

# **Qualification Specification**

# **ECITB Level 2 Certificate in Supporting Engineering Construction Operations**

Qualification number: 610/6445/2

Regulated by Ofqual

Qualification start date: 17/11/2025 Issue RV1-0 valid from 17/11/2025

### **Issue**

This specification is Issue RV1.0. We will inform approved centres of any changes to this issue. The latest issue can be found on our website.

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### **Changes to this document**

The table below sets out all revisions made to this document since it was first issued, and the dates on which the revisions were effective from.

New Issue number	Summary of changes made between the previous issue and this current issue	Page number	Date of change

### **Accessibility**

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### 1. Overview

### 1.1 ECITB

The Engineering Construction Industry Training Board (ECITB) is the employer-led skills, standards and qualifications body for the development of the engineering construction workforce of Great Britain. An arms-length body of the UK Government, the ECITB reports to the Department for Education.

The ECITB awarding organisation for regulated engineering construction qualifications is part of the training board. Our qualifications certify knowledge and competence across craft and technical disciplines. They improve quality and standards for the industry, helping engineering construction companies to maintain occupational competence.

This document is for use by approved centres to ensure that their candidates gain the relevant Knowledge, Skills and Behaviours (KSBs) for their role specific activities. It is also used by ECITB's External Quality Assurers and employers may be interested in this document if they have employees or applicants who hold this qualification.

### 1.2 Regulation

This qualification is regulated by Ofqual and is listed on Ofqual's Register of Regulated Qualifications.

This qualification has an operational start date of 17/11/2025. This is the date centres may start registering candidates and delivering courses leading to the qualification.

### 1.3 Objective

The objective of this qualification is to:

- prepare candidates for employment by attaining a range of knowledge, skills and behaviours to support activities within the engineering construction industry.
- provide opportunities to progress to the next level of vocational qualifications in the engineering construction industry.

### 1.4 Candidates

This qualification is suitable for candidates age 16+ who are interested in entering the engineering construction industry in the role of support operative. This qualification is also suitable for individuals who would like to acquire engineering skills in a realistic, sheltered, and controlled environment such as that offered by colleges, training providers and company training centres. This will then enable a safe progression into the workplace/employment.

The individual working in these roles will conduct activities in engineering construction under the direct supervision of a crafts person, charge hand or supervisor to prepare work areas and equipment, conduct activities and dismantle equipment and environments and reinstate the work area within a limited range of engineering construction components and materials. They will be able to interpret documents, specifications, engineering drawings and diagrams and understand the on-site hazards and health, safety and environmental requirements of plant and systems.

A candidate must register for this qualification via an ECITB approved centre based in England. If you are a candidate looking for a centre, please email ECITB at <a href="mailto:qualifications@ecitb.org.uk">qualifications@ecitb.org.uk</a> to help identify a suitable centre for you.

### 1.5 Language

This qualification is available in English only.

For candidates who use English as a second language, an approved centre must satisfy itself prior to registering a candidate that the candidate's level of English is sufficient to be able to access the learning and undertake the assessment at the appropriate level, and to be able to interact with others and work safely.

### 1.6 Entry requirements

There are no mandatory entry requirements. The qualification is open to any candidate who the approved centre believes has the ability to reach the assessment requirements set out within this document. A candidate must have a sound grasp of the English language and mathematics to be able to follow instructions as well as complete the learning and assessment required within this qualification. The approved centre will work with the candidate and, where appropriate, employer, to determine the candidate's suitability for the qualification.

### 1.7 Progression

Candidates who pass this qualification can progress to a range of further career options. These include apprenticeships in engineering construction and associated disciplines and they may gain employment in these areas. Possible qualifications the candidate could consider, after some experience supporting operations, include:

- ECITB Level 2 SIPS Diploma in Supporting the Installation of Engineering Construction Plant and Systems (RQF)
- ECITB Level 2 Diploma in Introduction to Welding in Engineering Construction Operations
- ECITB Level 3 Diploma in Engineering Construction Lifting, Positioning and Installing Structures, Plant and Equipment (RQF)
- ECITB Level 3 Diploma in Engineering Construction Maintenance (RQF)
- ECITB Level 3 Diploma in Installing Engineering Construction Plant and Systems (RQF)

You can find information about career progression in Engineering Construction at <u>Careers in engineering construction - ECITB</u>.

#### 1.8 Standards

Each unit in this qualification has been mapped to Apprenticeship/Occupational Standards and National Occupational Standards (NOS). The assessment criteria within this qualification have been developed by the ECITB in consultation with stakeholders, including employers in the industry, Assessment Associates who are subject experts and approved centres.

### 1.9 Units and grades

This qualification consists of 9 mandatory units. Candidates must attain all the learning outcomes in each unit to gain a pass in the qualification. Candidates achieve a unit by meeting all of the assessment criteria linked to all learning outcomes at the appropriate standard. The units in section 2 of this document detail the assessment criteria. The qualification grades available are a pass or fail. We issue a qualification certificate but do not issue unit certificates.

The qualification contains the following units:

ECITB unit ref no.	RQF unit ref no.	Unit title	RQF level	Mandatory or optional
SAF2	A/651/7125	Work safely in an engineering construction environment	2	Mandatory
REL2	D/651/7126	Maintain working relationships, communicate effectively, support diversity and inclusion	2	Mandatory
DOC2	F/651/7127	Interpret and follow documentation and procedures	2	Mandatory
PRE2	L/651/7860	Prepare work area, tools, materials and equipment in an engineering construction environment	2	Mandatory
MAR2	M/651/7861	Perform basic marking out in engineering construction	2	Mandatory
SHA2	R/651/7862	Perform basic shaping activities by material removal in engineering construction	2	Mandatory
ASC2	T/651/7863	Support the assembly of components in engineering construction	2	Mandatory
REM2	Y/651/7864	Support the removal and dismantling of components in engineering construction	2	Mandatory
RWA2	A/651/7865	Reinstate the work area after engineering construction activities	2	Mandatory

### 1.10 Guided Learning Hours (GLH) and Total Qualification Time (TQT)

Values for Total Qualification Time (TQT), including Guided Learning Hours (GLH), are calculated by considering how much time it would take the typical candidate to complete the learning and assessment activities to achieve the learning outcomes of a qualification.

TQT is an estimate of the total amount of time, on average, that the candidate will take to complete the supervised and unsupervised learning and assessment for the qualification.

GLH is a subset of the TQT and only refers to the supervised time that the candidate will spend with a tutor/ trainer/ assessor/ invigilator.

Individual candidates' requirements and different programme delivery methods at approved centres mean there will be variation in the actual time taken to complete a qualification. Values for TQT, including guided learning, are estimates.

There are **359** GLH and TQT for this qualification.

Some examples of activities which can contribute to guided learning include:

- classroom or workshop-based learning supervised by a tutor/trainer
- work-based learning supervised by a tutor/trainer
- live webinar or phone tutorial with a tutor/trainer in real time
- e-learning supervised by a tutor/trainer in real time
- all forms of assessment which take place under the immediate guidance or supervision of a tutor/trainer

The TQT for this qualification is also **359** hours.

The number of GLH/TQT is identical due to the candidate being supervised throughout the duration of this qualification.

The GLH and TQT for each unit are in this table:

ECITB unit ref no.	RQF unit ref no.	Unit title	Unit level	GLH	TQT
SAF2	A/651/7125	Work safely in an engineering construction environment	2	20	20
REL2	D/651/7126	Maintain working relationships, communicate effectively, support diversity and inclusion	2	20	20
DOC2	F/651/7127	Interpret and follow documentation and procedures	2	20	20
PRE2	L/651/7860	Prepare work area, tools, materials and equipment	2	20	20
MAR2	M/651/7861	Perform basic marking out in engineering construction	2	60	60
SHA2	R/651/7862	Perform basic shaping activities by material removal in engineering construction	2	115	115
ASC2	T/651/7863	Support the assembly of components in engineering construction	2	40	40
REM2	Y/651/7864	Support the removal and dismantling of components in engineering construction	2	40	40
RWA2	A/651/7865	Reinstate the work area after engineering construction activities	2	24	24
Total			•	359	359

### 1.11 RQF level

This qualification is at RQF level 2. The RQF level descriptor is:

Knowledge descriptor (the holder)	Skills descriptor (the holder can)
Has knowledge and understanding of facts,	Select and use relevant cognitive and
procedures and ideas in an area of study or	practical skills to complete well-defined,
field of work to complete well-defined tasks	generally routine tasks and address
and address straightforward problems.	straightforward problems.
Can interpret relevant information and	Identify, gather and use relevant
ideas.	information to inform actions.
Is aware of a range of information that is	Identify how effective actions have been.
relevant to the area of study or work.	

### 1.12 Equity, diversity and inclusion

We have designed this qualification and its assessments to enable fair access to all candidates as far as reasonably possible, while taking industry requirements into consideration e.g. health and safety.

You may wish to refer to our *Equal Opportunities Policy* and the *Reasonable Adjustments* and *Special Considerations Policy and Procedure* at <u>The ECITB Awarding Organisation</u> <u>ECITB</u>. If you would like to discuss arrangements for reasonable adjustments, please contact us at <u>qualifications@ecitb.org.uk</u>.

This qualification is designed to promote equity, diversity, and inclusion (EDI) through the learning outcomes (LOs) and assessment criteria (ACs) within it. The qualification ensures that candidates understand the importance of creating inclusive environments and are equipped with the skills to do so. The scope of the qualification covers maintaining and communicating effectively to promote good working relationships with all individuals within the workplace.

### 1.13 Sustainability

This qualification is designed to provide an understanding of sustainability principles and practices, integrating them throughout its learning outcomes (LOs) and assessment criteria (ACs). The qualification ensures that candidates are equipped with the knowledge and skills to implement sustainable practices in their allotted roles. The scope of the qualification covers critical sustainability topics such as resource management, environmental protection, and correct disposal of materials and equipment.

### 1.14 Digital skills

This qualification is designed to provide an understanding of digital skills by integrating them throughout its learning outcomes (LOs) and assessment criteria (ACs). The qualification ensures that candidates can use digital tools and technologies essential for workplaces. This could include emailing, data management, and following cybersecurity practices.

### 2. Units

### 2.1 Unit features

The qualification units are all presented in a standard layout, providing information for candidates, tutors/trainers, assessors, IQAs and EQAs as well as those who may wish to know about the units for progression purposes, such as training providers, colleges and employers. Each unit has the following sections in it:

### **ECITB** unit number

The unique unit code that identifies the unit on ECITB systems.

### **RQF** unit number

The unique unit code that identifies the unit on the Register of Regulated Qualifications.

#### **Unit title**

The name of the unit, which reflects the content of the unit.

### **RQF** level

The level measures the degree of challenge posed by the qualification compared to other qualifications. The level is determined by using Ofqual's level descriptors.

### **Unit aim**

A summary of what the unit enables the candidate to do.

### **Learning outcomes**

What a candidate will know, understand and/or be able to do upon attainment of the unit. Each learning outcome starts with the letters LO.

#### **Assessment criteria**

The requirements a candidate is expected to meet in order to demonstrate the attainment of the related learning outcome. Each assessment criterion starts with the letter K if it relates to Knowledge or understanding, with S if it relates to Skills or with B if it relates to Behaviours. Each assessment criterion starts with a command verb which instructs the candidate in what to do.

### **Additional Information**

This section provides further information related to those learning outcomes and assessment criteria where clarification is required to support delivery and assessment, to ensure the range of teaching, learning and content of the unit can be met. The text highlighted in **bold** within the assessment criteria indicates that additional information is provided at the end of the unit. This additional information outlines specific content that approved centres/ candidates are encouraged to explore and include within their evidence as appropriate to their role and workplace. The information should be used by candidates to prepare for the qualification, by tutors/trainers to deliver a programme of learning, by assessors to assess candidate evidence, and by IQAs and EQAs for quality assurance. This may also be used to write questions for knowledge tests.

### Assessment

This section outlines the ways the unit will be assessed.

#### **Standards**

The Occupational Standards (OS, formerly known as Apprenticeship Standards) and the National Occupational Standards (NOS) that the unit is aligned to, builds on or selectively covers.

### 2.2 Units

**ECITB Unit number: SAF2** 

RQF Unit number: A/651/7125

Unit title: Work safely in an engineering construction

environment

### **RQF level: 2**

**Unit aim:** This unit is designed to enable the candidate to gain an understanding of relevant health and safety legislation, safe working practices and emergency procedures. The knowledge gained underpins the development of skills and behaviours to minimise risk, deal with hazards and work safely at all times.

### Learning outcome:

1. The candidate will understand the relevant health, safety and environmental legislation, regulations, safe working practices, personal site safety responsibilities and be able to work safely in an engineering construction environment.

Knowledge assessment criteria: The candidate can, within the context of their role:		<b>Skills assessment criteria:</b> The candidate can, within the context of their role:		
	K1.1	Describe the statutory requirements of key health and safety legislation and regulations relevant to the role.	S1.1	Follow relevant health and safety legislation, regulations and workplace procedures when carrying out tasks.
	K1.2	Explain the purpose and nature of risk assessments, method statements and permit to work systems.	S1.2	
	K1.3	Explain the key consequences of not meeting health and safety responsibilities.	S1.3	Demonstrate safe working practices to meet legal and organisational health and safety responsibilities.
	K1.4	State the purpose of personal protective equipment (PPE) for specific tasks.	S1.4	
	K1.5	electrical appliances are safe to use.	S1.5	Carry out visual and pre-use checks to confirm that portable appliances
	K1.6	Describe typical first aid procedures in the workplace including how to report accidents.	S1.6	are safe for operation. Respond appropriately to workplace incidents, applying basic first aid
	K1.7	State common workplace emergency and evacuation procedures, including individual roles and responsibilities.	S1.7	procedures and reporting protocols. Follow site-specific emergency and evacuation procedures and carry out assigned roles during drills or real situations.
			l	

### Learning outcome:

2. The candidate will understand risk and hazard management techniques and take appropriate action to deal with potential hazards and mitigate risks.

			<b>5</b>
Knowledge assessment criteria: The candidate can, within the context of their role:		Skills assessment criteria: The candidate can, within the context of their role:	
K2.1	<b>hazards</b> associated with processes, tools, equipment and materials.	S2.1	Identify and report <b>hazards</b> related to processes, tools, equipment, and materials in accordance with
K2.2	State the potential effects of hazards on people, property, and the environment.	S2.2	workplace procedures.  Take appropriate <b>action</b> to minimise the impact of hazards on people,
K2.3	result from workplace hazards and how they can be prevented.	S2.3	prevent injury from identified
K2.4	Explain the risks within the work environment and relevant tasks.	52.4	hazards.
K2.5		S2.4	Assess and use appropriate control measures to mitigate risks within the work environment and relevant tasks.
	procedures for reporting.	S2.5	Follow workplace procedures for hazard management, including risk assessment, control measures, and

### Behaviours assessment criteria:

The candidate must demonstrate the following as part of the observed skills assessment or provide additional evidence as part of their portfolio of evidence, specifically:

accurate reporting.

- B1.1 Safety conscious works safely at all times
- B1.2 Risk aware identifies hazards and minimises risk
- B1.3 Effective communicator works effectively with others including keeping others informed
- B1.4 Conscientious follows procedures and completes documentation accurately and correctly
- B1.5 Takes initiative deals with routine problems effectively and highlights those that cannot be solved

#### **Assessment**

This section outlines the ways the unit will be assessed.

The candidate's knowledge will be assessed through the completion of a knowledge test for this specific unit.

The candidate's skills and behaviours will be assessed through observed activities in the workplace or through the completion of skills assessment tests in a simulated environment.

Some of the candidate's knowledge, skills and behaviours will be assessed in the technical discussion which is holistic and covers aspects of the whole qualification.

Further guidance on this unit can be found in section 3 of the qualification handbook or the Assessment Guidance Manual.

### **Standards**

The Occupational Standards and NOS that this unit is aligned to:

- ECİ C02 Work safely and manage risks and hazards in engineering construction
- ST0537 Engineering Operative

**ECITB Unit number: REL2** 

RQF Unit number: D/651/7126

Unit title: Maintain working relationships, communicate

effectively, support diversity and inclusion

**RQF level: 2** 

**Unit aim:** This unit will enable the candidate to understand the importance of maintaining working relationships and equip them to develop skills and behaviours to communicate effectively whilst adhering to processes and regulations.

### Learning outcome:

1. The candidate will understand and be able to maintain good working relationships with all individuals and communicate in manner that complies with Equality, Diversity & Inclusion (ED & I) policies.

### Knowledge assessment criteria:

The candidate can, within the context of their role:

- K1.1 Describe the importance of working with equality, diversity, and inclusion in mind.
- K1.2 Explain why it is important to treat people fairly and with respect in the workplace.
- K1.3 State why it is important to work with honesty and integrity.
- K1.4 List codes of conduct, including work-based and professional codes of conduct relevant to the role.
- K1.5 State the importance of maintaining good working relationships and the benefits, considering the impact of own work on others
- K1.6 Describe the different problems that affect working relationships and the actions that can be taken to deal with specific difficulties.
- K1.7 State the importance of reporting lines, procedures, systems and documentation and the consequences of failing to follow them.
- K1.8 Describe the limits of their own responsibility and who to refer to for clarification on issues.

### Skills assessment criteria:

The candidate can, within the context of their role:

- S1.1 Apply a positive response when others ask for help or information.
- S1.2 Treat people fairly and with respect in the workplace.
- S1.3 Demonstrate honesty and integrity in the completion of tasks and interactions with others.
- S1.4 Comply with codes of conduct, as appropriate for the role.
- S1.5 Maintain effective relationships by considering the impact of own work on others.
- S1.6 Keep others informed about work activities which affect them.
- S1.7 **Resolve problems and disagreements** in a constructive and objective manner.
- S1.8 Seek assistance from others in a polite and courteous manner.
- S1.9 Report problems within the limits of their own responsibility escalating if needed.

### Behaviours assessment criteria:

The candidate must demonstrate the following as part of the observed skills assessment or provide additional evidence as part of their portfolio of evidence, specifically:

B1.1 Effective communicator – works effectively with others including keeping others informed

B1.2 Ethical and sustainability behaviours such as:

- Conforms to environmental expectations
- Uses resources efficiently and effectively
- Treats all people fairly and with respect

#### **Assessment**

This section outlines the ways the unit will be assessed.

The candidate's knowledge will be assessed through the completion of a knowledge test for this specific unit.

The candidate's skills and behaviours will be assessed through observed activities in the workplace or through the completion of skills assessment tests in a simulated environment.

Some of the candidate's knowledge, skills and behaviours will be assessed in the technical discussion which is holistic and covers aspects of the whole qualification.

Further guidance on this unit can be found in section 3 of the qualification handbook or the Assessment Guidance Manual.

### **Standards**

The Occupational Standards and NOS that this unit is aligned to:

- ECI C01 Maintain working relationships, communicate effectively and support diversity and inclusion
- ST0537 Engineering Operative

**ECITB Unit number: DOC2** 

RQF Unit number: F/651/7127

**Unit title: Interpret and follow documentation and procedures** 

### **RQF level: 2**

**Unit aim:** This unit will enable the candidate to understand documentation and procedural requirements and equip them with skills and behaviours to interpret and follow documentation and procedures.

### Learning outcome:

1. The candidate will understand how to interpret engineering drawings and documents and be able to interpret and use these, following procedures.

Knowledge assessment criteria: The candidate can, within the context of their role:		<b>Skills assessment criteria:</b> The candidate can, within the context of their role:	
K1.1	Describe engineering drawings, documentation and conventions used in their role.	S1.1	Identify the correct drawings/documents relevant to the task.
K1.2			Check the <b>validity</b> of the documentation to be used for work to be undertaken. Adhere to all required procedures
K1.3	•	S1.3	including authorisation procedures.
K1.4	Describe typical reporting and authorisation processes and		engineering drawings and work instructions
K1.5	procedures and their importance. Explain typical <b>handover</b>	S1.5	Interpret and use relevant plans and schedules.
	<b>procedures</b> and requirements in relation to allocated workplace activities.	S1.6	Report any instance where the requirements of the activity cannot be fully met or where there are variations from the specification or plan of work.
		S1.7	Follow appropriate handover procedures.
		S1.8	Complete records accurately and correctly in accordance with procedures.

### Behaviours assessment criteria:

The candidate must demonstrate the following as part of the observed skills assessment or provide additional evidence as part of their portfolio of evidence, specifically:

- B1.1 Conscientious follows procedures and completes documentation accurately and correctly
- B1.2 Takes initiative deals with routine problems effectively and highlights those that cannot be solved

### **Assessment**

This section outlines the ways the unit will be assessed.

The candidate's knowledge will be assessed through the completion of a knowledge test for this specific unit.

The candidate's skills and behaviours will be assessed through observed activities in the workplace or through the completion of skills assessment tests in a simulated environment.

Some of the candidate's knowledge, skills and behaviours will be assessed in the technical discussion which is holistic and covers aspects of the whole qualification.

Further guidance on this unit can be found in section 3 of the qualification handbook or the Assessment Guidance Manual.

### **Standards**

The Occupational Standards and NOS that this unit is aligned to:

- ECI C05 Interpret and follow documentation and procedures
- ST0537 Engineering Operative

**ECITB Unit number: PRE2** 

RQF Unit number: L/651/7860

Unit title: Prepare work area, materials, tools and equipment in an engineering construction environment

### RQF level: 2

**Unit aim:** This unit will equip the candidate with the knowledge and skills required to prepare the work area, tools, materials and equipment in support of engineering construction activities.

### Learning outcome:

1. The candidate will understand how to and be able to prepare the work area, materials and equipment in the workplace safely and correctly.

# **Knowledge assessment criteria:** The candidate can, within the context of

The candidate can, within the context of their role:

- K1.1 Explain **work area preparation** requirements for the intended work activity.
- K1.2 State the requirement for isolations and why they must be in place before work commences.
- K1.3 List potential hazards and risks that may arise during the preparation of work areas.
- K1.4 Explain how to connect to **service supplies** in line with associated procedures.
- K1.5 List **different types of equipment** that must be prepared to support the specified activity.
- K1.6 Explain how to **select and check** the **correct materials** ensuring that they are in a usable condition.
- K1.7 Explain material handling and preparation terminology, methods and techniques.
- K1.8 Explain the **consequences** of not preparing work areas, equipment, tools and materials correctly.
- K1.9 Explain their own individual responsibility for care and security of **tool and equipment control.**
- K1.10 Explain their own responsibility for the correct use of relevant tools and equipment.

### Skills assessment criteria:

The candidate can, within the context of their role:

- S1.1 Ensure the work environment is suitable and **safe** for the activities to be undertaken.
- S1.2 Check workplace isolations are implemented as specified.
- S1.3 Identify potential hazards and risks during **preparation of work areas** and report as appropriate.
- S1.4 Connect to service supplies in line with associated procedures as specified.
- S1.5 Select equipment that must be prepared to support the specified activity.
- S1.6 **Select the correct materials** and **check** they comply to specification.
- S1.7 Prepare materials for the intended task.
- S1.8 Prepare equipment and tools to **check** they are serviceable and meet operational requirements.

### **Assessment**

This section outlines the ways the unit will be assessed.

The candidate's knowledge will be assessed through the completion of a knowledge test for this specific unit.

The candidate's skills will be assessed through observed activities in the workplace or through the completion of skills assessment tests in a simulated environment.

Some of the candidate's knowledge and skills will be assessed in the technical discussion which is holistic and covers aspects of the whole qualification.

Further guidance on this unit can be found in section 3 of the qualification handbook or the Assessment Guidance Manual.

#### **Standards**

- ECISAEC01 Prepare work areas, materials, tools and equipment
- ST0537 Engineering Operative

**ECITB Unit number: MAR2** 

**RQF Unit number: M/651/7861** 

Unit title: Perform basic marking out in engineering

construction

**RQF level: 2** 

**Unit aim:** This unit will provide the candidate with the knowledge and skills to complete basic marking out activities in engineering construction.

### Learning outcome:

1. The candidate will understand how to mark out to specification and be able to mark out components safely and effectively to requirements.

<b>Knowledge assessment criteria:</b> The candidate can, within the context of their role:		<b>Skills assessment criteria:</b> The candidate can, within the context of their role:	
K1.1 K1.2 K1.3	assembly drawings and specifications to complete the specified task. List the tools, methods and techniques used for marking out.		Select the correct instructions, assembly drawings and specification to complete the specified task. Interpret basic marking out information from the drawing(s) and specification(s).
K1.4	principles and their applications.	S1.3	Select the correct tools and equipment to conduct the marking out activities.
	quality checks and the possible consequences of not carrying out suitable checks.	S1.4	Apply appropriate datum points and prepare for marking out surfaces for intended activity.
K1.5	Explain how to use relevant tools correctly to complete the marking out task.		Mark out using the correct and approved methods. Check the marking out complies with the drawing(s) and specification(s).

### **Assessment**

This section outlines the ways the unit will be assessed.

The candidate's knowledge will be assessed through the completion of a knowledge test for this specific unit.

The candidate's skills will be assessed through observed activities in the workplace or through the completion of skills assessment tests in a simulated environment.

Some of the candidate's knowledge and skills will be assessed in the technical discussion which is holistic and covers aspects of the whole qualification.

Further guidance on this unit can be found in section 3 of the qualification handbook or the Assessment Guidance Manual.

### **Standards**

- ECISAEC08 Conduct basic marking out of materials in engineering construction
- ST0537 Engineering Operative

**ECITB Unit number: SHA2** 

RQF Unit number: R/651/7862

Unit title: Perform basic shaping activities by material removal in engineering construction

RQF level: 2

**Unit aim:** This unit will equip the candidate with the knowledge and skills to complete basic shaping activities in engineering construction.

### Learning outcome:

1. The candidate will understand how to and be able to shape components by material removal to specification safely and effectively.

Knowledge assessment criteria: The candidate can, within the context of their role:		<b>Skills assessment criteria:</b> The candidate can, within the context of their role:	
K1.1	Explain how to select the correct assembly drawings and specifications to complete the specified task.	S1.1 S1.2	Select the correct instructions, assembly drawings and specification to complete the specified task. Interpret basic shaping information
K1.2	List the <b>equipment</b> , methods and techniques used to shape		from the drawing(s) and specification(s).
K1.3	components by material removal.  Describe types of powered and hand tools used to shape components by	S1.3	Select the correct tools and equipment to conduct the shaping activities.
K1.4	material removal.	S1.4	Check the specified materials for quantity and quality.
KI. I	checks and the possible consequences of not carrying out		Prepare the component for shaping by material removal.
K1.5	suitable checks.  Explain individual responsibilities for care and security of tools and	S1.6	Conduct basic shaping of the materials using the correct shaping methods and techniques.
K1.6	equipment Explain <b>control processes</b> for the correct use/application of tools and equipment	S1.7	Check that the shaped component meets the final specification for dimensional accuracy and surface finish.
K1.7	• •	S1.8	Perform <b>post shaping quality checks</b> identifying any <b>defects</b> .
	control processes	S1.9	
		S1.10	Seek confirmation that the component is completed to the required drawing(s) and specification(s).

#### **Assessment**

This section outlines the ways the unit will be assessed.

The candidate's knowledge will be assessed through the completion of a knowledge test for this specific unit.

The candidate's skills will be assessed through observed activities in the workplace or through the completion of skills assessment tests in a simulated environment.

Some of the candidate's knowledge and skills will be assessed in the technical discussion which is holistic and covers aspects of the whole qualification.

The candidate must be observed a minimum of **two** times demonstrating shaping of engineering products using a minimum of **two** sequential stages correctly. The candidate must use a minimum of **two** techniques to achieve the desired result.

Further guidance on this unit can be found in section 3 of the qualification handbook or the Assessment Guidance Manual.

### **Standards**

- ECISAEC09 Conduct basic shaping activities by material removal using hand tools
- ST0537 Engineering Operative

**ECITB Unit number: ASC2** 

RQF Unit number: T/651/7863

Unit title: Support the assembly of components in engineering

construction

**RQF level: 2** 

**Unit aim:** This unit will provide the candidate with the knowledge and skills to complete activities to support the assembly of components in engineering construction.

### **Learning outcome:**

1. The candidate will understand how to assemble components and be able to assemble them following specification safely and effectively.

#### **Knowledge assessment criteria:** Skills assessment criteria: The candidate can, within the context of The candidate can, within the context of their role: their role: K1.1 Describe the purpose and application S1.1 Use relevant instructions, assembly of technical information used in drawings and specifications. typical assemblies, including S1.2 Assemble components in the correct components, equipment, and positions using approved methods systems. and techniques. K1.2 Explain the methods and S1.3 Secure components using the techniques used to assemble specified connectors, securing components. devices, fixings or tack welding, if K1.3 Describe how to secure the appropriate using temporary support. components, using the specified S1.4 Perform checks to confirm the connectors, securing devices and components are assembled correctly to the required specification. fixings. K1.4 Explain checking methods and techniques to ensure components are assembled correctly.

#### **Assessment**

This section outlines the ways the unit will be assessed.

The candidate's knowledge will be assessed through the completion of a knowledge test for this specific unit.

The candidate's skills will be assessed through observed activities in the workplace or through the completion of skills assessment tests in a simulated environment.

Some of the candidate's knowledge and skills will be assessed in the technical discussion which is holistic and covers aspects of the whole qualification.

The candidate must be observed a minimum of **two** times carrying out the assembly, (under supervision) of **two** different types of assemblies using sequential procedures and complying with specification.

The candidate must be observed a minimum of **two** times using a minimum of **two** typical techniques following and complying with specification.

Further guidance on this unit can be found in section 3 of the Qualification Handbook or the Assessment Guidance Manual.

### **Standards**

- ECISAEC10 Support the assembly of components, equipment and systems in engineering construction
- ST0537 Engineering Operative

**ECITB Unit number: REM2** 

RQF Unit number: Y/651/7864

Unit title: Support the removal and dismantling of components

in engineering construction

**RQF level: 2** 

**Unit aim:** This unit will equip the candidate with the knowledge and skills to complete removal and dismantling activities in engineering construction.

### **Learning outcome:**

1. The candidate will understand how to and be able to remove and dismantle components by following specification safely and effectively.

<b>Knowledge assessment criteria:</b> The candidate can, within the context of their role:	Skills assessment criteria: The candidate can, within the context of their role:	
<ul> <li>K1.1 Describe how engineering drawings and specifications are used to support the removal and dismantling of components, equipment, and systems.</li> <li>K1.2 Explain the methods and techniques used to dismantle and remove components safely and efficiently.</li> <li>K1.3 Describe the procedures, tools, and key considerations for removing and dismantling assembled components.</li> <li>K1.4 Explain how to ensure components are correctly and safely dismantled and removed in line with technical requirements.</li> </ul>	<ul> <li>S1.1 Use relevant instructions, removal/dismantling drawings, and specifications to plan and carry out tasks.</li> <li>S1.2 Dismantle components using approved methods and techniques.</li> <li>S1.3 Disassemble components using appropriate tools, techniques, and procedures.</li> <li>S1.4 Perform checks to confirm components are dismantled and removed correctly and safely.</li> </ul>	

#### **Assessment**

This section outlines the ways the unit will be assessed.

The candidate's knowledge will be assessed through the completion of a knowledge test for this specific unit.

The candidate's skills will be assessed through observed activities in the workplace or through the completion of skills assessment tests in a simulated environment.

Some of the candidate's knowledge and skills will be assessed in the technical discussion which is holistic and covers aspects of the whole qualification.

The candidate must be observed a minimum of **two** times carrying out the disassembly (under supervision) of **two** different types of assemblies using sequential procedures and complying with specification.

The candidate must use a minimum of **two** techniques to achieve the desired result.

Further guidance on this unit can be found in section 3 of the qualification or the Assessment Guidance Manual.

### **Standards**

- ECISAEC12 Support the dismantling of equipment and systems in engineering construction
- ST0537 Engineering Operative

**ECITB Unit number: RWA2** 

RQF Unit number: A/651/7865

Unit title: Reinstate the work area after engineering

construction activities

### **RQF level: 2**

**Unit aim:** This unit will equip the candidate with the knowledge and skills to reinstate the work area after completing engineering construction activities.

### **Learning outcome:**

1. The candidate will understand how to and be able to reinstate the work area safely and to specification after engineering construction activities.

Knowledge assessment criteria: The candidate can, within the context of their role:		Skills assessment criteria: The candidate can, within the context of their role:		
K1.1	State the <b>reinstatement actions</b> to be taken for materials, tools and equipment.	S1.1	Safely separate and label materials, equipment, tools, and <b>resources</b> post activity.	
K1.2	Explain <b>reinstatement procedures</b> of the work area and ensure specific requirements relating to <b>tools</b> ,	S1.2	Follow <b>storage procedures</b> for materials, equipment, tools and resources.	
	equipment, materials and resources are met.	S1.3	accordance with the relevant health,	
K1.3	environmental requirements that		safety, and environmental sustainability procedures.	
	need to be adhered to in order to dispose of and segregate waste and materials correctly.	S1.4	Store materials, equipment, tools, components, and resources in the correct <b>storage environment</b> .	
K1.4	State the correct reinstatement procedure(s) to be implemented to	S1.5	Complete the signing in and out in accordance with specified	
	store and where necessary dispose of hazardous and non-hazardous waste and redundant/obsolete	S1.6	procedures. <b>Restore</b> the work area, in line with organisational requirements.	
K1.5	equipment.  Describe methods and procedures for	S1.7	<b>Reinstate</b> the work area, in line with organisational requirements.	
	quarantining tools, equipment, and materials.	S1.8	•	
		S1.9	Report completion of the reinstatement task.	

### **Assessment**

This section outlines the ways the unit will be assessed.

The candidate's knowledge will be assessed through the completion of a knowledge test for this specific unit.

The candidate's skills will be assessed through observed activities in the workplace or through the completion of skills assessment tests in a simulated environment.

Some of the candidate's knowledge and skills will be assessed in the technical discussion which is holistic and covers aspects of the whole qualification.

Further guidance on this unit can be found in section 3 of the qualification handbook or the Assessment Guidance Manual.

### **Standards**

- ECISAEC05 Reinstate the work area after engineering construction activities
- ST0537 Engineering Operative