QUALIFICATION HANDBOOK

Level 2 NVQ in Insulation and Building Treatments (Construction)

(5931)

October 2021 Version 1.0

City & Guilds

A City & Guilds Group Business

Qualifications at a glance

Subject area	**Insulation and Building Treatments**
City & Guilds number	5931
Age group approved	16+
Entry requirements	N/A
Assessment	Portfolio
Grading	This qualification is graded as Achieved a Pass and Not Achieved a Pass
Fast track	Available
Support materials	Centre handbook Candidate logbook
Registration and certification	Consult the Walled Garden/Online Catalogue for last dates

Title and level	GLH	TQT	C&G number	Accreditation number
City & Guilds Level 2 NVQ in Insulation and Building Treatments – Wood Preserving and Damp-proofing (Construction)	347	670	5931-41	603/7687/9
City & Guilds Level 2 NVQ in Insulation and Building Treatments – Wall Tie Replacement (Construction)	351	680	5931-42	603/7687/9
City & Guilds Level 2 NVQ in Insulation and Building Treatments – Cavity Wall Insulation (Construction)	274	490	5931-43	603/7687/9
City & Guilds Level 2 NVQ in Insulation and Building Treatments – Solid Floor Insulation (Construction)	274	490	5931-44	603/7687/9
City & Guilds Level 2 NVQ in Insulation and Building Treatments – Under Floor Insulation (Construction)	264	480	5931-45	603/7687/9
City & Guilds Level 2 NVQ in Insulation and Building Treatments – Cold Roof Insulation (Construction)	264	480	5931-46	603/7687/9

Contents

1 Introduction

This document tells you what you need to do to deliver the qualifications:

Area	Description
Who are these qualifications for?	This qualification is ideal for those working in the construction industry and specialising in insulation and building treatments.
What do these qualifications cover?	It covers a number of specialist areas including: • wood preserving and damp-proofing • wall tie replacement • cavity wall insulation • solid floor insulation • under floor insulation • cold roof insulation Upon completion, learners show that they have the required skills and knowledge and are competent in the specialist occupational area.
Are the qualifications part of a framework or initiative?	This qualification is competency based for the Insulation and Building Treatments sector. It covers both the knowledge and skills to operate in this specialist industry. This qualification also supports applications for the TICA worker Cards, in line with TICA and CSCS worker card requirements.
What opportunities for progression are there?	This qualification will allow learners to progress into employment or onto the Level 3 NVQ in Insulation and Building Treatments (Construction).

Structure

These qualification structures originate from CITB.

The **City & Guilds NVQ in Insulation and Building Treatments** has six pathways:

- City & Guilds Level 2 NVQ in Insulation and Building Treatments – Wood Preserving and Damp-proofing (Construction) – TQT value of 670
- City & Guilds Level 2 NVQ in Insulation and Building Treatments – Wall Tie Replacement (Construction) – TQT value of 680
- City & Guilds Level 2 NVQ in Insulation and Building Treatments – Cavity Wall Insulation (Construction) – TQT value of 490
- City & Guilds Level 2 NVQ in Insulation and Building Treatments – Solid Floor Insulation (Construction) – TQT value of 490
- City & Guilds Level 2 NVQ in Insulation and Building Treatments – Under Floor Insulation (Construction) – TQT value of 480
- City & Guilds Level 2 NVQ in Insulation and Building Treatments – Cold Roof Insulation (Construction) – TQT value of 480

To achieve the **City & Guilds Level 2 NVQ in Insulation and Building Treatments – Wood Preserving and Damp-proofing (Construction) (5931-41)** learners must achieve all the mandatory units listed below.

Learners can also undertake the additional units 265 & 266; however, the completion of these units will not contribute to the overall achievement of this qualification pathway.

City & Guilds unit number	Unit title	Unit Level
Mandatory		
102	Conforming to general health, safety and welfare in the workplace	1
236	Conforming to productive working practices in the workplace	2
618	Moving, handling and storing resources in the workplace	2
245	Preparing structures for treatment in the workplace	2
246	Applying preservation treatment in the workplace	2
247	Reinstating the structure after building treatments in the workplace	2
242	Insulation and building treatments, building construction, defects and interfaces	3
Additional (not compulsory)		
265	Erecting and dismantling access/working platforms in the workplace	2
266	Develop customer relationships	2

To achieve the **City & Guilds Level 2 NVQ in Insulation and Building Treatments – Wall Tie Replacement (Construction) (5931-42)** learners must achieve all the mandatory units listed below.

Learners can also undertake the additional units 265 & 266; however, the completion of these units will not contribute to the overall achievement of this qualification pathway.

City & Guilds unit number	Unit title	Unit Level
Mandatory		
102	Conforming to general health, safety and welfare in the workplace	1
236	Conforming to productive working practices in the workplace	2
618	Moving, handling and storing resources in the workplace	2
245	Preparing structures for treatment in the workplace	2
247	Reinstating the structure after building treatments in the workplace	2
248	Installing wall ties in existing structures in the workplace	2
242	Insulation and building treatments, building construction, defects and interfaces	3
Additional (not compulsory)		
265	Erecting and dismantling access/working platforms in the workplace	2
266	Develop customer relationships	2

To achieve the **City & Guilds Level 2 NVQ in Insulation and Building Treatments – Cavity Wall Insulation (Construction) (5931-43)** learners must achieve all the mandatory units listed below.

Learners can also undertake the additional units 265 & 266; however, the completion of these units will not contribute to the overall achievement of this qualification pathway.

City & Guilds unit number	Unit title	Unit Level
Mandatory		
102	Conforming to general health, safety and welfare in the workplace	1
236	Conforming to productive working practices in the workplace	2
618	Moving, handling and storing resources in the workplace	2
237	Installing cavity wall insulation in the workplace	2
242	Insulation and building treatments, building construction, defects and interfaces	3
Additional (not compulsory)		
265	Erecting and dismantling access/working platforms in the workplace	2
266	Develop customer relationships	2

To achieve the **City & Guilds Level 2 NVQ in Insulation and Building Treatments – Solid Floor Insulation (Construction) (5931-44)** learners must achieve all the mandatory units listed below.

Learners can also undertake the additional units 265 & 266; however, the completion of these units will not contribute to the overall achievement of this qualification pathway.

City & Guilds unit number	Unit title	Unit Level
Mandatory		
102	Conforming to general health, safety and welfare in the workplace	1
236	Conforming to productive working practices in the workplace	2
618	Moving, handling and storing resources in the workplace	2
241	Installing insulation to solid floors in the workplace	2
242	Insulation and building treatments, building construction, defects and interfaces	3
Additional (not compulsory)		
265	Erecting and dismantling access/working platforms in the workplace	2
266	Develop customer relationships	2

To achieve the **City & Guilds Level 2 NVQ in Insulation and Building Treatments – Under Floor Insulation (Construction) (5931-45)** learners must achieve all the mandatory units listed below. Learners must undertake **one** of the additional mandatory units (243 and 244).

Learners can also undertake the additional units 265 & 266; however, the completion of these units will not contribute to the overall achievement of this qualification pathway.

City & Guilds unit number	Unit title	Unit Level
Mandatory		
102	Conforming to general health, safety and welfare in the workplace	1
236	Conforming to productive working practices in the workplace	2
618	Moving, handling and storing resources in the workplace	2
242	Insulation and building treatments, building construction, defects and interfaces	3
Additional mandatory		
243	Installing insulation to suspended floors in the workplace	2
244	Spraying insulation to suspended floors in the workplace	2
Additional (not compulsory)		
265	Erecting and dismantling access/working platforms in the workplace	2
266	Develop customer relationships	2

To achieve the **City & Guilds Level 2 NVQ in Insulation and Building Treatments – Cold Roof Insulation (Construction) (5931-46)** learners must achieve all the mandatory units listed below.

Learners can also undertake the additional units 265 & 266; however, the completion of these units will not contribute to the overall achievement of this qualification pathway.

City & Guilds unit number	Unit title	Unit Level
Mandatory		
102	Conforming to general health, safety and welfare in the workplace	1
236	Conforming to productive working practices in the workplace	2
618	Moving, handling and storing resources in the workplace	2
238	Installing insulation to cold roofs in the workplace	2
242	Insulation and building treatments, building construction, defects and interfaces	3
Additional (not compulsory)		
265	Erecting and dismantling access/working platforms in the workplace	2
266	Develop customer relationships	2

Total Qualification Time

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 and study.

Title and level	GLH	TQT
City & Guilds Level 2 NVQ in Insulation and Building Treatments – Wood Preserving and Damp-proofing (Construction)	347	670
City & Guilds Level 2 NVQ in Insulation and Building Treatments – Wall Tie Replacement (Construction)	351	680
City & Guilds Level 2 NVQ in Insulation and Building Treatments – Cavity Wall Insulation (Construction)	274	490
City & Guilds Level 2 NVQ in Insulation and Building Treatments – Solid Floor Insulation (Construction)	274	490
City & Guilds Level 2 NVQ in Insulation and Building Treatments – Under Floor Insulation (Construction)	264	480
City & Guilds Level 2 NVQ Certificate in Insulation and Building Treatments – Cold Roof Insulation (Construction)	264	480

2 Centre requirements

Approval

The approval process for construction qualifications is available on our website. Please visit **www.cityandguilds.com/construction** for further information.

Resource requirements

Staff delivering this qualification must be able to demonstrate that they meet the following occupational expertise requirements. They should

- be technically competent in the areas for which they are delivering training and/or have experience of providing training; this knowledge must be at least to the same level as the training being delivered
- hold appropriate qualifications as detailed in this handbook
- have recent relevant experience in the specific area they will be assessing
- have credible experience of providing training.

Centre staffing

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

Centres may design course programmes of study in any way which

- best meets the needs and capabilities of their candidates
- satisfies the requirements of the qualification.

When designing and delivering the course programme, centres might wish to incorporate other teaching and learning that is not assessed as part of the qualification. This might include the following:

- literacy, language and/or numeracy
- personal learning and thinking
- personal and social development
- employability.

Where applicable, this could involve enabling the candidate to access relevant qualifications covering these skills.

Centre staff may undertake more than one role, eg tutor and assessor or internal verifier, but cannot internally verify their own assessments.

Assessors and internal verifiers

Assessors must have sufficient, verifiable, relevant current industry experience, knowledge and understanding of the occupational working area at, or above, the level being assessed.

This must be of sufficient depth to be effective and reliable when judging candidates' competence. Assessors' experience, knowledge and understanding could be verified by a combination of

- curriculum vitae and employer endorsement
- references
- possession of a relevant NVQ/SVQ, or vocationally related qualification
- corporate membership of a relevant professional institution
- interview.

(The verification process must be recorded and available for audit)

Assessors **must** have sufficient occupational expertise so that they have up to date experience, knowledge and understanding of the aspects of work they are assessing. This could be verified by records of continuing professional development achievements. Assessors

- should only assess in their acknowledged area of occupational competence
- shall be prepared to participate in training activities for their continued professional development
- must have a sound, in-depth knowledge of, and uphold the integrity of, the sector's NOS and the Assessment Strategy
- must hold, or be working towards, a qualification as listed within 'Assessing and Assuring Quality of Assessment', either in the Regulated Qualification Framework (RQF), or the Scottish Credit and Qualifications Framework (SCQF):
    - Level 3 Award in Assessing Competence in the Work Environment
    - Level 3 Certificate in Assessing Vocational Achievement
    - SVQ (SCQF level) Assessing Competence in the Work Environment
    - SVQ (SCQF level) Assessing Vocational Achievement

  or hold one of the following:
    - A1 Assess candidates using a range of methods
    - D32/33 Assess candidate performance, using differing sources of evidence

  Holders of A1 and D32/33 must assess to the reviewed National Occupational Standards (NOS) for Learning and Development.

In Scotland, approval for exemptions must be obtained from the Scottish Qualifications Authority.

Continuing Professional Development (CPD)

Centres must support their staff to ensure that they have current knowledge of the occupational area, that delivery, mentoring, training,

assessment and verification is in line with best practice, and that it takes account of any national or legislative developments.

Candidate entry requirements

City & Guilds does not set entry requirements for these qualifications. However, centres must ensure that candidates have the potential and opportunity to gain the qualifications successfully.

Age restrictions

These qualifications are approved for 16–18, and 19 + learners. There are no age limits however attached to learners undertaking the qualification unless this is a legal requirement of the process or the environment.

3 Delivering the qualification

Initial assessment and induction

An initial assessment of each learner should be made before the start of their programme to identify:

- if the learner has any specific training needs
- support and guidance they may need when working towards their qualifications
- any units they have already completed, or credit they have accumulated which is relevant to the qualifications
- the appropriate type and level of qualification.

We recommend that centres provide an induction programme so the learner fully understands the requirements of the qualifications, their responsibilities as a learner, and the responsibilities of the centre. This information can be recorded on a learning contract.

Support materials

The following resources are available for these qualifications:

Description	How to access
Candidate logbook	Available to download from the City & Guilds website

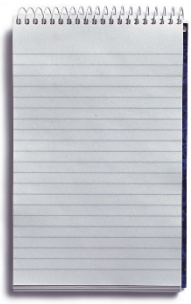
Recording documents

Candidates and centres may decide to use a paper-based or electronic method of recording evidence.

City & Guilds endorses several ePortfolio systems, including our own, **Learning Assistant**, an easy-to-use and secure online tool to support and evidence learners' progress towards achieving qualifications. Further details are available at: **www.cityandguilds.com/eportfolios**

City & Guilds has developed a set of Recording Forms including examples of completed forms, for new and existing centres to use as appropriate. Recording forms are available on the City & Guilds website.

Although new centres are expected to use these forms, centres may devise or customise alternative forms, which must be approved for use by the external verifier, before they are used by candidates and assessors at the centre. Amendable (MS Word) versions of the forms are available on the City & Guilds website.



4 Assessment

Assessment of the qualification

Candidates must have a completed portfolio of evidence for each unit. Centres are able to download the 5931 logbook from the City & Guilds website.

Aspects to be assessed through performance in the workplace

Direct evidence produced through normal performance in the workplace is the primary source for meeting the requirements. This includes naturally occurring documentary evidence (hard copy and electronic), direct observation of activities and witness testimony as relevant. Individual units will specify any exceptions to this position.

Workplace evidence must be supported by the required evidence of knowledge and understanding. This evidence may be identified by:

- questioning the candidate
- recognised industry education and training programme assessment or professional interview assessment that has been matched to NOS requirements
- performance evidence.

A holistic approach towards the collection of evidence should be encouraged. The focus should be on assessing activities generated by the whole work experience rather than focusing on specific tasks. This would show how evidence requirements could be met across the qualification to make the most efficient use of evidence.

5 Units

Availability of units

These units are also on The Register of Regulated Qualifications **http://register.ofqual.gov.uk/Unit**

Structure of units

These units each have the following:

- City & Guilds unit number
- title
- level
- TQT
- recommended Guided Learning Hours (GLH)
- endorsement by a sector or other appropriate body
- learning outcomes which are comprised of several assessment criteria.

Unit 102 Conforming to general health, safety and welfare in the workplace

Level	1
GLH	17
TQT	20
Unit aim	The aim of this unit is to provide you with an awareness of: • current statutory requirements and official guidance • responsibilities, to self and others, relating to workplace health, safety and welfare • personal behaviour and security in the workplace.

Learning outcome
The learner will: 1. comply with all workplace health, safety and welfare legislation requirements.
Assessment criteria
The learner can: 1.1 comply with information from workplace inductions and any health, safety and welfare briefings attended relevant to the occupational area 1.2 use health and safety control equipment safely to carry out the activity in accordance with legislation and organisational requirements 1.3 comply with statutory requirements, safety notices and warning notices displayed within the workplace and/or on equipment 1.4 state why and when health and safety control equipment, identified by the principles of protection, should be used relating to types, purpose and limitations of each type, the work situation, occupational use and the general work environment, in relation to: a. collective protective measures b. Personal Protective Equipment (PPE) c. Respiratory Protective Equipment (RPE) d. Local Exhaust Ventilation (LEV) 1.5 state how the health and safety control equipment relevant to the work should be used in accordance with the given instructions

1.6 state which types of health, safety and welfare legislation, notices and warning signs are relevant to the occupational area and associated equipment

1.7 state why health, safety and welfare legislation, notices and warning signs are relevant to the occupational area

1.8 state how to comply with control measures that have been identified by risk assessments and safe systems of work

Learning outcome
The learner will: 2. recognise hazards associated with the workplace that have not been previously controlled and report them in accordance with organisational procedures.
Assessment criteria
The learner can: 2.1 report any hazards created by changing circumstances within the workplace in accordance with organisational procedures 2.2 list typical hazards associated with the work environment and occupational area in relation to resources, substances, asbestos, equipment, obstructions, storage, services and work activities 2.3 list the current Health and Safety Executive top ten safety risks 2.4 list the current Health and Safety Executive top five health risks 2.5 state how changing circumstances within the workplace could cause hazards 2.6 state the methods used for reporting changed circumstances, hazards and incidents in the workplace

Learning outcome
The learner will: 3. comply with organisational policies and procedures to contribute to health, safety and welfare.
Assessment criteria
The learner can: 3.1 interpret and comply with given instructions to maintain safe systems of work and quality working practices 3.2 contribute to discussions by offering/providing feedback relating to health, safety and welfare 3.3 contribute to the maintenance of workplace welfare facilities in accordance with workplace welfare procedures 3.4 safely store health and safety control equipment in accordance with given instructions 3.5 dispose of waste and/or consumable items in accordance with legislation 3.6 state the organisational policies and procedures for health, safety and welfare, in relation to: a. dealing with accidents and emergencies associated with the work and environment b. methods of receiving or sourcing information c. reporting

d. stopping work
e. evacuation
f. fire risks and safe exit procedures
g. consultation and feedback

3.7 state the appropriate types of fire extinguishers relevant to the work

3.8 state how and when the different types of fire extinguishers are used in accordance with legislation and official guidance

Learning outcome
The learner will: 4. work responsibly to contribute to workplace health, safety and welfare whilst carrying out work in the relevant occupational area.
Assessment criteria
The learner can: 4.1 demonstrate behaviour which shows personal responsibility for general workplace health, safety and welfare 4.2 state how personal behaviour demonstrates responsibility for general workplace health, safety and welfare, in relation to: a. recognising when to stop work in the face of serious and imminent danger to self and/or others b. contributing to discussions and providing feedback c. reporting changed circumstances and incidents in the workplace d. complying with the environmental requirements of the workplace 4.3 give examples of how the behaviour and actions of individuals could affect others within the workplace

Learning outcome
The learner will: 5. comply with and support all organisational security arrangements and approved procedures.
Assessment criteria
The learner can: 5.1 provide appropriate support for security arrangements in accordance with approved procedures: a. during the working day b. on completion of the day's work c. for unauthorised personnel (other operatives and the general public) d. for theft 5.2 state how security arrangements are implemented in relation to the workplace, the general public, site personnel and resources

Unit 102 Conforming to general health, safety and welfare in the workplace

Supporting information

Guidance

This unit must be assessed in a work environment and in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the endorsements detailed within the relevant NVQ structure. Please refer to the NVQ structure applicable to the qualification/occupational area in which the candidate is being assessed.

Unit 236 Conforming to productive working practices in the workplace

Level	2
GLH	20
TQT	30
Unit aim	The aim of this unit is to provide you with an awareness of: • productive communication with line management, colleagues and customers • interpreting information • planning and carrying out productive work practices • working with others or as an individual.

Learning outcome
The learner will: 1. communicate with others to establish productive work practices.
Assessment criteria
The learner can: 1.1 communicate in an appropriate manner with line management, colleagues and/or customers to ensure that work is carried out productively 1.2 describe the different methods of communicating with line management, colleagues and customers 1.3 describe how to use different methods of communication to ensure that the work carried out is productive

Learning outcome
The learner will: 2. follow organisational procedures to plan the sequence of work.
Assessment criteria
The learner can: 2.1 interpret relevant information from organisational procedures in order to plan the sequence of work 2.2 plan the sequence of work, using appropriate resources, in accordance with organisational procedures to ensure work is completed productively 2.3 describe how organisational procedures are applied to ensure work is planned and carried out productively, in relation to: a. using resources for own and others' work requirements

b. allocating appropriate work to employees
c. organising the work sequence
d. reducing carbon emissions

2.4 describe how to contribute to zero/low carbon work outcomes within the built environment

Learning outcome
The learner will: 3. maintain relevant records in accordance with the organisational procedures.
Assessment criteria
The learner can: 3.1 complete relevant documentation according to the occupation as required by the organisation 3.2 describe how to complete and maintain documentation in accordance with organisational procedures, in relation to: a. job cards b. worksheets c. material/resource lists d. time sheets 3.3 explain the reasons for ensuring documentation is completed clearly and within given timescales

Learning outcome
The learner will: 4. maintain good working relationships when conforming to productive working practices.
Assessment criteria
The learner can: 4.1 carry out work productively, to the agreed specification, in conjunction with line management, colleagues, customers and/or other relevant people involved in the work to maintain good working relationships 4.2 apply the principles of equality and diversity and respect the needs of individuals when communicating and working with others 4.3 describe how to maintain good working relationships, in relation to: a. individuals b. customer and operative c. operative and line management d. own and other occupations 4.4 describe why it is important to work effectively with line management, colleagues and customers 4.5 describe how working relationships could have an effect on productive working 4.6 describe how to apply principles of equality and diversity when communicating and working with others

Unit 236 Conforming to productive working practices in the workplace

Supporting information

Guidance

This unit must be assessed in a work environment and in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Unit 237 Installing cavity wall insulation in the workplace

Level	2
GLH	110
TQT	200
Unit aim	The aim of this unit is to provide you with an awareness of: • interpreting information • adopting safe and healthy working practices • selecting materials, components and equipment • preparing for and installing cavity wall insulation.

Learning outcome
The learner will: 1. interpret the given information relating to the work and resources to confirm its accuracy, completeness and relevance to the building type, fabric and condition when installing cavity wall insulation.
Assessment criteria
The learner can: 1.1 Interpret and extract relevant information from drawings, specifications, schedules, method statements, risk assessments, manufacturers' information and data sheets 1.2 Comply with information and/or instructions derived from risk assessments and method statements 1.3 Describe why the organisational procedures have been developed and how they are implemented 1.4 Explain the importance of organisational procedures to solve problems and why it is important to follow them 1.5 Describe different types of information, their source, accuracy, completeness and how they are interpreted in relation to: a. drawings, specifications, schedules, method statements, risk assessments, design, standards, manufacturers' information, data sheets, official guidance, current legislation and regulations governing buildings

Learning outcome
The learner will: 2. know how to comply with environmentally responsible work practices to meet current legislation standards and official guidance when installing cavity wall insulation.
Assessment criteria
The learner can: 2.1 describe their responsibilities regarding potential accidents, health hazards and the environment in relation to: a. the workplace, below ground level, confined spaces, at height, tools and equipment, materials and substances, movement and storage of materials by manual handling and mechanical lifting 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to: a. site b. workplace c. siting and location of vehicles d. company e. customer f. access equipment g. material and waste storage h. the general public 2.3 explain the accident reporting procedures and who is responsible for making reports 2.4 describe the types of fire extinguishers available when installing cavity wall insulation and describe how and when they are used in relation to: a. water b. CO2 c. foam d. powder

Learning outcome
The learner will: 3. comply with current, relevant legislation, standards and official guidance to carry out your work and maintain safe and healthy work practices.
Assessment criteria
The learner can: 3.1 demonstrate compliance with, relevant legislation, standards and official guidance when installing cavity wall insulation in relation to the following: a. methods of work b. safe use of health and safety control equipment c. Safe use of access equipment and harness systems

d. safe use, storage and handling of materials, tools and equipment
e. operative maintenance of installation equipment
f. specific risks to health including mental health
g. specific risks associated with ventilation (roof space, inside the property and under floor) and combustion appliances

3.2 explain why, when and how health and safety control equipment, identified by the principles of prevention, should be used when installing cavity wall insulation, in relation to:
a. collective protective measures
b. personal protective equipment (PPE)
c. respiratory protective equipment (RPE)
d. local exhaust ventilation (LEV)

3.3 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills in relation to:
a. fires
b. spillages
c. injuries
d. emergencies relating to occupational activities
e. identification of and reporting asbestos containing materials

3.4 describe how to report risks and hazards identified by the following:
a. risk assessment
b. personal assessment
c. methods of work
d. manufacturers' technical information
e. data sheets
f. statutory regulations
g. official guidance
h. Control Of Substances Hazardous to Health (COSHH)

Learning outcome
The learner will: 4. select the required quantity and quality of resources for the methods of work to install cavity wall insulation.
Assessment criteria
The learner can: 4.1 select resources associated with own work in relation to materials, components and finishes, tools and equipment 4.2 check the suitability, compatibility characteristics of the materials, components and finishes determine if they are moisture open or moisture closed and their impact on the building 4.3 record and report issues or defects

4.4 describe why the characteristics, compatibility, quality, uses, sustainability, limitations and defects associated with the resources are important and how defects should be rectified.

4.5 describe how the resources should be used and how problems associated with the resources are reported in relation to:

a. protective sheeting
b. warning signs
c. public protection equipment
d. calibration equipment
e. essential airway sleeves
f. cavity barriers
g. mortar mix
h. mortar dyes
i. insulation
j. combustion vents
k. all work tools

4.6 describe how to confirm that the resources and materials conform to the specification

4.7 explain why the organisational procedures have been developed and how they are used for the selection of required resources

4.8 describe how to identify the hazards associated with the resources and methods of work and how they are overcome

4.9 describe how to calculate the quantity of materials required and used to ensure, adequacy of full as per system designer specification and wastage associated with the method and procedure to install cavity wall insulation

Learning outcome

The learner will:

5. minimise the risk of damage to the work and surrounding area when installing cavity wall insulation.

Assessment criteria

The learner can:

5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures

5.2 maintain a safe, clear and tidy work area

5.3 explain why it is important to maintain a safe, clear and tidy work area

5.4 dispose of waste in accordance with current legislation

5.5 describe how to protect work and its surrounding area from damage by general workplace activities, other occupations and adverse weather conditions and how to minimise damage to existing building fabric

5.6 explain the importance of protecting the work and its surrounding area against the risk of damage

5.7 explain why and how the disposal of waste must be carried out safely in accordance with the following:

a. current legislation
b. environmental responsibilities

c. organisational procedures
d. suppliers and manufactures' information
e. data sheets
f. statutory regulations
g. official guidance

Learning outcome
The learner will: 6. complete the work within the allocated time when installing cavity wall insulation.
Assessment criteria
The learner can: 6.1 demonstrate completion of your work within the estimated, allocated time and performance requirements of the system design, method statement and the required standard 6.2 describe the purpose of the work programme, including the estimated and allocated time and explain why deadlines should be kept in relation to: a. types of progress charts, timetables and estimated times b. organisational procedures for reporting circumstances which will affect the work programme

Learning outcome
The learner will: 7. comply with the given contract information to carry out the work efficiently install cavity wall insulation to the required specification.
Assessment criteria
The learner can: 7.1 demonstrate the following work skills when installing cavity wall insulation: a. measuring b. marking out c. calibrating d. monitoring e. fitting f. filling g. making good 7.2 use and maintain all work tools and installation equipment 7.3 carry out external and internal pre-installation check, assessing recording and reporting issues to include: a. suitable access b. property suitability c. structural integrity d. dampness e. decay f. exposure ratings g. vents and ventilation h. services (gas, electric, water, media cables) 7.4 check, record and report issues with construction ventilation, flues, chimneys and combustion air ventilators pre- and post-installation

7.5 prepare for and install cavity wall insulation to given, system designer specification, method statement and the required standard

7.6 drill holes to specified patterns using depth gauges and right-angled drilling only, selecting the correct masonry drill bit, speed and setting, and taking effective steps to minimise the impact to the building fabric and preventing rubble falling into the cavity

7.7 fit cavity barriers

7.8 assemble and operate installation equipment, measuring density, flow and quality tests

7.9 fill holes with matching and suitable materials

7.10 clean, disassemble and prepare installation processing equipment for transportation

7.11 handover and sign off to the customers satisfaction

7.12 harry out post installation checks

7.13 describe how the methods of work to meet the specification are carried out and how problems are identified and reported by the application of knowledge for safe, healthy and environmental work practices, procedures and skills relating to the method and area of work relating to the following:

a. the suitability, compatibility and characteristics of the materials, components and finishes, and determine if they are moisture open or moisture closed, their impact on the building and their appropriateness to the design and physical application
b. how to record and report issues or defects with the materials, components and finishes
c. why it is important to carry out external and internal pre-installation checks
d. how to carry out external and internal pre-installation checks, assessing, recording and reporting issues to include:
    i. suitable access
    ii. property suitability
    iii. structural integrity
    iv. dampness
    v. decay
    vi. exposure ratings
    vii. vents and ventilation
    viii. services (gas, electric, water, media cables)
e. why it is important to ensure that all necessary repairs are completed prior to installation
f. how to recognise, record and report the key issues that may inhibit commencement of the work including but not limited to:
    i. condition of building fabric
    ii. identification of any areas of potential water penetration
    iii. visibility and completeness of damp proof course
    iv. condition of window and door seals

v. height of internal floors in relation to external floor height
vi. condition of roof
vii. damaged or spalled brickwork
viii. drainage and down pipes
ix. protection and existence of sub floor ventilation
x. cavity width and identification of any debris

g. how to identify when specialist skills and knowledge are required and report accordingly including but not limited to:
i. fire safety
ii. electrical
iii. asbestos
iv. Radon
v. heritage
vi. architectural features
vii. ecology
viii. ventilation

h. the relevance of an assessment of significance and how to recognise specific requirements for structures of special interest, traditional construction, hard-to-treat buildings and historical significance

i. how to identify, record, report and rectify unintended consequences not addressed in the design, including but not limited to the existence of thermal bridges, thermal bypassing and water ingress, inadequate ventilation and condensation risk

j. why it is important to avoid unintended consequences

k. why it is important to explain installation procedure to building occupants to include but not limited to the following:
i. scope and work programme
ii. safety requirements during the installation process
iii. protection of property and personal items
iv. specific benefits and implications to include homeowner information
v. agreed standards of making good

l. the implications of existing guarantees and warranties that may be compromised by the installation, to include but not limited to:
i. wall ties
ii. windows
iii. damp proof course
iv. renders
v. Tyrolean coatings
vi. silicone weatherproof coatings

m. how to work with, around and in close proximity to plant and machinery

n. how to direct and guide the operations and movement of plant and machinery to ensure protection of a safe working environment
o. how to identify and follow the installation quality requirements
p. how and why it is important to check, record and report issues with construction ventilation, flues, chimneys and combustion air ventilators pre and post installation
q. why it is important to ensure pre-installation material checks are within specified parameters, to include checking and recording batch number and reporting defects
r. how to assemble and operate installation processing equipment in line with manufacturers and system manuals
s. how to calibrate equipment to measure density, flow and quality tests to ensure they are in line with manufacturers specifications and material requirements
t. why effective selection of PPE equipment to avoid cementation dust is important
u. how to drill holes to specified patterns and the importance of using depth gauges and right-angled drilling only, selecting the correct masonry drill bit, speed and setting, and taking effective steps to minimise the impact to the building fabric and preventing rubble falling into the cavity
v. how to fit cavity barriers in accordance with specification from roof to ground level in order to avoid overspill and underspill between the two separated cavity elements
w. how to install cavity wall insulation from inside and outside of a building including lance techniques
x. why it is important to ensure effective and safe operation of equipment and consistency of fill using the appropriate technique for the selected material (to include bead using adhesive bonding agents and blown mineral wool)
y. how to fill holes with matching and suitable materials to ensure evidence of the drill pattern is minimised and the finish is in keeping with the original building texture and colour
z. why it is important to clean and disassemble installation processing equipment and pack away for transportation
aa. the different types of air and vapour control layers and breather membranes, where and how they should be used and why it is important to install them correctly
bb. the importance of ensuring the integrity of air and vapour control layers and breather membranes following installation and the need to maintain continuity
cc. why it is important to immediately record and report unforeseen events including but not limited to equipment malfunctions, situations and faults not identified in the original design
dd. why it is important to complete post installation checks in accordance with the system designer installations

operations manual and report issues to include but not limited to safeguarding the combustion ventilation and report defects

ee. why it is important to provide post installation advice and guidance to building occupants including homeowner packs

ff. how to handover and sign off to the customers satisfaction

gg. how to use all work tools and installation equipment in line with manufacturers and system specifications

hh. how to work at height using access equipment and harness systems

ii. how and why maintenance of all work tools and installation equipment is carried out

7.14 describe the needs of other occupations and the importance of teamwork and communication when installing cavity wall insulation

Unit 237 Installing cavity wall insulation in the workplace

Supporting information

Guidance

This unit must be assessed in a work environment and in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Unit 238 Installing insulation to cold roofs in the workplace

Level	2
GLH	100
TQT	190
Unit aim	The aim of this unit is to provide you with an awareness of: • interpreting information • adopting safe and healthy working practices • selecting materials, components and equipment • preparing, installing and relocating modular demountable partition systems.

Learning outcome
The learner will: 1. interpret the given design information relating to the work and resources to confirm its accuracy, completeness and relevance to the building type, fabric and condition when installing insulation to cold roofs.
Assessment criteria
The learner can: 1.1 interpret and extract relevant information from: a. drawings b. specifications c. schedules d. method statements e. risk assessments f. manufacturers' information g. data sheets 1.2 comply with information and/or instructions derived from risk assessments and method statements 1.3 describe why the organisational procedures have been developed and how they are implemented 1.4 explain the importance of organisational procedures to solve problems and why it is important to follow them 1.5 describe different types of information, their source, accuracy, completeness and how they are interpreted in relation to: a. drawings b. specifications

c. schedules
d. method statements
e. risk assessments
f. design
g. standards
h. manufacturers' information
i. data sheets
j. official guidance
k. current legislation and regulations governing buildings

Learning outcome

The learner will:

2. know how to comply with environmentally responsible work practices to meet current legislation standards and official guidance when installing insulation to cold roofs.

Assessment criteria

The learner can:

2.1 describe their responsibilities regarding potential accidents, health hazards and the environment in relation to:
   a. the workplace
   b. below ground level
   c. confined spaces
   d. at height
   e. tools and equipment
   f. materials and substances
   g. movement and storage of materials by manual handling and mechanical lifting

2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to:
   a. site
   b. workplace
   c. siting and location of vehicles
   d. company
   e. customer
   f. assess equipment
   g. materials and waste storage
   h. the general public

2.3 explain the accident reporting procedures and who is responsible for making reports

2.4 describe the types of fire extinguishers available when installing to cold roofs and describe how and when they are used in relation to:
   a. water
   b. CO2
   c. foam
   d. powder

Learning outcome

The learner will:

3. comply with current, relevant legislation, standards and official guidance to carry out your work and maintain safe and healthy work practices.

Assessment criteria

The learner can:

3.1 demonstrate compliance with, relevant legislation, standards and official guidance when installing insulation to cold roofs in relation to the following:

- a. methods of work
- b. safe use of health and safety control equipment
- c. safe use of access equipment and harness systems
- d. safe use, storage and handling of materials, tools and equipment
- e. specific risks to health including mental health
- f. specific risks associated with ventilation (roof space, inside the property and under floor) and combustion appliances

3.2 explain why, when and how health and safety control equipment, identified by the principles of prevention, should be used when installing insulation to cold roofs in relation to:

- a. collective protective measures
- b. personal protective equipment (PPE)
- c. respiratory protective equipment (RPE)
- d. local exhaust ventilation (LEV)

3.3 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills in relation to:

- e. fires
- a. spillages
- b. injuries
- c. emergencies relating to occupational activities
- d. identification of and reporting of asbestos containing materials

3.4 describe how to report risks and hazards identified by the following:

- a. risk assessment
- b. personal assessment
- c. methods of work
- d. manufacturers' technical information
- e. data sheets
- f. statutory regulations
- g. official guidance
- h. Control of Substances Hazardous to Health (COSHH)

Learning outcome
The learner will: 4. select the required quantity and quality of resources for the methods of work to install insulation to cold roofs.
Assessment criteria
The learner can: 4.1 select resources associated with own work in relation to materials, components, fixings, finishes, tools and equipment. 4.2 check the suitability, compatibility characteristics of the materials, components, fixing and finishes determine if they are moisture open or moisture closed and their impact on the building. 4.3 record and report issues or defects 4.4 describe why the characteristics, compatibility, quality, uses, sustainability, limitations and defects associated with the resources are important and how defects should be rectified. 4.5 describe how the resources should be used and how problems associated with the resources are reported in relation to: a. protective sheeting b. warning signs c. temporary barriers d. insulation e. pipe insulation f. tank and cylinder jackets g. insulation fixings and ancillary items h. access boards i. loft hatches j. light wells k. soffit and fascia boards l. tile vents m. ridge tiles n. sarking felt vents o. draught-proofing materials p. fire rated caps q. cable protection r. all work tools and equipment. 4.6 describe how to confirm that the resources and materials conform to the specification 4.7 explain why the organisational procedures have been developed and how they are used for the selection of required resources 4.8 describe how to identify the hazards associated with the resources and methods of work and how they are overcome 4.9 describe how to calculate the quantity of materials required and used to ensure, adequacy of fill as per system designer specification and wastage associated with the method and procedure to install insulation to cold roofs

Learning outcome

The learner will:

5. minimise the risk of damage to the work and surrounding area when installing insulation to cold roofs.

Assessment criteria

The learner can:

5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures

5.2 maintain a safe, clear and tidy work area

5.3 explain why it is important to maintain a safe, clear and tidy work area

5.4 dispose of waste in accordance with current legislation

5.5 describe how to protect work and its surrounding area from damage by general workplace activities, other occupations and adverse weather conditions and how to minimise damage to existing building fabric

5.6 explain the importance of protecting the work and its surrounding area against the risk of damage

5.7 explain why and how the disposal of waste must be carried out safely in accordance with the following:

- a. current legislation
- b. environmental responsibilities
- c. organisational procedures
- d. manufacturers' information
- e. data sheets
- f. statutory regulations
- g. official guidance

Learning outcome

The learner will:

6. complete the work within the allocated time when installing insulation to cold roofs.

Assessment criteria

The learner can:

6.1 demonstrate completion of your work within the estimated, allocated time and performance requirements of the system design, method statement and the required standard

6.2 describe the purpose of the work programme, including the estimated and allocated time and explain why deadlines should be kept in relation to:

- a. types of progress charts, timetables and estimated times
- b. organisational procedures for reporting circumstances which will affect the work programme

Learning outcome

The learner will:

7. comply with the given contract information to carry out the work efficiently to install insulation to cold roofs to the required specification.

Assessment criteria

The learner can:

7.1 demonstrate the following work skills when installing insulation to cold roofs:
   a. measuring
   b. marking out
   c. calculating
   d. cutting
   e. fitting
   f. filling
   g. positioning
   h. securing
   i. making good

7.2 use and maintain all work tools and equipment

7.3 carry out external and internal pre installation checks assessing, recording and reporting issues to include:
   a. suitable access
   b. property suitability
   c. structural integrity
   d. dampness
   e. decay
   f. vents and adequate ventilation
   g. services (gas, electric, water, media cables)

7.4 prepare and install insulation to cold roofs using at least one of the following methods in compliance with current regulations and to given working instructions:
   a. placed
   b. mechanically or adhesively fixed

7.5 prepare and install insulation to the following in compliance with current regulations and to given working instructions:
   a. pipes
   b. tanks and/or cylinders
   c. access hatches
   d. light wells

7.6 protect electrical services, lighting, media, high amperage cables

7.7 create and protect platforms and walkways for access and storage

7.8 remove and secure building occupants stored items

7.9 install passive ventilation and safeguarding existing ventilation

7.10 insulate and draught-proof access hatches

7.11 insulate light wells

7.12 minimise the effects of thermal bridging

7.13 carry out post installation checks to ensure insulation complies with the design

7.14 provide post installation advice and guidance to building occupants including homeowner packs

7.15 hand over and sign off to the customers satisfaction

7.16 describe how the methods of work to meet the specification, are carried out and how problems are identified and reported by the application of knowledge for safe, healthy and environmental work practices, procedures and skills relating to the method and area of work relating to the following:

a. the suitability, compatibility and characteristics of the materials, components and finishes, and determine if they are moisture open or moisture closed, their impact on the building and their appropriateness to the design and physical application
b. how to record and report issues or defects with the materials, components and finishes
c. why it is important to carry out external and internal pre-installation checks
d. how to carry out external and internal pre-installation checks, assessing, recording and reporting issues to include:
    i. common infestations
    ii. protected species
    iii. suitable access
    iv. property suitability
    v. structural integrity
    vi. dampness
    vii. decay
    viii. vents and ventilation
    ix. services (gas, electric, water, media cables)
e. why it is important to ensure that all necessary repairs are completed prior to installation
f. how and why it is important to check, record and report issues with construction ventilation, flues, chimneys and combustion air ventilators pre and post installation
g. how to identify and follow the installation quality requirements
h. how to recognise, record and report the key issues that may inhibit commencement of the work including but not limited to:
    i. condition of building fabric
    ii. identification of any areas of potential water penetration
    iii. condition of roof
    iv. drainage and down pipes
i. how to identify when specialist skills and knowledge are required and report accordingly including but not limited to:
    i. fire safety
    ii. electrical
    iii. asbestos
    iv. Radon
    v. heritage
    vi. architectural features

vii. ecology
viii. ventilation

j. the relevance of an assessment of significance and how to recognise specific requirements for structures of special interest, traditional (pre-1919) construction, hard-to-treat buildings and historical significance
k. how to identify, record, report and rectify unintended consequences not addressed in the design, including but not limited to the existence of thermal bridges, thermal bypassing and water ingress, inadequate ventilation and condensation risk
l. why it is important to avoid unintended consequences
m. why it is important to explain installation procedure to building occupants to include but not limited to the following:
    i. scope and work programme
    ii. safety requirements during the installation process
    iii. protection of property and personal items
    iv. specific benefits and implications to include homeowner information
    v. agreed standards of making good
n. the implications of existing guarantees and warranties that may be compromised by the installation to include but not limited to:
    i. roof skylights
    ii. loft guarantees
    iii. building warranties
    iv. timber treatment
o. how to work with, around and in close proximity to plant and machinery
p. how to direct and guide the operations and movement of plant and machinery to ensure protection of a safe working environment
q. how to work in confined spaces
r. how to create and protect platforms and walkways
s. why it is important to identify and remove infested, damaged and contaminated insulation from the roof area
t. how to remove and secure building occupants stored items
u. how to identify and install passive ventilation and report any ventilation limitations identified
v. why it is important to recognise and report the potential risk of increased condensation following installation relating to roof coverings (pitched and flat) and roof structures (timber, metal, concrete)
w. the importance of ensuring all work to services (gas, electric, water, media cables) is carried out by suitably qualified people
x. how to check for and protect hidden utilities
y. how to identify insulation materials and their characteristics for cold roofs, pipes, storage tanks, cylinders and access hatches

z. how to prepare and install, placed, mechanically or adhesively fixed insulation to cold roofs

aa. why it is important to minimise the effects of thermal bridging through compliance with design detail ensuring consistent insulation of the area being insulated

bb. how to check serviceability and provision of walkway boards and platforms

cc. how to prepare and fix pipe, tank and cylinder insulation

dd. how to ensure the insulation is contained within the prescribed areas

ee. how to protect downlighters by installation of fire rated caps to the required specification

ff. how to ensure insulation around electrical apparatus will not create fire hazards (light fittings, electrical units and cables)

gg. how to insulate and draught-proof access hatches

hh. how to Insulate light wells to ensure continuity of insulation

ii. how to maintain fire resistant barriers

jj. the different types of air and vapour control layers and breather membranes, where and how they should be used and why it is important to install them correctly

kk. the importance of ensuring the integrity of air and vapour control layers and breather membranes following installation and the need to maintain continuity

ll. why it is important to immediately record and report unforeseen events including but not limited to equipment malfunctions, situations and faults not identified in the original design

mm. why it is important to complete post installation checks in accordance with the design, method statement and installations operations manual and report issues to include but not limited to safeguarding the combustion ventilation and report defects

nn. why it is important to provide advice to building occupants to preserve the integrity of the insulation (insulation data sheet and warning labels)

oo. how to handover and sign off to the customers' satisfaction

pp. how to use all work tools and equipment

qq. how to work at height using access equipment and harness systems

rr. how and why maintenance of all work tools and equipment is carried out

7.17 describe the needs of other occupations and the importance of teamwork and communication when installing insulation to cold roofs

Unit 238 Installing insulation to cold roofs in the workplace

Guidance

This unit must be assessed in a work environment and in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the endorsements detailed within the relevant NVQ structure. Please refer to the NVQ structure applicable to the qualification/occupational area in which the candidate is being assessed.

One of the following endorsements required:

- placed
- mechanically or adhesively fixed.

Unit 241 Installing insulation to solid floors in the workplace

Level	2
GLH	110
TQT	200
Unit aim	The aim of this unit is to provide you with an awareness of: • interpreting information • complying with responsible work practices to meet legislation standards • selecting the required quantity and quality of resources • minimising risk • completing within the allocated time.

Learning outcome

The learner will:

1. interpret the given design information relating to the work and resources to confirm its accuracy, completeness and relevance to the building type, fabric and condition when installing insulation to solid floors.

Assessment criteria

The learner can:

1.1 interpret and extract relevant information from:
- a. drawings
- b. specifications
- c. schedules
- d. method statements
- e. risk assessments
- f. manufacturers' information
- g. data sheets

1.2 comply with information and/or instructions derived from risk assessments and method statements

1.3 describe why the organisational procedures have been developed and how they are implemented

1.4 explain the importance of organisational procedures to solve problems and why it is important to follow them

1.5 describe different types of information, their source, accuracy, completeness and how they are interpreted in relation to:
- a. drawings
- b. specifications
- c. schedules
- d. method statements
- e. risk assessments
- f. design
- g. standards

h. manufacturers' information
i. data sheets
j. official guidance
k. current legislation and regulations governing buildings

Learning outcome
The learner will: 2. know how to comply with environmentally responsible work practices to meet current, legislation standards and official guidance when installing insulation to solid floors.
Assessment criteria
The learner can: 2.1 describe their responsibilities regarding potential accidents, health hazards and the environment in relation to: l. the workplace a. below ground level b. in confined spaces c. at height d. tools and equipment e. materials and substances f. movement and storage of materials by manual handling and mechanical lifting 2.2. describe the organisational security procedures for tools, equipment and personal belongings in relation to: a. site b. workplace c. siting and location of vehicles d. company e. customer f. access equipment g. material and waste storage h. the general public 2.3 explain the accident reporting procedures and who is responsible for making reports 2.4 describe the types of fire extinguishers available when installing insulation to solid floors and describe how and when they are used in relation to: a. water b. CO2 c. foam d. powder

Learning outcome
The learner will:

3. comply with current, relevant legislation, standards and official guidance to carry out your work and maintain safe and healthy work practices.

Assessment criteria

The learner can:

3.1 demonstrate compliance with relevant legislation, standards and official guidance when installing insulation to solid floors in relation to the following:

a. methods of work
b. safe use of health and safety control equipment
c. safe use of access equipment
d. safe use, storage and handling of materials, tools and equipment
e. specific risks to health including mental health
f. specific risks associated with ventilation and combustion appliances

3.2. explain why, when and how health and safety control equipment, identified by the principles of prevention, should be used when installing insulation to solid floors in relation to:

a. collective protective measures
b. personal protective equipment (PPE)
c. respiratory protective equipment (RPE)
d. local exhaust ventilation (LEV)

3.3 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills in relation to:

a. fires
b. spillages
c. injuries
d. emergencies relating to occupational activities
e. identification of and reporting of asbestos containing materials

3.4 describe how to report risks and hazards identified by the following:

a. risk assessment
b. personal assessment
c. methods of work
d. manufacturers' technical information
e. data sheets
f. statutory regulations
g. official guidance
h. Control of Substances Hazardous to Health (COSHH)

Learning outcome
The learner will: 4. select the required quantity and quality of resources for the methods of work to install insulation to solid floors.
Assessment criteria
The learner can: 4.1 select resources associated with own work in relation to materials, components, tools and equipment 4.2 check the suitability, compatibility and characteristics of the materials and components, determine if they are moisture open or moisture closed and their impact on the building 4.3 record and report issues or defects 4.4 describe why the characteristics, compatibility, quality, uses, sustainability, limitations and defects associated with the resources are important and how defects should be rectified 4.5 describe how the resources should be used and how problems associated with the resources are reported in relation to: a. protective sheeting b. warning signs c. temporary barriers d. insulation e. making good materials f. filling materials g. tapes and sealants h. all work tools 4.6 describe how to confirm that the resources and materials conform to the specification 4.7 explain why the organisational procedures have been developed and how they are used for the selection of required resources 4.8 describe how to identify the hazards associated with the resources and methods of work and how they are overcome 4.9 describe how to calculate the quantity of materials required to ensure consistency of coverage to manufacturers' specification and wastage associated with the method and procedure to install insulation to solid floors

Learning outcome
The learner will: 5. minimise the risk of damage to the work and surrounding area when installing insulation to solid floors.
Assessment criteria
The learner can: 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures 5.2 maintain a safe, clear and tidy work area

5.3 explain why it is important to maintain a safe, clear and tidy work area

5.4 dispose of waste in accordance with current legislation

5.5 describe how to protect work and its surrounding area from damage by general workplace activities, other occupations and adverse weather conditions and how to minimise damage to existing building fabric

5.6 explain the importance of protecting the work and its surrounding area against the risk of damage

5.7 explain why and how the disposal of waste must be carried out safely in accordance with the following:

a. current legislation
b. environmental responsibilities
c. organisational procedures
d. manufacturers' information
e. data sheets
f. statutory regulations
g. official guidance

Learning outcome
The learner will: 6. complete the work within the allocated time when installing insulation to solid floors.
Assessment criteria
The learner can: 6.1 demonstrate completion of your work within the estimated, allocated time and performance requirements of the system design, method statement and the required standard 6.2 describe the purpose of the work programme, including the estimated and allocated time and explain why deadlines should be kept in relation to: a. types of progress charts, timetables and estimated times b. organisational procedures for reporting circumstances which will affect the work programme

Learning outcome
The learner will: 7. comply with the given contract information to carry out the work efficiently to install insulation to solid floors to the required specification.
Assessment criteria
The learner can: 7.1 demonstrate the following work skills when installing insulation to solid floors: a. carrying out internal pre-installation checks b. measuring c. marking out

d. calculating
e. cutting
f. fitting
g. filling
h. positioning and securing
i. making good

7.2 use and maintain all work tools and equipment
7.3 check, record and report issues with construction ventilation, flues, chimneys and combustion air ventilators pre- and post-installation
7.4 recognise, record and report the key issues that may inhibit commencement of the work including but not limited to:

a. condition of building fabric
b. identification of any areas of potential water penetration
c. visibility and completeness of damp proof course and membranes
d. condition of window and door seals
e. height of internal floors in relation to external floor height
f. drainage and down pipes
g. protection of existing ventilation in line with design

7.5 identify the potential risk of increased condensation following installation relating to solid floors and how to prevent it
7.6 prepare floor for insulation to include the following but not limited to:

a. safe systems of work
b. minimising damage
c. checking existing services
d. building construction and heritage significance
e. working surface, solid, free from defect, level and dry
f. customer safety

7.7 check for hidden utilities
7.8 maintain integrity of membranes
7.9 remove and minimise damage to floorcoverings
7.10 clear and safeguard existing and install additional ventilation if required in accordance with the design and installation checks and report back issues which impact the ventilation assessment
7.11 protect the building occupants and their property
7.12 confirm pre-installation material checks are within specified parameters to include checking and reporting defects
7.13 rectify defects in preparation of insulation measures
7.14 prepare and place insulation to solid floors using the following methods to given working instructions:

a. insulation under a screed
b. insulation on top of a solid floor
c. cut, place and tape insulation to manufacturers' specification
d. apply damp proof membrane as required
e. restrict or reduce unwanted heat loss
f. ensure maintenance of adequate ventilation

g. minimise the effects of thermal bridging through compliance with design detail and ensuring a consistent level of insulation of the installed area

7.15 complete post installation checks in accordance with the design, method statement and installations operations manual and report issues to include but not limited to safeguarding the combustion ventilation and report defects

7.16 provide post installation advice and guidance to building occupants including homeowner packs

7.17 handover and sign off to the customers satisfaction

7.18 describe how the methods of work to meet the specification, are carried out and how problems are identified and reported by the application of knowledge for safe, healthy and environmental work practices, procedures and skills relating to the method and area of work relating to the following:

a. the suitability, compatibility and characteristics of the materials, components and finishes, and determine if they are moisture open or moisture closed, their impact on the building and their appropriateness to the design and physical application
b. how to record and report issues or defects with the materials, components and finishes
c. why it is important to carry out external and internal pre-installation checks
d. how to carry out external and internal pre-installation checks assessing, recording and reporting issues to include:
    i. suitable access
    ii. property suitability
    iii. structural integrity
    iv. dampness
    v. decay
    vi. vents and ventilation
    vii. services (gas, electric, water, media cables)
e. why it is important to ensure that all necessary repairs are completed prior to installation
f. how to recognise, record and report the key issues that may inhibit commencement of the work including but not limited to:
    i. condition of building fabric
    ii. identification of any areas of potential damp
    iii. evidence of incompleteness of damp proof course and membranes
    iv. height of internal floors in relation to external floor height
    v. damaged or spalled brickwork
    vi. drainage and down pipes
    vii. protection and existence of sub floor ventilation

g. how to identify when specialist skills and knowledge are required and report accordingly including but not limited to:
    i. fire safety
    ii. electrical
    iii. asbestos
    iv. Radon
    v. heritage
    vi. ecology
    vii. architectural features
    viii. ventilation

h. the relevance of an assessment of significance and how to recognise specific requirements for structures of special interest, traditional construction, hard-to-treat buildings and historical significance

i. how to identify, record, report and rectify unintended consequences not addressed in the design, including but not limited to the existence of: thermal bridges, thermal bypassing and water ingress, inadequate ventilation and condensation risk

j. why it is important to avoid unintended consequences

k. how to check, record and report issues with construction ventilation, flues, chimneys and combustion air ventilators pre- and post-installation

l. why it is important to recognise the potential risk of increased condensation following installation relating to solid floors and how to prevent it

m. why it is important to explain installation procedure to building occupants to include but not limited to the following:
    i. scope and work programme
    ii. safety requirements during the installation process
    iii. protection of property and personal items
    iv. specific benefits and implications to include homeowner information
    v. agreed standards of making good

n. how to identify and follow the installation quality requirements

o. how to work with, around and in close proximity to plant and machinery

p. how to direct and guide the operations and movement of plant and machinery to ensure protection of a safe working environment

q. how to prepare floor for insulation to include the following but not limited to:
    i. safe systems of work
    ii. minimising damage
    iii. checking existing services
    iv. building construction and heritage significance
    v. working surface, solid, free from defect, level and dry

vi. customer safety

r. how to check for and protect hidden utilities

s. the importance of ensuring all work to services (gas, electric, water) is carried out by suitably qualified people

t. how to maintain integrity of membranes

u. how to remove and minimise damage to floorcoverings

v. how to clear and safeguard existing and install additional ventilation if required in accordance with the design and installation checks and report back issues which impact the ventilation assessment

w. how to protect the building occupants and their property

x. how to confirm pre-installation material checks are within specified parameters to include checking and reporting defects

y. how to rectify defects in preparation of insulation measures

z. how to prepare and place insulation to solid floors using the following methods to given working instructions:

i. insulation under a screed
ii. insulation on top of a solid floor
iii. cut, place and tape insulation to manufacturers' specification
iv. apply damp proof membrane
v. restrict or reduce unwanted heat loss
vi. ensure maintenance of adequate ventilation

aa. why it is important to minimise the effects of thermal bridging through compliance with design detail and ensuring a full consistent level of insulation to the area being insulated

bb. the different types of air and vapour control layers and breather membranes, where and how they should be used and why it is important to install them correctly

cc. the importance of ensuring the integrity of air and vapour control layers and breather membranes following installation and the need to maintain continuity

dd. why it is important to immediately record and report unforeseen events including but not limited to equipment malfunctions, situations and faults not identified in the original design

ee. why it is important to complete post installation checks in accordance with the design, method statement and installations operations manual and report issues to include but not limited to safeguarding the combustion ventilation and report

ff. why it is important to provide post installation advice and guidance to building occupants including homeowner packs

gg. how to handover and sign off to the customers satisfaction

hh. how to use all work tools and equipment

ii. how to work at height using access equipment

jj. how and why maintenance of all work tools and installation equipment is carried out

7.19 describe the needs of other occupations and the importance of teamwork and communication when installing insulation to solid floors

Unit 241 Installing insulation to solid floors in the workplace

Supporting information

Guidance

This unit must be assessed in a work environment and in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the endorsements detailed within the relevant NVQ structure. Please refer to the NVQ structure applicable to the qualification/occupational area in which the candidate is being assessed.

Two of the following endorsements required:

- injected/blown
- placed
- mechanically/adhesively fixed
- sprayed.

Unit 242 Insulation and building treatments, building construction, defects and interfaces

Level	Level 3
GLH	100
TQT	190
Unit aim	The aim of this unit is to provide you with an awareness of: • interpreting information • complying with legislation, standards and official guidance • selecting the required quantity and quality of resources • minimising the risk of damage • complying with given contract information.

Learning outcome
The learner will: 1. interpret the given design information relating to the work and resources and identify its suitability, taking into consideration building type, defects and detailing and recording and reporting issues in regard to building construction, defects and interfaces.
Assessment criteria
The learner can: 1.1 interpret and extract relevant information from: a. drawings b. specifications c. schedules d. method statements e. risk assessments f. manufacturers' information g. data sheets 1.2 comply with information and/or instructions derived from risk assessments and method statements 1.3 explain the importance of organisational procedures to solve problems and why it is important to follow them

1.4 describe different types of information, their source, accuracy, completeness and how they are interpreted in relation to:

a. types of construction
b. energy efficiency measures
c. building treatments
d. drawings
e. method statements
f. design
g. standards
h. manufacturers' information
i. data sheets
j. official guidance
k. current legislation and regulations governing buildings

Learning outcome

The learner will:

2. comply with current, relevant legislation, standards and official guidance to carry out your work and maintain safe and healthy work practices as stated for each measure to be installed.

Assessment criteria

The learner can:

2.1 describe the relevant, current legislation, standards and official guidance and how they are applied

2.2 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills in relation to:

a. fires
b. spillages
c. injuries
d. emergencies relating to occupational activities
e. identification of and reporting of asbestos containing materials

2.3 describe how to report risks and hazards identified by the following:

a. risk assessment
b. personal assessment
c. methods of work
d. safe systems of work
e. manufacturers' technical information
f. data sheets
g. statutory regulations
h. official guidance
i. Control of Substances Hazardous to Health (COSHH)

2.4 explain the accident reporting procedures and who is responsible for making reports

Learning outcome
The learner will: 3. select the required quantity and quality of resources for the methods of work in relation to building construction, defects and interfaces.
Assessment criteria
The learner can: 3.1 select resources associated with own work 3.2 check the suitability, compatibility and characteristics of the materials, components and finishes and determine if they are moisture open or moisture closed and their impact on the building 3.3 record and report issues or defects 3.4 describe why the characteristics, compatibility, quality, uses, sustainability, limitations and defects associated with the resources are important and how defects should be rectified 3.5 describe how the resources should be used and how problems associated with the resources are reported 3.6 describe how to confirm that the resources and materials conform to the specification 3.7 explain why the organisational procedures have been developed and how they are used for the selection of required resources 3.8 describe how to identify the hazards associated with the resources and methods of work and how they are overcome

Learning outcome
The learner will: 4. minimise the risk of damage to the work and surrounding area in relation to building construction, defects and interfaces.
Assessment criteria
The learner can: 4.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures 4.2 maintain a safe, clear and tidy work area 4.3 explain why it is important to maintain a safe, clear and tidy work area 4.4 dispose of waste in accordance with current legislation 4.5 describe how to protect work and its surrounding area from damage by general workplace activities, other occupations and adverse weather conditions and how to minimise damage to existing building fabric 4.6 explain the importance of protecting the work and its surrounding area against the risk of damage

Learning outcome

The learner will:

5. comply with the given contract information when identifying common building construction, defects and interfaces to the required specification.

Assessment criteria

The learner can:

5.1 comply with the given contract information to carry out the work efficiently to the required specification

5.2 demonstrate work skills to carry out external and internal pre installation checks in regard to building construction, defects and material interfaces:

5.3 identify common building defects including but not limited to:

a. salt contamination
b. causes of dampness
c. rain penetration
d. rising damp
e. internal moisture vapour
f. damaged services
g. structural defects

5.4 describe how the methods of work to meet the specification, are carried out and how problems are identified and reported by the application of knowledge for safe, healthy and environmental work practices, procedures and skills relating to the method and area of work relating to the following:

a. the suitability, compatibility and characteristics of the materials, components and finishes, and determine if they are moisture open or moisture closed, their impact on the building and their appropriateness to the design and physical application
b. how to record and report issues or defects with the materials, components and finishes
c. why it is important to carry out external and internal pre-installation checks
d. how to carry out external and internal pre-installation checks, assessing, recording and reporting issues to include but not limited to:
    i. property suitability
    ii. structural integrity
    iii. dampness
    iv. decay
    v. exposure ratings
    vi. vents and ventilation
    vii. services (gas, electric, water, media cables)
e. why it is important to ensure that all necessary repairs are completed prior to installation
f. the implications that types of construction and materials have on the introduction of energy efficiency measures and other forms of building treatments with specific reference to:

i. roofs
ii. walls including internal and external finishes
iii. floors
iv. windows and doors
v. chimneys and fireplaces
vi. flues and combustion ventilation
vii. fabric interfaces
viii. existing services

g. the importance of the correct sequencing of installation of energy efficiency measures and building treatments
h. how performance varies in different construction types, locations and through the impact of habitation and usage
i. how alterations, additions and extensions to the original construction can affect the performance of the building
j. how to identify common building defects including but not limited to: salt contamination and causes of dampness, rain penetration, rising damp, internal moisture vapour, damaged services, structural defects and understand the implications of these when they are present
k. how achieving continuity of the insulation and building treatments can prevent problems such as water ingress, poor energy efficiency and thermal bridges, whilst understanding the unique circumstances at party walls and the associated risks to adjacent properties
l. how to recognise unintended consequences, why they happen, how to avoid them and the importance of moisture content in external fabric including but not limited to:
    i. impacts on neighbouring properties
    ii. insulation fitting and placement for different insulation types
    iii. junctions
    iv. thermal bridging and condensation risks
    v. thermal bypassing
    vi. void ventilation
m. the potential causes of mould and fungal decay in buildings and the impact of ventilation and air flow following the installation of thermal efficiency measures
n. the implications of building defects and the repairs required and how they will affect the choice of energy efficiency measures and building treatments
o. the importance of compatibility and interactions between measures and the fabric of the underlying building
p. how to identify when specialist skills and knowledge are required and report accordingly, including but not limited to:
    i. fire safety
    ii. electrical
    iii. gas
    iv. asbestos

v. Radon
vi. heritage
vii. ecology
viii. archaeological and architectural features
ix. ventilation
x. dampness and building exposure

q. the relevance of an assessment of significance and how to recognise specific requirements for structures of special interest, traditional construction, hard-to-treat buildings and historical significance
r. how your actions can lead to unintended consequences, why they happen, how to avoid them and the importance of reporting them

5.5 describe the needs of other occupations and the importance of teamwork and communication how to effectively communicate within a team when identifying building construction, defects and interfaces

Unit 242 Insulation and building treatments, building construction, defects and interfaces

Supporting information

Guidance

This unit must be assessed in a work environment and in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Unit 243 Installing insulation to suspended floors in the workplace

Level	2
GLH	100
TQT	190
Unit aim	The aim of this unit is to provide you with an awareness of: • interpreting information • adopting safe and healthy working practices • selecting materials, components and equipment • installing insulation to floors.

Learning outcome
The learner will: 1. interpret the given design information relating to the work and resources to confirm its accuracy, completeness and relevance to the building type, fabric and condition when installing insulation to suspended floors.
Assessment criteria
The learner can: 1.1 interpret and Interpret and extract relevant information from: a. drawings b. specifications c. schedules d. method statements e. risk assessments f. manufacturers' information g. data sheets 1.2 comply with information and/or instructions derived from risk assessments and method statements 1.3 describe why the organisational procedures have been developed and how they are implemented 1.4 explain the importance of organisational procedures to solve problems and why it is important to follow them 1.5 describe different types of information, their source, accuracy, completeness and how they are interpreted in relation to: a. drawings

b. specifications
c. schedules
d. method statements
e. risk assessments
f. design
g. standards
h. manufacturers' information
i. data sheets
j. official guidance
k. current legislation and regulations governing buildings

Learning outcome

The learner will:

2. know how to comply with environmentally responsible work practices to meet current, legislation standards and official guidance when installing insulation to suspended floors.

Assessment criteria

The learner can:

2.1 describe their responsibilities regarding potential accidents, health hazards and the environment in relation to:
   a. the workplace
   b. below ground level
   c. confined spaces
   d. at height
   e. tools and equipment
   f. materials and substances
   g. movement and storage of materials by manual handling and mechanical lifting

2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to:
   a. site
   b. workplace
   c. siting and location of vehicles
   d. company
   e. customer
   f. access equipment
   g. materials and waste storage
   h. the general public

2.3 explain the accident reporting procedures and who is responsible for making reports

2.4 describe the types of fire extinguishers available when applying surface finishes to installing insulation to suspended floors and describe how and when they are used in relation to:
   a. water
   b. CO2
   c. foam
   d. powder

Learning outcome
The learner will: 3. comply with current, relevant legislation, standards and official guidance to carry out your work and maintain safe and healthy work practices.
Assessment criteria
The learner can: 3.1 demonstrate compliance with, relevant legislation, standards and official guidance when installing insulation to suspended floors in relation to the following: a. methods of work b. safe use of health and safety control equipment c. safe use of access equipment d. safe use, storage and handling of materials, tools and equipment e. specific risks to health including mental health f. specific risks associated with ventilation (inside the property and under floor) and also including combustion appliances g. specific risks associated with working in confined spaces 3.2 explain why, when and how health and safety control equipment, identified by the principles of prevention, should be used when installing insulation to suspended floors, in relation to: a. collective protective measures b. personal protective equipment (PPE) c. respiratory protective equipment (RPE) d. local exhaust ventilation (LEV) 3.3 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills in relation to: a. fires b. spillages c. injuries d. emergencies relating to occupational activities e. identification of and reporting of asbestos containing materials 3.4 describe how to report risks and hazards identified by the following: a. risk assessment b. personal assessment c. methods of work d. manufacturers' technical information e. data sheets f. statutory regulations g. official guidance h. Control of Substances Hazardous to Health (COSHH)

Learning outcome
The learner will: 4. select the required quantity and quality of resources for the methods of work to install insulation to suspended floors.
Assessment criteria
The learner can: 4.1 select resources associated with own work in relation to materials, components, fixings, finishes, tools and equipment 4.2 check the suitability, compatibility and characteristics of the materials, components and finishes, determine if they are moisture open or moisture closed and their impact on the building 4.3 record and report issues 4.4 describe why the characteristics, compatibility, quality, uses, sustainability, limitations and defects associated with the resources are important and how defects should be rectified 4.5 describe how the resources should be used and how problems associated with the resources are reported in relation to: a. protective sheeting b. warning signs c. temporary barriers d. making good materials e. filling materials f. sealants g. all work tools and equipment 4.6 describe how to confirm that the resources and materials conform to the specification 4.7 explain why the organisational procedures have been developed and how they are used for the selection of required resources 4.8 describe how to identify the hazards associated with the resources and methods of work and how they are overcome 4.9 describe how to calculate the quantity of materials required and used to ensure, adequacy of fill as per system designer specification and wastage associated with the method and procedure to install insulation to suspended floors

Learning outcome
The learner will: 5. minimise the risk of damage to the work and surrounding area when installing insulation to suspended floors.
Assessment criteria
The learner can: 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures 5.2 maintain a safe, clear and tidy work area 5.3 explain why it is important to maintain a safe, clear and tidy work area 5.4 dispose of waste in accordance with current legislation

5.5 describe how to protect work and its surrounding area from damage by general workplace activities, other occupations and adverse weather conditions and how to minimise damage to existing building fabric

5.6 explain why and how the disposal of waste must be carried out safely in accordance with the following:

a. current legislation
b. environmental responsibilities
c. organisational procedures
d. suppliers and manufactures' information
e. data sheets
f. statutory regulations
g. official guidance

Learning outcome
The learner will: 6. complete the work within the allocated time when installing insulation to suspended floors.
Assessment criteria
The learner can: 6.1 demonstrate completion of your work within the estimated, allocated time and performance requirements of the system design, method statement and the required standard 6.2 describe the purpose of the work programme, including the estimated and allocated time, and explain why deadlines should be kept in relation to: a. types of progress charts, timetables and estimated times b. organisational procedures for reporting circumstances which will affect the work programme

Learning outcome
The learner will: 7. comply with the given contract information to carry out the work efficiently to install insulation to suspended floors to the required specification.
Assessment criteria
The learner can: 7.1 demonstrate the following work skills when installing insulation to suspended floors: a. measuring b. marking out c. cutting d. fitting e. positioning f. securing g. making good 7.2 use and maintain all work tools and equipment

7.3 carry out external and internal pre-installation check, assessing, recording and reporting issues to include:
   a. suitable access
   b. property suitability
   c. structural integrity
   d. dampness
   e. decay
   f. vents and ventilation
   g. services (gas, electric, water, media cables)

7.4 recognise, record and report the key issues that may inhibit commencement of the work including but not limited to:
   a. condition of building fabric
   b. identification of any areas of potential water penetration
   c. visibility and completeness of damp proof course
   d. condition of window and door seals
   e. height of internal floors in relation to finished ground level
   f. drainage and down pipes
   g. protection and existence of sub floor ventilation

7.5 identify the potential risk of increased condensation following installation relating to suspended floors and how to prevent it

7.6 check, record and report issues with under floor (cross flow) ventilation, flues, chimneys and combustion air ventilators pre- and post-installation

7.7 prepare floor for insulation creating access points taking into consideration the following but not limited to:
   a. safe systems of work
   b. minimising damage
   c. checking existing services
   d. building construction and heritage significance
   e. customer safety

7.8 install placed, mechanically or adhesively fixed insulation to suspended floors

7.9 check for hidden utilities

7.10 maintain integrity of membranes

7.11 remove and minimise damage to floorcoverings

7.12 ensure the minimum void area air space is maintained by removing debris

7.13 clear and safeguard existing and install additional in accordance with the design and installation checks and report back issues which impact the ventilation assessment

7.14 protect the building occupants and their property

7.15 confirm pre-installation material checks are within specified parameters to include checking and reporting defects

7.16 rectify defects in preparation of insulation measures.

7.17 maintain existing soundproofing

7.18 install and maintain fire resistant barriers

7.19 carry out post installation checks in accordance with the design, method statement and installations operations manual and

report issues to include but not limited to safeguarding the combustion ventilation and report defects

7.20 provide post installation advice and guidance to building occupants including homeowner packs

7.21 handover and sign off to the customers satisfaction

7.22 work at height using access equipment

7.23 describe how the methods of work to meet the specification, are carried out and how problems are identified and reported by the application of knowledge for safe, healthy and environmental work practices, procedures and skills relating to the method and area of work relating to the following:

a. the suitability, compatibility and characteristics of the materials, components and finishes, and determine if they are moisture open or moisture closed, their impact on the building and their appropriateness to the design and physical application
b. how to record and report issues or defects with the materials, components and finishes
c. why it is important to carry out external and internal pre-installation checks
d. how to carry out external and internal pre-installation checks, assessing, recording and reporting issues to include:
    i. suitable access
    ii. property suitability
    iii. structural integrity
    iv. dampness
    v. decay
    vi. vents and ventilation
    vii. services (gas, electric, water, media cables)
e. how to recognise, record and report the key issues that may inhibit commencement of the work including but not limited to:
    i. condition of building fabric
    ii. identification of any areas of potential water penetration
    iii. visibility and completeness of damp proof course
    iv. condition of window and door seals
    v. height of internal floors in relation to external floor height
    vi. condition of roof
    vii. damaged and spalled brickwork
    viii. rain and waste water goods
    ix. protection and existence of sub floor ventilation
    x. wall cavity width and identification of any debris
f. why it is important to ensure that all necessary repairs are completed prior to installation

g. how to identify when specialist skills and knowledge are required and report accordingly including but not limited to:
    i. fire safety
    ii. electrical
    iii. asbestos
    iv. Radon
    v. heritage
    vi. archaeological and architectural features
    vii. ecology
    viii. ventilation
    ix. exposure and topography
h. the relevance of an assessment of significance and how to recognise specific requirements for structures of special interest, traditional construction, hard-to-treat buildings and historical significance
i. how to identify, record, report and rectify unintended consequences not addressed in the design, including but not limited to the existence of thermal bridges, thermal bypassing and water ingress, inadequate ventilation and condensation risk
j. why it is important to avoid unintended consequences
k. how to check, record and report issues with under floor (cross flow) ventilation, flues, chimneys and combustion air ventilators pre- and post-installation
l. why it is important to explain installation procedure to building occupants to include but not limited to the following:
    i. scope and work programme
    ii. safety requirements during the installation process
    iii. protection of property and personal items
    iv. specific benefits and implications to include homeowner information
    v. agreed standards of making good
m. the implications of existing guarantees and warranties that may be compromised by the installation to include but not limited to:
    i. timber treatments
    ii. replacement wall ties
    iii. injected damp proof course
    iv. under floor and central heating systems
    v. Radon barriers
    vi. electrical wiring
    vii. services
n. how to identify and follow the installation quality requirements
o. how to work with, around and in close proximity to plant and machinery

p. how to direct and guide the operations and movement of plant and machinery to ensure protection of a safe working environment
q. why it is important to recognise the potential risk of increased condensation following installation relating to suspended floors and how to prevent it
r. how to prepare a floor for insulation, creating access points taking into consideration the following but not limited to:
    i. safe systems of work
    ii. minimising damage
    iii. checking existing services
    iv. building construction and heritage significance
    v. customer safety
    vi. archaeology
s. how to check for hidden utilities
t. the importance of ensuring all work to services (gas, electric, water) is carried out by suitably qualified people
u. how to maintain the integrity of membranes
v. how to remove and minimise damage to floorcoverings
w. why it is important to ensure the minimum void area air space is maintained by removing debris as required
x. why it is important to clear and safeguard existing and install additional ventilation if required in accordance with the design and installation checks and report back issues which impact the ventilation assessment
y. how to protect the building occupants and their property
z. how to install placed, mechanically or adhesively fixed insulation to suspended floors
aa. the different types of air and vapour control layers and breather membranes, where and how they should be used and why it is important to install them correctly
bb. the importance of ensuring the integrity of air and vapour control layers and breather membranes following installation and the need to maintain continuity
cc. why it is important to immediately record and report unforeseen events including but not limited to equipment malfunctions, situations and faults not identified in the original design
dd. how to ensure pre-installation material checks are within specified parameters and reporting defects
ee. how to ensure existing cross flow ventilation is maintained within the floor void
ff. how to maintain existing sound-proofing
gg. how to install and maintain fire resistant barriers
hh. why it is important to minimise thermal bridging through compliance with design detail ensuring a consistent level of insulation to the area being insulated
ii. why it is important to complete post installation checks in accordance with the design, method statement and installations operations manual and report issues to

include but not limited to safeguarding the combustion ventilation and report defects

jj. why it is important to provide post installation advice and guidance to building occupants including homeowner packs

kk. how to handover and sign off to the customers satisfaction

ll. how to use all work tools and equipment

mm. how to work at height using access equipment

nn. how and why maintenance of all work tools and equipment is carried out

7.24 describe the needs of other occupations and the importance of teamwork and communication when installing insulation to suspended floors

Unit 243 Installing insulation to suspended floors in the workplace

Supporting information

Guidance

This unit must be assessed in a work environment and in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Unit 244 Spraying insulation to suspended floors in the workplace

Level	2
GLH	110
TQT	200
Unit aim	The aim of this unit is to provide you with an awareness of: • interpreting information • complying with legislation, standards and official guidance • selecting the required quantity and quality of resources • minimising the risk of damage • complying with given contract information.

Learning outcome

The learner will:

1. interpret the given design information relating to the work and resources to confirm its accuracy, completeness and relevance to the building type, fabric and condition when spraying insulation to suspended floors.

Assessment criteria

The learner can:

1.1 interpret and extract relevant information from:

a. drawings
b. specifications
c. schedules
d. method statements
e. risk assessments
f. manufacturers' information
g. data sheets

1.2 comply with information and/or instructions derived from risk assessments and method statements

1.3 describe why the organisational procedures have been developed and how they are implemented

1.4 explain the importance of organisational procedures to solve problems and why it is important to follow them

1.5 describe different types of information, their source, accuracy, completeness and how they are interpreted in relation to:

a. drawings
b. specifications
c. schedules
d. method statements
e. risk assessments
f. design
g. standards
h. manufacturers' information
i. data sheets
j. official guidance
k. current legislation and regulations governing buildings

Learning outcome
The learner will: 2. know how to comply with environmentally responsible work practices to meet current, legislation standards and official guidance when spraying insulation to suspended floors.
Assessment criteria
The learner can: 2.1 describe their responsibilities regarding potential accidents, health hazards and the environment, whilst working: a. in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting. 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to: a. site b. workplace c. siting and location of vehicles d. company e. customer f. access equipment g. material and waste storage h. the general public 2.3 explain what the accident reporting procedures are and who is responsible for making reports 2.4 describe the types of fire extinguishers available when spraying insulation to suspended floors and describe how and when they are used in relation to: a. water b. CO2

c. foam

d. powder

Learning outcome

The learner will:

3. comply with current, relevant legislation, standards and official guidance to carry out your work and maintain safe and healthy work practices.

Assessment criteria

The learner can:

3.1 demonstrate compliance with relevant legislation, standards and official guidance when spraying insulation to suspended floors in relation to the following:

a. methods of work

b. safe use of health and safety control equipment

c. safe use of access equipment

d. safe use, storage and handling of materials, tools and equipment

e. operative maintenance of installation equipment

f. specific risks to health including mental health

g. specific risks associated with ventilation (inside the property and under floor) and also including combustion appliances

h. specific risks associated with working in confined spaces

3.2 explain why, when and how health and safety control equipment, identified by the principles of prevention, should be used when spraying insulation to suspended floors in relation to:

a. collective protective measures

b. personal protective equipment (PPE)

c. respiratory protective equipment (RPE)

d. local exhaust ventilation (LEV)

3.3 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills in relation to:

a. fires

b. spillages

c. injuries

d. emergencies relating to occupational activities

e. identification of and reporting of asbestos containing materials

3.4 describe how to report risks and hazards identified by the following:

a. risk assessment
b. personal assessment
c. methods of work
d. manufacturers' technical information
e. data sheets
f. statutory regulations
g. official guidance
h. Control of Substances Hazardous to Health (COSHH)

Learning outcome

The learner will:

4. select the required quantity and quality of resources for the methods of work to spray insulation to suspended floors.

Assessment criteria

The learner can:

4.1 select resources associated with own work in relation to materials, components and finishes, tools and equipment

4.2 check the suitability, compatibility and characteristics of the materials, components and finishes, determine if they are moisture open or moisture closed and their impact on the building

4.3 record and report issues or defects

4.4 Describe why the characteristics, compatibility, quality, uses, sustainability, limitations and defects associated with the resources are important and how defects should be rectified

4.5 describe how the resources should be used and how problems associated with the resources are reported in relation to:

a. protective sheeting
b. warning signs
c. temporary barriers
d. making good materials
e. filling materials
f. sealants
g. installation equipment
h. all work tools

4.6 describe how to confirm that the resources and materials conform to the specification

4.7 explain why the organisational procedures have been developed and how they are used for the selection of required resources

4.8 describe how to identify the hazards associated with the resources and methods of work and how they are overcome

4.9 describe how to calculate the quantity of materials required and used to ensure adequacy of fill as per the system designer specification and wastage associated with the method and procedure to spray insulation to suspended floors

Learning outcome
The learner will: 5. minimise the risk of damage to the work and surrounding area when spraying insulation to suspended floors.
Assessment criteria
The learner can: 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures 5.2 maintain a safe, clear and tidy work area 5.3 Explain why it is important to maintain a safe, clear and tidy work area 5.4 dispose of waste in accordance with current legislation 5.5 describe how to protect work and its surrounding area from damage by general workplace activities, other occupations and adverse weather conditions and how to minimise damage to existing building fabric 5.6 explain the importance of protecting the work and its surrounding area against the risk of damage 5.7 explain why and how the disposal of waste must be carried out safely in accordance with the following: a. current legislation b. environmental responsibilities c. organisational procedures d. manufacturers' information e. data sheets f. statutory regulations g. official guidance

Learning outcome
The learner will: 6. complete the work within the allocated time when spraying insulation to suspended floors.
Assessment criteria
The learner can: 6.1 demonstrate completion of your work within the estimated, allocated time and performance requirements of the system design, method statement and the required standard 6.2 describe the purpose of the work programme, including the estimated and allocated time and explain why deadlines should be kept in relation to: a. types of progress charts, timetables and estimated times b. organisational procedures for reporting circumstances which will affect the work programme

Learning outcome
The learner will: 7. comply with the given contract information to carry out the work efficiently to spray insulation to suspended floors to the required specification.
Assessment criteria
The learner can: 7.1 demonstrate the following work skills when spraying insulation to suspended floors: a. measuring b. marking out c. calculating d. cutting e. fitting f. filling g. positioning and securing h. making good 7.2 use and maintain all work tools and installation equipment 7.3 carry out external and internal pre installation checks assessing, recording and reporting issues to include: a. suitable access b. property suitability c. structural integrity d. dampness e. decay f. vents and ventilation g. services (gas, electric, water, media cables) 7.4 recognise, record and report the key issues that may inhibit commencement of the work including but not limited to: a. condition of building fabric b. identification of any areas of potential water penetration c. visibility and completeness of damp proof course d. condition of window and door seals e. height of internal floors in relation to external floor height f. drainage and down pipes g. protection and existence of sub floor ventilation 7.5 identify the potential risk of increased condensation following installation relating to suspended floors and how to prevent it 7.6 check, record and report issues with under floor (cross flow) ventilation, flues, chimneys and combustion air ventilators pre- and post-installation 7.7 prepare floor for insulation creating access points taking into consideration the following but not limited to:

a. safe systems of work
b. minimising damage
c. checking existing services
d. building construction and heritage significance
e. customer safety

7.8 check for hidden utilities
7.9 maintain integrity of membranes
7.10 remove and minimise damage to floorcoverings
7.11 ensure the minimum void area air space is maintained by removing debris
7.12 clear and safeguard existing and install additional ventilation in accordance with the design and installation checks and report back issues which impact the ventilation assessment
7.13 protect the building occupants and their property
7.14 confirm pre-installation material checks are within specified parameters to include checking and reporting defects
7.15 rectify defects in preparation of insulation measures
7.16 assemble, operate, clean and disassemble installation processing equipment
7.17 calibrate equipment to measure density, flow and quality tests
7.18 spray insulation to suspended floors
7.19 maintain existing soundproofing
7.20 install and maintain fire resistant barriers
7.21 complete post installation checks in accordance with the design, method statement and installations operations manual and report issues to include but not limited to safeguarding the combustion ventilation and report defects
7.22 provide post installation advice and guidance to building occupants including homeowner packs
7.23 handover and sign off to the customers satisfaction
7.24 clean and disassemble installation processing equipment and pack away for transportation
7.25 work at height using access equipment
7.26 describe how the methods of work to meet the specification, are carried out and how problems are identified and reported by the application of knowledge for safe, healthy and environmental work practices, procedures and skills relating to the method and area of work relating to the following:

a. the suitability, compatibility and characteristics of the materials, components and finishes, and determine if they are moisture open or moisture closed, their impact on the building and their appropriateness to the design and physical application
b. how to record and report issues or defects with the materials, components and finishes
c. why it is important to carry out external and internal pre-installation checks
d. how to carry out external and internal pre-installation checks, assessing, recording and reporting issues to include:

i. suitable access

ii. property suitability
iii. structural integrity
iv. dampness
v. decay
vi. vents and ventilation
vii. services (gas, electric, water, media cables)

e. why it is important to ensure that all necessary repairs are completed prior to installation

f. how to recognise, record and report the key issues that may inhibit commencement of the work including but not limited to:

i. condition of building fabric
ii. identification of any areas of potential water penetration
iii. visibility and completeness of damp proof course
iv. condition of window and door seals
v. height of internal floors in relation to external floor height
vi. condition of roof
vii. damaged or spalled brickwork
viii. rain and wastewater goods
ix. protection and existence of sub floor ventilation
x. cavity width and identification of any debris

g. how to identify when specialist skills and knowledge are required and report accordingly including but not limited to:

i. fire safety
ii. electrical
iii. asbestos
iv. Radon
v. heritage
vi. archaeological and architectural features
vii. ecology
viii. ventilation
ix. exposure & topography

h. the relevance of an assessment of significance and how to recognise specific requirements for structures of special interest, traditional construction, hard-to-treat buildings and historical significance

i. how to identify, record, report and rectify unintended consequences not addressed in the design, including but not limited to the existence of thermal bridges, thermal

bypassing and water ingress, inadequate ventilation and condensation risk

j. why it is important to avoid unintended consequences

k. how to check, record and report issues with under floor (cross flow) ventilation, flues, chimneys and combustion air ventilators pre- and post-installation

l. why it is important to explain installation procedure to building occupants to include but not limited to the following:

    i. scope and work programme

    ii. safety requirements during the installation process

    iii. protection of property and personal items

    iv. specific benefits and implications to include homeowner information

    v. agreed standards of making good

m. the implications of existing guarantees and warranties that may be compromised by the installation to include but not limited to:

    i. timber treatments

    ii. replacement wall ties

    iii. injected damp proof course

    iv. under floor and central heating systems

    v. Radon barriers

    vi. electrical wiring

    vii. services

n. how to identify and follow the installation quality requirements

o. how to work with, around and in close proximity to plant and machinery

p. how to direct and guide the operations and movement of plant and machinery to ensure protection of a safe working environment

q. why it is important to recognise the potential risk of increased condensation following installation relating to suspended floors and how to prevent it

r. how to prepare a floor for insulation, creating access points taking into consideration the following but not limited to:

    i. safe systems of work

    ii. minimising damage

    iii. checking existing services

    iv. building construction and heritage significance

    v. customer safety

vi. archaeology

s. how to check for hidden utilities

t. the importance of ensuring all work to services (gas, electric, water) is carried out by suitably qualified people

u. how to maintain integrity of membranes

v. how to remove and minimise damage to floorcoverings

w. why it is important to ensure the minimum void area air space is maintained by removing debris as required

x. why it is important to clear and safeguard existing and install additional ventilation if required in accordance with the design and installation checks and report back issues which impact the ventilation assessment

y. how to protect the building occupants and their property

z. how to assemble, operate, clean and disassemble installation processing equipment

aa. how to calibrate equipment to measure density, flow and quality tests

bb. how to spray insulation to suspended floors

cc. how to ensure pre-installation material checks are within specified parameters to include checking and recording batch number and reporting defects

dd. the different types of air and vapour control layers and breather membranes, where and how they should be used and why it is important to install them correctly

ee. the importance of ensuring the integrity of air and vapour control layers and breather membranes following installation and the need to maintain continuity

ff. why it is important to immediately record and report unforeseen events including but not limited to equipment malfunctions, situations and faults not identified in the original design

gg. how to ensure existing cross flow ventilation is maintained within the floor void

hh. how to maintain existing soundproofing

ii. how to install and maintain fire resistant barriers

jj. why it is important to minimise thermal bridging through compliance with design detail ensuring a consistent level of insulation of the area being insulated

kk. why it is important to complete post installation checks in accordance with the design, method statement and installations operations manual and report issues to include but not limited to safeguarding the combustion ventilation and report defects

ll. why it is important to provide post installation advice and guidance to building occupants including homeowner packs

mm. how to handover and sign off to the customers satisfaction

nn. how to clean and disassemble installation processing equipment and pack away for transportation

oo. how to use all work tools and installation equipment in line with manufacturers and system specifications

pp. how to work at height using access equipment and harness systems

qq. how and why maintenance of all work tools and installation equipment is carried out

7.27 describe the needs of other occupations and the importance of teamwork and communication when spraying insulation to suspended floors

Unit 244 Spraying insulation to suspended floors in the workplace

Supporting information

Guidance

This unit must be assessed in a work environment and in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Unit 245 Preparing structures for treatment in the workplace

Level	2
GLH	53
TQT	130
Unit aim	The aim of this unit is to provide you with an awareness of: • interpreting information • adopting safe and healthy working practices • selecting materials, components and equipment • preparing structures for treatment in the workplace.

Learning outcome
The learner will: 1. interpret the given information relating to the work and resources when preparing structures for treatment.
Assessment criteria
The learner can: 1.1 interpret and extract relevant information from drawings, specifications, schedules, method statements, risk assessments, manufactures' information and data sheets 1.2 comply with information and/or instructions derived from risk assessments and method statements 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 describe different types of information, their source and how they are interpreted in relation to: a. drawings, specifications, schedules, method statements, risk assessments, manufactures' information and data sheets, and current regulations governing buildings.

Learning outcome

The learner will:

2. know how to comply with relevant legislation and official guidance when preparing structures for treatment.

Assessment criteria

The learner can:

2.1 describe their responsibilities regarding potential accidents, health hazards and the environment whilst working:

   a. in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting.

2.2 explain what the accident reporting procedures are and who is responsible for making reports

Learning outcome

The learner will:

3. maintain safe and healthy working practices when preparing structures for treatment.

Assessment criteria

The learner can:

3.1 use health and safety control equipment safely and comply with the methods of work to carry out the activity in accordance with current legislation and organisational requirements when preparing structures for treatment

3.2 demonstrate compliance with given information and relevant legislation when preparing structures for treatment in relation to the following:

   a. safe use of access equipment and work platforms

   b. safe use, storage and handling of materials, tools and equipment

   c. specific risks to health

3.3 explain why and when health and safety control equipment identified by the principles of prevention should be used, relating to preparing structures for treatment, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:

   a. collective protective measures

   b. Personal Protective Equipment (PPE)

   c. Respiratory Protective Equipment (RPE)

   d. Local Exhaust Ventilation (LEV)

3.4 describe how the relevant health and safety control equipment should be used in accordance with the given working instructions

3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related activities

Learning outcome
The learner will: 4. select the required quantity and quality of resources for the methods of work to prepare structures for treatment.
Assessment criteria
The learner can: 4.1 select resources associated with own work in relation to materials, components, fixings, tools and equipment 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to: a. cleaning fluids, neutralisers, inhibitors, water repellents, stabilisers and wall ties b. signs, barriers, props, fixings c. hand tools, portable power tools and equipment 4.3 describe how the resources should be used correctly and how problems associated with the resources are reported 4.4 explain why the organisational procedures have been developed and how they are used for the selection of required resources 4.5 describe any potential hazards associated with the resources and methods of work 4.6 describe how to calculate quantity length, area, volume and wastage associated with the method/procedure to prepare structures for treatment

Learning outcome
The learner will: 5. minimise the risk of damage to the work and surrounding area when preparing structures for treatment.
Assessment criteria
The learner can: 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures 5.2 minimise damage and maintain a clean work space 5.3 dispose of waste in accordance with current legislation 5.4 describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 5.5 explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information and data sheets, statutory regulations and official guidance

Learning outcome

The learner will:

6. complete the work within the allocated time when preparing structures for treatment.

Assessment criteria

The learner can:

6.1 demonstrate completion of the work within the allocated time

6.2 demonstrate the following work skills when preparing structures for treatment:

- a. types of progress charts, timetables and estimated times
- b. organisational procedures for reporting circumstances which will affect the work programme

Learning outcome

The learner will:

7. comply with the given contract information to prepare structures for treatment to the required specification.

Assessment criteria

The learner can:

7.1 demonstrate the following work skills when preparing structures for treatment:

- a. measuring, marking out, preparing, positioning and securing.

7.2 use and maintain hand tools, portable power tools and ancillary equipment

7.3 prepare for treatments of wood preservation and/or damp-proofing and/or wall tie replacement, to given working instructions, relating to three of the following:

- a. clean substrates
- b. erect temporary barriers and signs
- c. removal of non-structural and/or structural components for access to treatment areas
- d. storage of items to be reinstated

7.4 describe how to apply safe, healthy and environmental work practices, follow procedures, report problems and establish the authority needed to rectify them, to:

- a. understand the implications of existing guarantees and warranties
- b. prepare site and clean structures to substrate for either in-situ wood preservation and/or damp-proofing and/or wall tie replacement remedial treatments above and below (wood preservation only) ground level
- c. protect the site from all treatments (dust sheets, plastic sheets)
- d. measure areas for treatment and volumes of treatment products: cleaning fluids, neutralisers, inhibitors, biocides, water repellents stabilisers and wall ties
- e. erect temporary barriers and signs
- f. remove non-structural and structural components for access to treatment areas
- g. check hidden utilities

h. provide temporary supports to structure
i. store items to be reinstated after treatment
j. recognise when specialist skills and knowledge are required and report accordingly
k. recognise specific requirements for structures of special interest, traditional construction (pre 1919) and historical significance and report accordingly
l. use hand tools, portable tools and equipment
m. work at height
n. use access equipment and work platforms.

7.5 describe the needs of other occupations and how to effectively communicate within a team when preparing structures for treatment

7.6 describe how to maintain the tools and equipment used when preparing structures for treatment

Unit 245 Preparing structures for treatment in the workplace

Supporting information

Guidance

This unit must be assessed in a work environment and in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

One of the following endorsements required:

- Wood preservation
- Damp-proofing
- Wall tie replacement.

Unit 246 Applying preservation treatment in the workplace

Level	2
GLH	63
TQT	160
Unit aim	The aim of this unit is to provide you with an awareness of: • interpreting information • adopting safe and healthy working practices • selecting materials, components and equipment • applying preservation treatment.

Learning outcome
The learner will: 1. interpret the given information relating to the work and resources when applying preservation treatment.
Assessment criteria
The learner can: 1.1 interpret and extract relevant information from drawings, specifications, schedules method statements, risk assessments, manufactures' information and data sheets 1.2 comply with information and/or instructions derived from risk assessments and method statements 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 describe different types of information, their source and how they are interpreted in relation to: a. drawings, specifications, schedules, method statements, risk assessments, manufacturers' information and data sheets, and current regulations governing buildings.

Learning outcome
The learner will:

2. know how to comply with relevant legislation and official guidance when applying preservation treatment.

Assessment criteria

The learner can:

2.1 describe their responsibilities regarding potential accidents, health hazards and the environment whilst working:
   a. in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting

2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, vehicles, company and operative/technician

2.3 explain what the accident reporting procedures are and who is responsible for making reports

2.4 describe the types of fire extinguishers available when applying preservation treatment and describe how and when they are used

Learning outcome

The learner will:

3. maintain safe and healthy working practices when applying preservation treatment.

Assessment criteria

The learner can:

3.1 use health and safety control equipment safely and comply with the methods of work to carry out the activity in accordance with current legislation and organisational requirements when applying preservation treatment

3.2 demonstrate compliance with given information and relevant legislation when applying preservation treatment in relation to the following:
   a. safe use of access equipment and work platforms
   b. safe use, storage and handling of materials, tools and equipment
   c. specific risks to health

3.3 explain why and when health and safety control equipment identified by the principles of prevention should be used, relating to applying preservation treatment, and the types, purpose and limitations of each type the work situation and general work environment, in relation to:
   a. collective protective measures
   b. Personal Protective Equipment (PPE)
   c. Respiratory Protective Equipment (RPE)
   d. Local Exhaust Ventilation (LEV)

3.4 describe how the relevant health and safety control equipment should be used in accordance with the given working instructions

3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when

involved with fires, spillages, injuries and other task-related activities

Learning outcome
The learner will: 4. select the required quantity and quality of resources for the methods of work to apply preservation treatment.
Assessment criteria
The learner can: 4.1 select resources associated with own work in relation to materials, components, tools and equipment 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to: a. biocides, damp-proofing products and water b. cementitious, liquid and physical membranes c. hand tools, portable power tools and treatment equipment 4.3 describe how the resources should be used correctly and how problems associated with the resources are reported 4.4 explain why the organisational procedures have been developed and how they are used for the selection of required resources 4.5 describe any potential hazards associated with the resources and methods of work 4.6 describe how to calculate quantity length, area, volume and wastage associated with the method/procedure to apply preservation treatment

Learning outcome
The learner will: 5. minimise the risk of damage to the work and surrounding area when applying preservation treatment.
Assessment criteria
The learner can: 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures 5.2 minimise damage and maintain a clean workspace 5.3 dispose of waste in accordance with current legislation 5.4 describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 5.5 explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information and data sheets, statutory regulations and official guidance

Learning outcome
The learner will: 6. complete the work within the allocated time when applying preservation treatment.
Assessment criteria
The learner can: 6.3 demonstrate completion of the work within the allocated time 6.4 demonstrate the following work skills when preparing structures for treatment: a. types of progress charts, timetables and estimated times b. organisational procedures for reporting circumstances which will affect the work programme

Learning outcome
The learner will: 7. comply with the given contract information to apply preservation treatment to the required specification.
Assessment criteria
The learner can: 7.1 demonstrate the following work skills when preparing structures for treatment: a. measuring, mixing, brushing, drilling, spraying and injecting 7.2 use and maintain hand tools, portable power tools, treatment equipment and ancillary equipment 7.3 apply remedial in-situ treatments to given working instructions for either wood preservation and/or damp-proofing 7.4 describe how to apply safe, healthy and environmental work practices, follow procedures, report problems and establish the authority needed to rectify them, to: a. understand the implications of existing guarantees and warranties b. apply wood preservation and/or damp-proofing treatments above or below (wood preservation only) ground level to structures and components by brush, spray, irrigation, injection and electro-osmosis c. prepare two-part treatment mixes d. identify and complete drilling patterns e. measure areas for treatment and volumes of treatment mixes, biocides and additives f. apply cementitious and liquid membranes and fix physical membranes g. recognise when specialist skills and knowledge are required and report accordingly h. recognise specific requirements for structures of special interest, traditional construction (pre 1919) and historical significance i. use hand tools, portable tools and equipment j. work at height k. use access equipment and work platforms

7.5	describe the needs of other occupations and how to effectively communicate within a team when applying preservation treatments
7.6	describe how to maintain the tools and equipment used when applying preservation treatment

Unit 246 Applying preservation treatment in the workplace

Supporting information

Guidance

This unit must be assessed in a work environment and in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

One of the following endorsements required:

- wood preservation
- damp-proofing.

Unit 247 Reinstating the structure after building treatments in the workplace

Level	2
GLH	67
TQT	170
Unit aim	The aim of this unit is to provide you with an awareness of: • interpreting information • adopting safe and healthy working practices • selecting materials, components and equipment • reinstating the structure after building treatments in the workplace.

Learning outcome
The learner will: 1. interpret the given information relating to the work and resources when reinstating the structure after building treatments.
Assessment criteria
The learner can: 1.1 interpret and extract relevant information from drawings, specifications, schedules, method statements, risk assessments, manufacturers' information and data sheets 1.2 comply with information and/or instructions derived from risk assessments and method statements 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 describe different types of information, their source and how they are interpreted in relation to: a. drawings, specifications, schedules, method statements, risk assessments, manufactures' information and data sheets, and current regulations governing buildings

Learning outcome
The learner will: 2. know how to comply with relevant legislation and official guidance when reinstating the structure after building treatments
Assessment criteria
The learner can: 2.1 describe their responsibilities regarding potential accidents, health hazards and the environment whilst working: a. in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, vehicles, company and operative/technician 2.3 explain what the accident reporting procedures are and who is responsible for making reports

Learning outcome
The learner will: 3. maintain safe and healthy working practices when reinstating the structure after building treatments.
Assessment criteria
The learner can: 3.1 use health and safety control equipment safely and comply with the methods of work to carry out the activity in accordance with current legislation and organisational requirements when reinstating the structure after building treatments 3.2 demonstrate compliance with given information and relevant legislation when reinstating the structure after building treatments in relation to the following: a. safe use of access equipment and work platforms b. safe use, storage and handling of materials, tools and equipment c. specific risks to health 3.3 explain why and when health and safety control equipment, identified by the principles of prevention should be used, relating to reinstating the structure after building treatments, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to: a. collective protective measures b. Personal Protective Equipment (PPE) c. Respiratory Protective Equipment (RPE) d. Local Exhaust Ventilation (LEV) 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given working instructions 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when

involved with fires, spillages, injuries and other task-related activities

Learning outcome
The learner will: 4. select the required quantity and quality of resources for the methods of work to reinstate the structure after building treatments.
Assessment criteria
The learner can: 4.1 select resources associated with own work in relation to materials, components, fixings, tools and equipment 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to: a. removed components, sand, cement, lime, bricks, masonry, stone, plasters, plasterboards, damp-proof course (DPC), insulation, timber, wall ties, dyes, fixings, fittings b. hand tools, power tools and equipment 4.3 describe how the resources should be used correctly and how problems associated with the resources are reported 4.4 explain why the organisational procedures have been developed and how they are used for the selection of required resources. 4.5 describe any potential hazards associated with the resources and methods of work 4.6 describe how to calculate quantity, length, area and wastage associated with the method/procedure to reinstate the structure after building treatments

Learning outcome
The learner will: 5. minimise the risk of damage to the work and surrounding area when reinstating the structure after building treatments.
Assessment criteria
The learner can: 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures 5.2 minimise damage and maintain a clean work space 5.3 dispose of waste in accordance with current legislation 5.4 describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 5.5 explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information and data sheets, statutory regulations and official guidance

Learning outcome
The learner will: 6. complete the work within the allocated time when reinstating the structure after building treatments.
Assessment criteria
The learner can: 6.1 demonstrate completion of the work within the allocated time 6.2 demonstrate the following work skills when preparing structures for treatment: a. types of progress charts, timetables and estimated times b. organisational procedures for reporting circumstances which will affect the work programme

Learning outcome
The learner will: 7. comply with the given contract information to reinstate the structure after building treatments to the required specification.
Assessment criteria
The learner can: 7.1 demonstrate the following work skills when preparing structures for treatment: a. measuring, marking out, fitting, applying, cleaning, positioning and securing 7.2 use and maintain hand tools, portable power tools and ancillary equipment 7.3 reinstate the structure after wood preservation and/or damp-proofing treatments and/or wall tie replacement to given working instructions, relating to two of the following: a. air bricks b. masonry c. plasterwork and/or renders d. structural timbers (wall plates, joists, flooring/decking) wood preservation and/or damp-proofing only e. non-structural components (doors, windows, skirting, architraves and services that have been temporarily moved for treatment purposes) f. damp-proof courses g. insulation 7.4 arrange re-commission of services (electric, gas, water, media cables) to given working instructions 7.5 describe how to apply safe, healthy and environmental work practices, follow procedures, report problems and establish the authority needed to rectify them, to: a. reinstate structures after treatments above or (wood preservation only) below ground b. understand the implications of existing guarantees and warranties c. reinstate air bricks and ventilation d. reinstate masonry e. rebuild (sleeper walls, piers, walls) f. apply plasterwork where removed

g. install structural timbers (wall plates, joists, flooring/decking)
h. replace doors, windows, skirting, architraves
i. replace services, to the point of connection, that were temporarily removed for treatment purposes
j. arrange the re-commission of services (electric, gas, water, media cables)
k. insert damp-proof courses
l. replace insulation
m. mix lime and cement mortars and concrete
n. clean cavities
o. complete post installation checks: compliance with specifications, water penetration, anchorage/fixing, vents, services (gas, electric, water, media cables)
p. recognise when specialist skills and knowledge are required and report accordingly
q. recognise specific requirements for structures of special interest, traditional construction (pre 1919) and historical significance
r. use hand tools, portable power tools and equipment
s. work at height
t. use access equipment and work platforms

7.6 describe the needs of other occupations and how to effectively communicate within a team when reinstating the structure after building treatments

7.7 describe how to maintain the tools and equipment used when reinstating the structure after building treatments

Unit 247 Reinstating the structure after building treatments in the workplace

Supporting information

Guidance

This unit must be assessed in a work environment and in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Unit 248 Installing wall ties in existing structures in the workplace

Level	2
GLH	67
TQT	170
Unit aim	The aim of this unit is to provide you with an awareness of: • interpreting information • adopting safe and healthy working practices • selecting materials, components and equipment • installing wall ties in existing structures.

Learning outcome
The learner will: 1. interpret the given information relating to the work and resources when installing wall ties in existing structures.
Assessment criteria
The learner can: 1.1 interpret and extract relevant information from drawings, specifications, schedules, method statements, risk assessments, manufacturers' information and data sheets 1.2 comply with information and/or instructions derived from risk assessments and method statements 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 describe different types of information, their source and how they are interpreted in relation to: a. drawings, specifications, schedules, method statements, risk assessments, manufactures' information and data sheets, and current regulations governing buildings.

Learning outcome
The learner will: 2. know how to comply with relevant legislation and official guidance when installing wall ties in existing structures

Assessment criteria
The learner can: 2.1 describe their responsibilities regarding potential accidents, health hazards and the environment whilst working: a. in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, vehicles, company and operative/technician 2.3 explain what the accident reporting procedures are and who is responsible for making reports

Learning outcome
The learner will: 3. maintain safe and healthy working practices when installing wall ties in existing structures.
Assessment criteria
The learner can: 3.1 use health and safety control equipment and comply with the methods of work to carry out the activity in accordance with current legislation and organisational requirements when installing wall ties in existing structures 3.2 demonstrate compliance with given information and relevant legislation when installing wall ties in existing structures in relation to the following: a. safe use of access equipment and work platforms b. safe use, storage and handling of materials, tools and equipment c. specific risks to health 3.3 explain why and when health and safety control equipment, identified by the principles of prevention, should be used, relating to installing wall ties in existing structures, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to: a. collective protective measures b. Personal Protective Equipment (PPE) c. Respiratory Protective Equipment (RPE) d. Local Exhaust Ventilation (LEV) 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given working instructions 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related activities

Learning outcome
The learner will: 4. select the required quantity and quality of resources for the methods of work to install wall ties in existing structures.
Assessment criteria
The learner can: 4.1 select resources associated with own work in relation to materials, components, fixings, tools and equipment 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to: a. ties, fixings, fittings, resins and grouts b. hand tools, power tools and equipment 4.3 describe how the resources should be used correctly and how problems associated with the resources are reported 4.4 explain why the organisational procedures have been developed and how they are used for the selection of required resources 4.5 describe any potential hazards associated with the resources and methods of work 4.6 describe how to calculate quantity, length, area and wastage associated with the method/procedure to install wall ties in existing structures

Learning outcome
The learner will: 5. minimise the risk of damage to the work and surrounding area when installing wall ties in existing structures.
Assessment criteria
The learner can: 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures 5.2 minimise damage and maintain a clean workspace 5.3 dispose of waste in accordance with current legislation 5.4 describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 5.5 explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information and data sheets, statutory regulations and official guidance

Learning outcome
The learner will: 6. complete the work within the allocated time when installing wall ties in existing structures.
Assessment criteria

The learner can:

6.1 demonstrate completion of the work within the allocated time

6.2 demonstrate the following work skills when preparing structures for treatment:

a. types of progress charts, timetables and estimated times
b. organisational procedures for reporting circumstances which will affect the work programme

Learning outcome

The learner will:

7. comply with the given contract information to install wall ties in existing structures to the required specification.

Assessment criteria

The learner can:

7.1 demonstrate the following work skills when installing wall ties in existing structures:

a. measuring, marking out, fitting, finishing, positioning and securing

7.2 use and maintain hand tools, portable power tools and ancillary equipment

7.3 install and test new wall ties/fixings into existing structures to given working instructions, relating to two of the following systems:

a. driven
b. grouted
c. resin
d. mechanical

7.4 describe how to apply safe, healthy and environmental work practices, follow procedures, report problems and establish the authority needed to rectify them, to:

a. carry out pre and post installation checks
b. install driven, grouted, resin and mechanical wall tie/fixing systems into existing stone, concrete, masonry, brick, block, timber and manufactured unit structures
c. understand the implications of existing guarantees and warranties
d. understand the implications of existing cavity wall insulation
e. test pull wall ties
f. remove existing defective wall ties
g. isolate existing defective wall ties
h. recognise when specialist skills and knowledge are required and report accordingly
i. recognise specific requirements for structures of special interest, traditional construction (pre 1919) and historical significance
j. use hand tools, portable power tools and equipment
k. work at height
l. use access equipment and work platforms

7.5	describe the needs of other occupations and how to effectively communicate within a team when installing wall ties in existing structures
7.6	describe how to maintain the tools and equipment used when installing wall ties in existing structures

Unit 248 Installing wall ties in existing structures in the workplace

Supporting information

Guidance

This unit must be assessed in a work environment and in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Two of the following endorsements required:

- driven systems
- grouted systems
- resin systems
- mechanical systems.

Unit 265 Erecting and dismantling access/working platforms in the workplace

Level	2
GLH	37
TQT	80
Unit aim	The aim of this unit is to provide you with an awareness of: • interpreting information • adopting safe and healthy working practices • selecting materials, components and equipment • erecting and dismantling access/working platforms.

Learning outcome
The learner will: 1. interpret the given information relating to the work and resources when erecting and dismantling access/working platforms.
Assessment criteria
The learner can: 1.1 interpret and extract information from specifications, method statements, risk assessments and manufacturers' information 1.2 comply with information and/or instructions derived from risk assessments and method statement 1.3 state the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 describe different types of information, their source and how they are interpreted in relation to: a. specifications, current legislation, method statements, risk assessments and manufacturers' information

Learning outcome
The learner will: 2. know how to comply with relevant legislation and official guidance when erecting and dismantling access/working platforms.
Assessment criteria
The learner can: 2.1 describe their responsibilities under current legislation and official guidance whilst working: a. in the workplace, at height, in confined areas, with tools and equipment, with movement/storage of materials and by manual handling 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 2.3 state what the accident reporting procedures are and who is responsible for making reports

Learning outcome
The learner will: 3. maintain safe working practices when erecting and dismantling access/working platforms.
Assessment criteria
The learner can: 3.1 use personal protective equipment (PPE) and access equipment safely to carry out the activity in accordance with legislation and organisational requirements when erecting and dismantling access/working platforms 3.2 explain why, when and how personal protective equipment (PPE) should be used, relating to erecting and dismantling access/working platforms, and the types, purpose and limitations of each type 3.3 state how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards

Learning outcome
The learner will: 4. select the required quantity and quality of resources for the methods of work to erect and dismantle access/working platforms.
Assessment criteria
The learner can: 4.1 describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to: a. ladders/crawler boards b. stepladders/platform steps c. trestles d. proprietary staging/podiums e. proprietary towers f. mobile scaffold towers g. protection equipment and notices h. tools and ancillary equipment 4.2 select resources associated with own work in relation to materials, components, tools and equipment 4.3 state how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 4.4 outline potential hazards associated with the resources and method of work 4.5 describe how to calculate quantity of equipment required associated with the method/procedure to erect and dismantle access equipment/working platforms

Learning outcome
The learner will: 5. minimise the risk of damage to the work and surrounding area when erecting and dismantling access/working platforms.
Assessment criteria
The learner can: 5.1 protect the work and its surrounding area from damage 5.2 minimise damage and maintain a clean workspace 5.3 describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 5.4 dispose of waste in accordance with legislation 5.5 state why the disposal of waste should be carried out in relation to the work

Learning outcome
The learner will: 6. complete the work within the allocated time when erecting and dismantling access/working platforms.
Assessment criteria
The learner can: 6.1 demonstrate completion of the work within the allocated time 6.2 state the purpose of the work programme and explain why deadlines should be kept in relation to: a. organisational procedures for reporting circumstances which will affect the work programme

Learning outcome
The learner will: 7. comply with the given contract information to erect and dismantle access/ working platforms to the required specification.
Assessment criteria
The learner can: 7.1 demonstrate the following work skills when erecting and dismantling access/working platforms: a. moving, positioning/erecting, securing, checking, dismantling and removing 7.2 erect, dismantle and store two of the following access equipment to given access regulations: a. ladders/crawler boards b. stepladders/platform steps c. proprietary towers d. trestle platforms e. mobile scaffold towers f. proprietary staging/podiums 7.3 describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to: a. provide protection to the work area b. establish a base for equipment c. erect proprietary access equipment to manufacturer's instructions suitable for the work d. erect non-proprietary access equipment suitable for the work e. place protective screens and notices f. check/monitor equipment during the period of use g. dismantle and store access equipment h. use tools and equipment i. work at height 7.4 safely use and store materials, hand tools and ancillary equipment

7.5 state the needs of other occupations and how to communicate within a team when erecting and dismantling access/working platforms
7.6 describe how to maintain the tools and equipment used when erecting and dismantling access/working platforms

Unit 265 Erecting and dismantling access/working platforms in the workplace

Supporting information

Guidance

This unit must be assessed in a work environment and in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

The following endorsement required (i.e. own area of work): Insulation and building treatments

Plus two or more of the following endorsements required:

- ladders/crawler boards
- step ladders/platform steps
- proprietary towers
- trestle platforms
- mobile scaffold towers
- proprietary staging/podiums.

Unit 266 Develop customer relationships

Level	2
GLH	50
TQT	60
Unit aim	The aim of this unit is to provide you with an awareness of: • building customer confidence • meeting customer expectations • developing long-term customer relationships

Learning outcome
The learner will: 1. build their customer's confidence that the service they give will be excellent.
Assessment criteria
The learner can: 1.1 show that they behave assertively and professionally with customers 1.2 allocate the time they take to deal with their customer following organisational guidelines 1.3 reassure their customer that they are doing everything possible to keep the service promises made by the organisation

Learning outcome
The learner will: 2. meet the expectations of their customers.
Assessment criteria
The learner can: 2.1 recognise when there may be a conflict between their customer's expectations and your organisation's service offer 2.2 balance their customer's expectations with their organisation's service offer by offering an alternative or explaining the limits of the service offer 2.3 work effectively with others to resolve any difficulties in meeting their customer's expectations

Learning outcome

The learner will: 3. develop the long-term relationship between their customer and their organisation.
Assessment criteria
The learner can: 3.1 give additional help and information to their customer in response to customer questions and comments about their organisation's services or products 3.2 discuss expectations with their customer and explain how these compare with their organisation's services or products 3.3 advise others of feedback received from their customer 3.4 identify new ways of helping customers based on the feedback customers have given them 3.5 identify added value that their organisation could offer to long-term customers

Learning outcome
The learner will: 4. know how to develop customer relationships.
Assessment criteria
The learner can: 4.1 describe their organisation's services or products 4.2 explain the importance of customer retention 4.3 explain how their own behaviour affects the behaviour of the customer 4.4 describe how to behave assertively and professionally with customers 4.5 describe how to defuse potentially stressful situations 4.6 identify the limitations of their organisation's service offer 4.7 compare how customer expectations may change as the customer deals with their organisation 4.8 identify the cost and resource implications of an extension of the service offer to meet or exceed customer expectations 4.9 explain the cost implications of bringing in new customers as opposed to retaining existing customers 4.10 identify who to refer to when considering any variation to their organisation's service offer

Unit 266 Develop customer relationships

Supporting information

Guidance

The assessment and quality assurance requirement for this unit provides evidence towards A and V units.

This unit must be assessed in a work environment and in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Unit 618 Moving, handling and storing resources in the workplace

Level	2
GLH	27
TQT	50
Unit aim	The aim of this unit is to provide you with an awareness of: • interpreting information • adopting safe and healthy working practices • selecting aids or equipment to move, handle or store occupational resources • moving, handling and storing occupational resources to maintain useful condition

Learning outcome
The learner will: 1. comply with given information when moving, handling and/or storing resources.
Assessment criteria
The learner can: 1.1 interpret the given information relating to moving, handling and/or storing resources, relevant to the given occupation 1.2 interpret the given information relating to the use and storage of lifting aids and equipment 1.3 describe the different types of technical, product and regulatory information, their source and how they are interpreted 1.4 state the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.5 describe how to obtain information relating to using and storing lifting aids and equipment

Learning outcome
The learner will: 2. know how to comply with relevant legislation and official guidance when moving, handling and/or storing resources.
Assessment criteria
The learner can: 2.1 describe their responsibilities under current legislation and official guidance whilst working: a. in the workplace

b. in confined spaces
c. below ground level
d. at height
e. with tools and equipment
f. with materials and substances
g. with movement/storage of materials
h. by manual handling and mechanical

2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative

2.3 explain what the accident reporting procedures are and who is responsible for making the reports

2.4 state the appropriate types of fire extinguishers relevant to the work

2.5 describe how and when the different types of fire extinguishers, relevant to the given occupation, are used in accordance with legislation and official guidance

Learning outcome
The learner will: 3. maintain safe working practices when moving, handling and/or storing resources.
Assessment criteria
The learner can: 3.1 use health and safety control equipment safely to carry out the activity in accordance with legislation and organisational requirements when moving, handling and/or storing resources 3.2 use lifting aids safely as appropriate to the work 3.3 protect the environment in accordance with safe working practices as appropriate to the work 3.4 explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to moving, handling and/or storing resources, and the types, purpose and limitations of each type, the work situation, occupational use and the general work environment, in relation to: a. collective protective measures b. Personal Protective Equipment (PPE) c. Respiratory Protective Equipment (RPE) d. Local Exhaust Ventilation (LEV) 3.5 describe how the health and safety control equipment relevant to the work should be used in accordance with the given instructions 3.6 state how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards

Learning outcome
The learner will: 4. select the required quantity and quality of resources for the methods of work to move, handle and/or store occupational resources.
Assessment criteria
The learner can: 4.1 select the relevant resources to be moved, handled and/or stored, associated with own work 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the occupational resources in relation to: a. lifting and handling aids b. container(s) c. fixing, holding and securing systems 4.3 describe how the resources should be handled and how any problems associated with the resources are reported 4.4 explain why the organisational procedures have been developed and how they are used for the selection of required resources 4.5 describe any potential hazards associated with the resources and methods of work

Learning outcome
The learner will: 5. prevent the risk of damage to occupational resources and surrounding environment when moving, handling and/or storing resources.
Assessment criteria
The learner can: 5.1 protect occupational resources and their surrounding area from damage in accordance with safe working practices and organisational procedures 5.2 dispose of waste and packaging in accordance with legislation 5.3 maintain a clean workspace when moving, handling or storing resources 5.4 describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 5.5 explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance

Learning outcome
The learner will: 6. complete the work within the allocated time when moving, handling and/or storing resources.
Assessment criteria
The learner can: 6.1 demonstrate completion of the work within the allocated time 6.2 state the purpose of the work programme and explain why deadlines should be kept in relation to: a. progress charts, timetables and estimated times b. organisational procedures for reporting circumstances which will affect the work programme

Learning outcome
The learner will: 7. comply with the given occupational resource information to move, handle and/or store resources to the required guidance.
Assessment criteria
The learner can: 7.1 demonstrate the following work skills when moving, handling and/or storing occupational resources: a. moving, positioning, storing, securing and/or using lifting aids and kinetic lifting techniques 7.2 move, handle and/or store occupational resources to meet product information and organisational requirements relating to three of the following: a. sheet material b. loose material c. bagged or wrapped material d. fragile material e. tools and equipment f. components g. liquids 7.3 describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them when moving, handling and/or storing occupational resources 7.4 describe the needs of other occupations when moving, handling and/or storing resources

Unit 618 Moving, handling and storing resources in the workplace

Supporting information

Guidance

This unit must be assessed in a work environment and in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Appendix 1 Relationships to other qualifications

Literacy, language, numeracy and ICT skills development

These qualifications can develop skills that can be used in the following qualifications:

- Functional Skills (England) – see **www.cityandguilds.com/functionalskills**
- Essential Skills (Northern Ireland) – see **www.cityandguilds.com/essentialskillsni**
- Essential Skills Wales – see **www.cityandguilds.com/esw**

Appendix 2 Change detail

Date and version No.	Change detail	Section
July 2021 V1.0	Following incremental review, the content from 5931 has been updated. Incremental review changes are: -TQT and GLH updated -New units -Some changes to unit content (see below summary) Unit number changes are: 101 changed to 102 201 changed to 236 202 changed to 618 210 changed to 265 217 changed to 237 218 changed to 238 224 changed to 243 225 changed to 245 226 changed to 246 227 changed to 247 228 changed to 248 New units are 241, 242, 244, 266 **Summary of changes to content** Amendments to units 237, 243, 238 Core unit content remains unchanged for units 102, 236, 265 and 618.	All

Appendix 3 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 **Centres and Training Providers homepage** on **www.cityandguilds.com**.

Centre Manual - Supporting Customer Excellence contains detailed information about the processes which must be followed and requirements which must be met for a centre to achieve 'approved centre' status, or to offer a particular qualification, as well as updates and good practice exemplars for City & Guilds assessment and policy issues. Specifically, the document includes sections on:

- The centre and qualification approval process
- Assessment, internal quality assurance and examination roles at the centre
- Registration and certification of candidates
- Non-compliance
- Complaints and appeals
- Equal opportunities
- Data protection
- Management systems
- Maintaining records
- Assessment
- Internal quality assurance
- External quality assurance

Access to Assessment & Qualifications 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 homepage** section of the City & Guilds website also contains useful information such on such things as:

- Walled Garden: how to register and certificate candidates on line
- Events: dates and information on the latest Centre events
- Online assessment: how to register for e-assessments.

Centre Guide – Delivering International Qualifications contains detailed information about the processes which must be followed and requirements which must be met for a centre to achieve 'approved centre' status, or to offer a particular qualification. Specifically, the document includes sections on:

- The centre and qualification approval process and forms
- Assessment, verification and examination roles at the centre

- Registration and certification of candidates
- Non-compliance
- Complaints and appeals
- Equal opportunities
- Data protection
- Frequently asked questions

Useful contacts

UK learners **General qualification information**	**T: +44 (0)844 543 0033** **E: learnersupport@cityandguilds.com**
International learners General qualification information	T: +44 (0)844 543 0033 F: +44 (0)20 7294 2413 E: **intcg@cityandguilds.com**
Centres Exam entries, Certificates, Registrations/enrolment, Invoices, Missing or late exam materials, Nominal roll reports, Results	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 E: **centresupport@cityandguilds.com**
Single subject qualifications Exam entries, Results, Certification, Missing or late exam materials, Incorrect exam papers, Forms request (BB, results entry), Exam date and time change	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 F: +44 (0)20 7294 2404 (BB forms) E: **singlesubjects@cityandguilds.com**
International awards Results, Entries, Enrolments, Invoices, Missing or late exam materials, Nominal roll reports	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 E: **intops@cityandguilds.com**
Walled Garden Re-issue of password or username, Technical problems, Entries, Results, e-assessment, Navigation, User/menu option, Problems	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 E: **walledgarden@cityandguilds.com**
Employer Employer solutions, Mapping, Accreditation, Development Skills, Consultancy	T: +44 (0)121 503 8993 E: **business@cityandguilds.com**
Publications Logbooks, Centre documents, Forms, Free literature	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413

If you have a complaint, or any suggestions for improvement about any of the services that we provide, email: feedbackandcomplaints@cityandguilds.com

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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 operates from three major hubs: London (servicing Europe, the Caribbean and Americas), Johannesburg (servicing Africa), and Singapore (servicing Asia, Australia and New Zealand). The Group also includes the Institute of Leadership & Management (management and leadership qualifications), City & Guilds Land Based Services (land-based qualifications), the Centre for Skills Development (CSD works to improve the policy and practice of vocational education and training worldwide) and Learning Assistant (an online e-portfolio).

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