)
- heritage (dry stone wall building, with through stones, facing, pinning and copings).

The processes involved will depend on the areas chosen and the tasks themselves. Typically, this will involve the learner:

- measuring
- marking
- cutting
- joining
- shaping
- assembling
- mixing
- finishing
- applying surface treatments.

## UNIT 3 TEACHER GUIDANCE

## 3.8 Removing and disposing of materials

Content Amplification	Teacher Guidance
<p>3.8.1 Learners should know and understand that:</p> <ul style="list-style-type: none"> <li>• preparation for construction, and the construction task itself, should aim to minimise waste</li> <li>• where possible, waste should be reused or recycled</li> <li>• non-reusable waste should be handled, stored and disposed of appropriately and in compliance with good practice and relevant regulations</li> <li>• where appropriate, shelf-life should be considered before and after use of products.</li> </ul>	<p>Learners must understand that accurate calculations, measurements and estimations are important; not only is it cost effective, but it helps to protect the environment, by minimising waste and reducing world production cost.</p> <p>Reusing materials and upcycling, where possible, should be considered.</p> <p>The removal and disposal of materials will be trade area specific. Whilst there are many general principles, teachers should focus on the three trade areas selected and input accordingly. Certain tasks, for example, the rebuilding of a dry-stone wall using the existing stones will be far less problematic than the renewal of plastic piping for a plumbing task.</p>

## UNIT 3 TEACHER GUIDANCE

## 3.9 Working practices that promote health and safety

Content Amplification	Teacher Guidance
<p>3.9.1 Learners should understand:</p> <ul style="list-style-type: none"> <li>• the importance of ensuring the cleanliness and safety of work areas</li> <li>• that work areas should be clean and free of any obstructions or trip hazards</li> <li>• that the area should be adequately sized for the task allowing for safe completion of all activities</li> <li>• that first aid facilities should be easily reached.</li> </ul>	<p>Safe working procedures and practices are key to a safe working environment and it is the responsibility of staff and learners to ensure that they work safely. Staff need to consider ‘risk assessment’ and learners should understand that this ‘risk assessment’ is very important whilst carrying out practical tasks. When carrying out tasks, learners also need to understand that they have a duty of care not only to themselves, but also their peers.</p> <p>Learners should understand what control measures are and that they come directly from the risks that have been identified when carrying out the tasks. They need to be aware that compliance with these control measures is paramount.</p>
<p>3.9.2 The learner should know and understand that:</p> <ul style="list-style-type: none"> <li>• the correct personal protective equipment should be selected as part of the planning process and adhered to prior to starting, and during, construction tasks</li> <li>• personal protective equipment should be checked for damage and to ensure it is fit for purpose</li> <li>• personal protective equipment may be required for: <ul style="list-style-type: none"> <li>• respiratory protection (e.g., masks)</li> <li>• eye protection (e.g., goggles, visors)</li> <li>• hearing protection (e.g., ear plugs, earmuffs)</li> <li>• hand protection (e.g., gloves, barrier cream)</li> <li>• feet protection (e.g., steel toe-cap footwear)</li> <li>• head protection – (e.g., hard hats).</li> </ul> </li> </ul>	<p>Linked to ‘risk assessment’, personal protective equipment [PPE] must be considered for any task that the learner carries out.</p> <p>Tasks should not proceed if the risk is too high or suitable PPE is not available.</p>

## UNIT 3 TEACHER GUIDANCE

## 3.10 Evaluating construction tasks

Content Amplification		Teacher Guidance
3.10.1	<p>Learners should be able to evaluate a finished construction task against the project requirements considering:</p> <ul style="list-style-type: none"> <li>• possible further improvements</li> <li>• areas of the project that were challenging.</li> </ul>	<p>The evaluation should be a systematic review to determine the task's merit, worth and success, as measured against the specification, using a set criterion.</p> <p>Learners need to understand that the primary purpose of evaluation is to enable 'reflection' and assist in the identification of future change or improvements.</p>
3.10.2	<p>Learners should be able to evaluate a finished construction task against personally-set success criteria considering whether:</p> <ul style="list-style-type: none"> <li>• all aspects of the task were within the levels of tolerance</li> <li>• the task was completed to the set timescale</li> <li>• the task was completed to the required quality.</li> </ul>	
3.10.3	<p>Learners should be able to evaluate a finished construction task against the needs of end users, considering:</p> <ul style="list-style-type: none"> <li>• their health and safety</li> <li>• the intended purpose of the outcome of the construction task.</li> </ul>	

## CONTROLLED ASSESSMENT

### CONTROLS

#### Guide to Controls

There are a number of different aspects that are controlled within the internal assessment of our Vocational Awards. These are:

- supervision
- guidance
- resources
- collaboration.

#### Redrafting

Re-drafting is allowed within the time of the controlled assessment and without teacher feedback.

#### Time

The total time allocated for assessed tasks is 30 hours. Candidates cannot exceed this time. Unit 3 tasks feature recommended timings that are for guidance only. Centres should discourage candidates from exceeding the recommended times or devoting insufficient time to this work.



## Supervision

One level of supervision features throughout the Unit 3 assessment:

Indirect supervision	<p>Candidates do not need to be directly supervised at all times.</p> <p>The centre must ensure that:</p> <ul style="list-style-type: none"> <li>• all candidates participate in the assessment</li> <li>• there is sufficient supervision to ensure that work can be authenticated</li> <li>• the work an individual candidate submits for assessment is his/her own.</li> </ul> <p>Candidates' work must remain within the centre at all times and must be stored securely between timetabled sessions.</p>
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## Guidance

One level of guidance features throughout the Unit 3 assessment:

Category of Advice/Feedback:	Indirect
Teachers can:	
Review candidates' work and provide oral and written advice at a <b>general</b> level in order to secure a functional outcome.	✓
Evaluate progress to date and propose broad approaches for improvement.	X
Provide detailed specific advice on how to improve drafts to meet assessment criteria.	X
Give detailed feedback on errors and omissions which leave candidates with no opportunity to show initiative themselves.	X
Intervene personally to improve the presentation or content of work.	X

## Resources

One level of resources features throughout the Unit 3 assessment:

<b>Permitted</b>	<p>Candidates have access to resources and/or preparatory notes as directed by the brief or unit guidance.</p> <p>Candidates' work must remain within the centre at all times and must be stored securely between timetabled sessions.</p> <p>Centres should refer to specifications for subject-specific guidance.</p>
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Where the level of control is 'permitted', candidates' notes are limited to:

Task:	Resources permitted:
1-4	<p>Class notes relating to interpretation of design briefs, and identification of tools, equipment, materials and PPE.</p> <p>Any resources necessary to support the safe and effective use of tools and equipment related to construction tasks.</p>

## Collaboration

One level of collaboration features in the Unit 3 assessment:

<b>Not permitted</b>	Candidates should not collaborate in any way during the task.
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## PRESENTATION

The completed learner work will provide the evidence associated with the tasks outlined in the assignment brief. This work will be primarily text based with the inclusion of photographs. All four tasks (and sub-tasks) need to be completed for each of the three trade areas selected.

## ASSESSMENT OF UNIT 3

### Unit 3: Construction the Built Environment

Controlled Assessment: 30 hours

60% of qualification

120 marks: 180 UMS

An assignment brief will be provided by WJEC that will include a scenario and several tasks available via the WJEC Secure Website.

Centres must follow the instructions for running controlled assessments in the Administration Guide and within each Unit Guide. In line with these instructions, centres are required to have in place a controlled assessment policy (which can be part of a centre's NEA policy); this will be checked as part of the centre and qualification approval process.

The assessment objective weightings for Unit 3 are:

AO1	AO2	AO3
3%	39%	18%
6 marks	78 marks	30 marks

## FAQS

### Can learners resit the Unit 3 assessment?

Candidates may resit the internally assessed unit prior to certification but cannot improve previously submitted work. The best uniform mark score from the attempts will be used in calculating the final overall grade.

Candidates who are unhappy with the grade awarded for the qualification may choose to resit one or more units following certification.

Where the candidate resits the internally assessed unit, the higher of the uniform mark score from either the initial attempt or the resit attempt will be used in calculating the overall grade. The candidate will also need to resit the externally assessed unit to satisfy the terminal rule requirement for the qualification and only the uniform mark score from the resit attempt will be used in calculating the final overall grade, even if this is lower than the previous attempt.

### What is the entry code for this unit?

		Entry Code
Unit 3	Internal	E819U3

### Is this assessment compulsory?

This assessment is compulsory for learners studying Unit 3. Learners will study Unit 3 in addition to Unit 1 **unless** Unit 2 is studied.

**When can candidates submit the Unit 3 assessment?**

Assessment opportunities will be available in January and May/June each year, until the end of the life of this specification.

January 2023 will be the first assessment opportunity for Unit 3.

**Are candidates assessed on their spelling, punctuation and grammar in this assessment?**

No, although learners are reminded of the need for good English and orderly, clear presentation in their answers.

**Will candidates be expected to answer questions about content in Unit 1 in this assessment?**

Yes. Learners will need to make use of their knowledge and understanding gained from Unit 1 throughout this unit, including:

- 1.1.4 Professional and managerial roles & responsibilities associated with the built environment sector
- 1.2.3 Building life cycle: construction
- 1.2.6 Disposal, reuse or recycling
- 1.6.4 Waste disposal, re-use and recycling
- 1.7 Trades, employment and careers
- 1.8.1 Risks for employees, employers and the public during construction and the built environment projects
- 1.8.2 Following procedures and carrying out risk assessments
- 1.8.4 Using personal protective equipment (PPE).

**Will the assessment objective weightings remain the same throughout the life of the specification?**

Yes.

**How is the unit reported?**

This unit will be graded Level 1 Pass, Level 1 Merit, Level 1 Distinction, Level 1 Distinction\*, Level 2 Pass, Level 2 Merit, Level 2 Distinction, Level 2 Distinction\*.

**Where can I access the Controlled Assessment assignment briefs?**

The Controlled Assessment assignment briefs can be found in the Candidate and Assessor pack on the secure website under [WJEC \(wjecservices.co.uk\)](https://www.wjecservices.co.uk).

**How will I know which assignment brief to use?**

Candidate and Assessor packs will be clearly labelled with the release date and the year of submission for that brief. Centres must ensure that they provide learners with the correct brief for the year during which learners will be submitting their controlled assessment.

**What happens if a candidate has done the wrong brief?**

Centres should contact the subject team at WJEC as soon as possible. The centre may be required to submit the relevant JCQ form to ensure that the learners is not penalised.

**Will the tasks remain the same throughout the life of the specification?**

Example tasks will be provided for each of the trade areas. These examples will change every year and need to be followed. Centres are not able to design their own examples. The examples provided for each trade area will be set within a common published context within the assignment brief.

**Do learners have to use the published contexts given for the controlled assessment tasks?**

Yes. The context will change every year, and learners must complete tasks according to the context that is included as part of the assignment brief for the appropriate year of submission.

**When should learners complete the Controlled Assessment?**

Controlled Assessment tasks may be completed and assessed at any suitable time during the course. However, centres need to ensure they have delivered the content needed for candidates to be able to access marks allocated to all aspects of the relevant Controlled Assessment.

**Can candidates work together on any part of their Controlled Assessment?**

No. Please see the Administration Guide and pages 24 – 26 of this document for more information on how to manage the Controlled Assessment.

**How long should learners spend on their Controlled Assessment?**

Learners should spend 30 hours on their Controlled Assessment tasks. Please see the Administration Guide and pages 24 – 26 of this document for more information on how to manage the Controlled Assessment.

**Can learners complete their Controlled Assessment outside of the classroom?**

All tasks should be carried out within the prescribed Controls, including those pertaining to supervision and time constraints, as detailed in the Assignment Brief. Please see the Administration Guide and pages 24 – 26 of this document for more information on how to manage the Controlled Assessment.

**Are there any word or page restrictions for the Controlled Assessment?**

No. Please see the Administration Guide and pages 24 – 26 of this document for more information on how to manage the Controlled Assessment.

**How should learners present their Controlled Assessment work for submission to WJEC?**

Please see the Administration Guide and pages 24 – 26 of this document for more information on how to manage the Controlled Assessment.

**Can the work be a combination of word processed and handwritten?**

Yes.

**Can learners use the internet during the completion of their NEA?**

No. Please see the Administration Guide and pages 24 – 26 of this document for more information on how to manage the Controlled Assessment.

**Can teachers provide guidance about candidates' Controlled Assessment work?**

Yes/No. Please see the Administration Guide and pages 24 – 26 of this document for more information on how to manage the Controlled Assessment.

**Are learners permitted to redraft their work?**

Once the task is finished and the final assessment made, no further amendments may be made. Please see the Administration Guide and pages 24 – 26 of this document for more information on how to manage the Controlled Assessment.

**How will work be submitted to WJEC?**

Please see the Administration Guide and pages 24 – 26 of this document for more information on how to manage the submission of the Controlled Assessment.

**What if the centre does not have the resources to produce coloured images, would black and white be rejected?**

Black and white images are acceptable if the quality of the work undertaken is evidenced to the same level as would be provided by a coloured image.

**Is there a set number of images that are requested and are there any min/max sizes?**

There is no maximum number of images. The optimum number may vary depending on the nature of the task and the trade area. There are no minimum or maximum size requirements. The purpose of the images is to provide evidence about the work completed by individual learners. It is anticipated that one image will be provided for each trade area highlighting safe working practice and another for each trade area showing the completed work. Commentaries are to be provided with all images.

**What provisions will be made for learners who might struggle to access the Controlled Assessment activities such as learners with disabilities or learners who have specific learning needs?**

WJEC will follow the guidance and rules on reasonable adjustments found in the Joint Council for Qualifications (JCQ) document: Access Arrangements and Reasonable Adjustments: General and Vocational Qualifications.

We believe that, as a consequence of the provision for reasonable adjustments, very few learners will have a complete barrier to any part of the assessment in WJEC Level 1/2 Vocational Award in Construction and the Built Environment (Technical Award). We recognise, however, that Controlled Assessment activities can provide challenges for learners with particular disabilities. We will be pleased to respond to queries from centres on an individual basis should they seek advice on delivery or assessment of the qualification for a particular learner or group of learners, and to discuss what reasonable adjustments might be appropriate to remove or minimise the disadvantage experienced by a learner with disabilities studying the WJEC Level 1/2 Vocational Award in Construction and the Built Environment (Technical Award).



## GLOSSARY FOR UNIT 3

Term	Definition
<b>Analyse</b>	To examine in detail in order to discover meaning, essential features, etc. to break down into components or essential features.
<b>Assessment</b>	The action or an instance of making a judgment about something.
<b>Building trades</b>	Trades that are essential to and practised in connection with building construction, such as carpentry, plumbing and bricklaying.
<b>Built Environment</b>	The man-made surroundings that provide the setting for human activity that includes cities, infrastructures buildings, the spaces between them such as parks.
<b>Client</b>	A person or organisation using the services of a professional person or company.
<b>Code of Practice</b>	A document that complements occupational health and safety laws and regulations to provide detailed practical guidance on how to comply with legal obligations.
<b>Construction Industry</b>	The term used to describe the sector of the national economy that carries out building and infrastructure projects.
<b>Contingencies</b>	This is a potential negative event that may occur in the future, such as an economic recession, natural disaster, fraudulent activity, or a terrorist attack.
<b>Critical Path Analysis</b>	This is a project management technique which considers the timing and interrelationship of the key activities required to complete a construction project.
<b>Design Brief</b>	A written description of what a new project or product should do, what is needed to produce it, how long it will take, etc.
<b>Evaluate</b>	To evaluate is to judge the value or worth of someone or something.
<b>Fit for Purpose</b>	The appropriate, and of a necessary standard, for its intended use.
<b>Gantt Charts</b>	A chart in which a series of horizontal lines shows the amount of work done or production completed in certain periods of time in relation to the amount planned for those periods.
<b>Hazard</b>	Something that can cause harm, such as working at height and using heavy plant and machinery.
<b>Infrastructure</b>	The general term for a basic physical system that supports human activity, such as transportation systems, communication networks and energy distributions.



<b>Interpreting</b>	The act of explaining, reframing, or otherwise showing your own understanding of something.
<b>Legislation</b>	Rules or laws relating to a particular activity that are made by a government.
<b>Manufacturing</b>	The processes required to transform raw materials into useful products.
<b>Milestones</b>	A significant or important event in a project or task.
<b>Pathway</b>	A pathway is a particular course of action or a way of achieving something.
<b>Primary Industries</b>	Industries that extract raw materials from nature for use in their unprocessed state, such as coal, iron ore or for use in manufacturing.
<b>Project Tolerance</b>	A feature of a project's plan, as it recognises allowance of certain variation in duration, budget or quality, to which the project is approved as still successful.
<b>Recycled</b>	Materials or products that have been treated using a special industrial process so that they can be used again.
<b>Regulations</b>	These are rules made by a government or other authority in order to control the way something is done, or the way people behave.
<b>Renewable energy technologies</b>	Technologies involved in the generation or collection of energy from renewable sources, as opposed to generating energy by burning finite resources such as fossil fuels or natural gas.
<b>Risk</b>	A risk is the chance, high, medium, or low, that any hazard will actually cause harm.
<b>Risk assessment</b>	A critical examination of health and safety hazards at a construction site, usually involving a five-step process.
<b>Specifications</b>	A written document describing in detail the scope of work, materials to be used, methods of installation, and quality of workmanship.
<b>Sustainability</b>	To focus on meeting the needs of the present, without compromising the ability of future generations to meet their need.