QUALIFICATION HANDBOOK

Level 2 NVQ Certificate/Diploma in Insulation and Building Treatments (Construction) (5931)

October 2018 Version 5.2

City & Guilds

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
Registration and certification	Consult the Walled Garden/Online Catalogue for last dates

	GLH	**TQT**		
City & Guilds Level 2 NVQ Certificate in Insulation and Building Treatments (Construction) (External Wall Insulation – Boarder)	137	290	5931 -12	603/3228/1
City & Guilds Level 2 NVQ Certificate in Insulation and Building Treatments (Construction) (Cavity Wall Insulation)	134	280	5931 -13	603/3228/1
City & Guilds Level 2 NVQ Certificate in Insulation and Building Treatments (Construction) (Cold Roof Insulation)	114	220	5931 -14	603/3228/1
City & Guilds Level 2 NVQ Certificate in Insulation and Building Treatments (Construction) (Draught-proofing)	137	290	5931 -15	603/3228/1
City & Guilds Level 2 NVQ Certificate in Insulation and Building Treatments (Construction) (Internal Insulation)	137	290	5931 -16	603/3228/1
City & Guilds Level 2 NVQ Certificate in Insulation and Building Treatments (Construction) (Insulate Framed Sections of Buildings)	137	290	5931 -17	603/3228/1
City & Guilds Level 2 NVQ Certificate in Insulation and Building Treatments	134	280	5931 -18	603/3228/1

(Construction) (External Wall Insulation – Finisher)				

City & Guilds Level 2 NVQ Certificate in Insulation and Building Treatments (Construction) (Warm Roof Insulation)	141	300	5931 -19	603/3228/1
City & Guilds Level 2 NVQ Certificate in Insulation and Building Treatments (Construction) (Floor Insulation)	134	280	5931 -20	603/3228/1
City & Guilds Level 2 NVQ Diploma in Insulation and Building Treatments (Construction) (Wood Preserving and Damp-proofing)	197	560	5931 -21	603/3227/X
City & Guilds Level 2 NVQ Diploma in Insulation and Building Treatments (Construction) (Wall Tie Replacement)	251	570	5931 -22	603/3227/X
City & Guilds Level 2 NVQ Diploma in Insulation and Building Treatments (Construction) (External Wall Insulation – Boarder/Finisher)	214	490	5931 -23	603/3227/X
City & Guilds Level 2 NVQ Diploma in Insulation and Building Treatments (Construction) (Cold/Warm Roof Insulation)	204	460	5931 -24	603/3227/X

Date and version No.	Change detail	Section
May 2012 V2.0	Amendment of 5931-07 ROC.	Structure
	Amendments to qualification titles.	Qualifications at a glance Structure
Jan 2013 V3.0	Addition of 5931-08,09,10 structures	Structure
	Amendments to qualification titles.	Qualifications at a glance Structure
March 2014 V4	Unit 208 Credits and GLH amended	Units
May 2015 V4.1	Assessment criteria amended for unit 201, 4.5; unit 202, 1.4; unit 207, 4.6; unit 212, 7.6.	Units
September 2017 V4.2	Added GLH and TQT details Deleted QCF	Structure Centre requirements
March 2018 V5.0	Amendments made to support changes to NVQ affecting all units..	All Sections
September 2018 V5.1	Added City & Guilds to all qualifications	All Sections
October 2018 V5.2	Amended GLH for 5931-21	Qualification at a Glance

Contents

1 Introduction

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

Area	Description
Who are these qualifications for?	These qualifications are ideal for those working in the construction industry and specialising in insulation and building treatments.
What does the qualification cover?	They cover a number of specialist areas including: • cavity wall insulation • external wall insulation • loft insulation • draught-proofing • internal insulation • insulating framed sections of buildings • wood preservation and damp-proofing • wall tie replacement 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?	These qualifications form the competence based element of the Intermediate Apprenticeship in Construction Specialist (Level 2), pathway 12: Insulation and Building Treatments (for England)
What opportunities for progression are there?	These qualifications will allow learners to progress into employment or onto an Advanced Apprenticeship in the Construction Sector (England only).

Structure

These qualification structures reflect CITB NVQ structures 2015 V4.

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

- City & Guilds Level 2 NVQ Certificate in Insulation and Building Treatments (Construction) (External Wall Insulation – Boarder) - TQT value of 300
- City & Guilds Level 2 NVQ Certificate in Insulation and Building Treatments (Construction) (Cavity Wall Insulation) - TQT value of 290
- City & Guilds Level 2 NVQ Certificate in Insulation and Building Treatments (Construction) (Cold Roof Insulation) - TQT value of 280
- City & Guilds Level 2 NVQ Certificate in Insulation and Building Treatments (Construction) (Draughtproofing) - TQT value of 220
- City & Guilds Level 2 NVQ Certificate in Insulation and Building Treatments (Construction) (Internal Insulation) – TQT value of 290
- City & Guilds Level 2 NVQ Certificate in Insulation and Building Treatments (Construction) (Insulate Framed Sections of Buildings) - TQT value of 290
- City & Guilds Level 2 NVQ Certificate in Insulation and Building Treatments (Construction) (External Wall Insulation – Finisher) - TQT value of 290
- City & Guilds Level 2 NVQ Certificate in Insulation and Building Treatments (Construction) (Warm Roof Insulation) - TQT value of 280
- City & Guilds Level 2 NVQ Certificate in Insulation and Building Treatments (Construction) (Floor Insulation) – TQT value of 280

The **City & Guilds NVQ Diploma in Insulation and Building Treatments (Construction)** has four pathways:

- City & Guilds Level 2 NVQ Diploma in Insulation and Building Treatments (Construction) (Wood Preserving and Damp-proofing) - TQT value of 560
- City & Guilds Level 2 NVQ Diploma in Insulation and Building Treatments (Construction) (Wall Tie Replacement) - TQT value of 570
- City & Guilds Level 2 NVQ Diploma in Insulation and Building Treatments (Construction) (External Wall Insulation – Boarder/Finisher) - TQT value of 490
- City & Guilds Level 2 NVQ Diploma in Insulation and Building Treatments (Construction) (Cold/Warm Roof insulation) – TQT value of 460

To achieve the **City & Guilds Level 2 NVQ Certificate in Insulation and Building Treatments (Construction) (External Wall Insulation – Boarder) (5931-12)** learners must achieve all the mandatory units listed below.

Learners can also undertake the elective Unit 210 & 215, however completion of these units will not contribute to the overall achievement of this qualification.

City & Guilds unit number	Unit title	Unit Level
Mandatory Unit		
101	Conforming to general health, safety and welfare in the workplace	1
201	Conforming to productive working practices in the workplace	2
202	Moving, handling and storing resources in the workplace	2
216	Installing external wall insulation in the workplace	2
Elective Unit		
210	Erecting and dismantling access/working platforms in the workplace	2
215	Applying finishing plaster to prepared surfaces in the workplace	2

To achieve the **City & Guilds Level 2 NVQ Certificate in Insulation and Building Treatments (Construction) (Cavity Wall Insulation) (5931-13)** learners must achieve all the mandatory units listed below.

Learners can also undertake the elective Unit 210 & 215, however completion of these units will not contribute to the overall achievement of this qualification.

City & Guilds unit number	Unit title	Unit Level
Mandatory		
101	Conforming to general health, safety and welfare in the workplace	1
201	Conforming to productive working practices in the workplace	2
202	Moving, handling and storing resources in the workplace	2
217	Installing cavity wall insulation in the workplace	2
Elective Unit		
210	Erecting and dismantling access/working platforms in the workplace	2
215	Applying finishing plaster to prepared surfaces in the workplace	2

To achieve the **City & Guilds Level 2 NVQ Certificate in Insulation and Building Treatments (Construction) (Cold Roof Insulation) (5931-14)** learners must achieve all the mandatory units listed below.

Learners can also undertake the elective Unit 210 & 215, however completion of these units will not contribute to the overall achievement of this qualification.

City & Guilds unit number	Unit title	Unit Level
Mandatory		
101	Conforming to general health, safety and welfare in the workplace	1
201	Conforming to productive working practices in the workplace	2
202	Moving, handling and storing resources in the workplace	2
218	Installing insulation to cold roofs in the workplace	2
Elective Unit		
210	Erecting and dismantling access/working platforms in the workplace	2
215	Applying finishing plaster to prepared surfaces in the workplace	2

To achieve the **City & Guilds Level 2 NVQ Certificate in Insulation and Building Treatments (Construction) (Draughtproofing) (5931-15)** learners must achieve all the mandatory units listed below.

Learners can also undertake the elective Unit 210 & 215, however the credits from this unit will not contribute to the overall achievement of this qualification.

City & Guilds unit number	Unit title	Unit Level
Mandatory		
101	Conforming to general health, safety and welfare in the workplace	1
201	Conforming to productive working practices in the workplace	2
202	Moving, handling and storing resources in the workplace	2
219	Installing draught-proofing to openings in the workplace	2
Elective Unit		
210	Erecting and dismantling access/working platforms in the workplace	2
215	Applying finishing plaster to prepared surfaces in the workplace	2

To achieve the **City & Guilds Level 2 NVQ Certificate in Insulation and Building Treatments (Construction) (Internal Insulation) (5931-16)** learners must achieve all the mandatory units listed below.

Learners can also undertake the elective Unit 210 & 215, however completion of these units will not contribute to the overall achievement of this qualification.

City & Guilds unit number	Unit title	Unit Level
Mandatory		
101	Conforming to general health, safety and welfare in the workplace	1
201	Conforming to productive working practices in the workplace	2
202	Moving, handling and storing resources in the workplace	2
220	Installing internal insulation to walls in the workplace	2
Elective Unit		
210	Erecting and dismantling access/working platforms in the workplace	2
215	Applying finishing plaster to prepared surfaces in the workplace	2

To achieve the **City & Guilds Level 2 NVQ Certificate in Insulation and Building Treatments (Construction) (Insulate Framed Sections of Buildings) (5931-17)** learners must achieve all the mandatory units listed below.

Learners can also undertake the elective Unit 210 & 215, however completion of these units will not contribute to the overall achievement of this qualification.

City & Guilds unit number	Unit title	Unit Level
Mandatory		
101	Conforming to general health, safety and welfare in the workplace	1
201	Conforming to productive working practices in the workplace	2
202	Moving, handling and storing resources in the workplace	2
221	Installing insulation to framed sections of buildings in the workplace	2
Elective Unit		
210	Erecting and dismantling access/working platforms in the workplace	2
215	Applying finishing plaster to prepared surfaces in the workplace	2

To achieve the **City & Guilds Level 2 NVQ Certificate in Insulation and Building Treatments (Construction) (External Wall Insulation – Finisher) (5931-18)** learners must achieve all the mandatory units listed below.

Learners can also undertake the elective Unit 210 & 215, however completion of these units will not contribute to the overall achievement of this qualification.

City & Guilds unit number	Unit title	Unit Level
Mandatory		
101	Conforming to general health, safety and welfare in the workplace	1
201	Conforming to productive working practices in the workplace	2
202	Moving, handling and storing resources in the workplace	2
222	Applying surface finishes to external wall insulation in the workplace	2
Elective Unit		
210	Erecting and dismantling access/working platforms in the workplace	2
215	Applying finishing plaster to prepared surfaces in the workplace	2

To achieve the **City & Guilds Level 2 NVQ Certificate in Insulation and Building Treatments (Construction) (Warm Roof Insulation) (5931-19)** learners must achieve all the mandatory units listed below.

Learners can also undertake the elective Unit 210 & 215, however completion of these units will not contribute to the overall achievement of this qualification.

City & Guilds unit number	Unit title	Unit Level
Mandatory		
101	Conforming to general health, safety and welfare in the workplace	1
201	Conforming to productive working practices in the workplace	2
202	Moving, handling and storing resources in the workplace	2
223	Installing insulation to warm roofs in the workplace	2
Elective Unit		
210	Erecting and dismantling access/working platforms in the workplace	2
215	Applying finishing plaster to prepared surfaces in the workplace	2

To achieve the **City & Guilds Level 2 NVQ Certificate in Insulation and Building Treatments (Construction) (Floor Insulation) (5931-20)** learners must achieve all the mandatory units listed below.

Learners can also undertake the elective Unit 210 & 215, however completion of these units will not contribute to the overall achievement of this qualification.

City & Guilds unit number	Unit title	Unit Level
Mandatory		
101	Conforming to general health, safety and welfare in the workplace	1
201	Conforming to productive working practices in the workplace	2
202	Moving, handling and storing resources in the workplace	2
224	Installing insulation to floors in the workplace	2
Elective Unit		
210	Erecting and dismantling access/working platforms in the workplace	2
215	Applying finishing plaster to prepared surfaces in the workplace	2

To achieve the **City & Guilds Level 2 NVQ Diploma in Insulation and Building Treatments (Construction) (Wood Preserving and Damp-proofing) (5931-21)** learners must achieve all the mandatory units listed below.

Learners can also undertake the elective Unit 210 & 215. The credits from this unit will not contribute to the overall achievement of this qualification pathway.

City & Guilds unit number	Unit title	Unit Level
Mandatory		
101	Conforming to general health, safety and welfare in the workplace	1
201	Conforming to productive working practices in the workplace	2
202	Moving, handling and storing resources in the workplace	2
225	Preparing structures for treatment in the workplace	2
226	Applying preservation treatment in the workplace	2
227	Reinstating the structure after building treatments in the workplace	2
Elective Unit		
210	Erecting and dismantling access/working platforms in the workplace	2
215	Applying finishing plaster to prepared surfaces in the workplace	2

To achieve the **City & Guilds Level 2 NVQ Diploma in Insulation and Building Treatments (Construction) (Wall Tie Replacement) (5931-22)** learners must achieve all the mandatory units listed below.

Learners can also undertake the elective Unit 210 & 215. The credits from this unit will not contribute to the overall achievement of this qualification pathway.

City & Guilds unit number	Unit title	Unit Level
Mandatory		
101	Conforming to general health, safety and welfare in the workplace	1
201	Conforming to productive working practices in the workplace	2
202	Moving, handling and storing resources in the workplace	2
225	Preparing structures for treatment in the workplace	2
227	Reinstating the structure after building treatments in the workplace	2
228	Installing wall ties in existing structures in the workplace	2
Elective Unit		
210	Erecting and dismantling access/working platforms in the workplace	2
215	Applying finishing plaster to prepared surfaces in the workplace	2

To achieve the **City & Guilds Level 2 NVQ Diploma in Insulation and Building Treatments (Construction) (External Wall Insulation – Boarder/Finisher) (5931-23)** learners must achieve all the mandatory units listed below.

Learners can also undertake the elective Unit 210 & 215. The credits from this unit will not contribute to the overall achievement of this qualification pathway.

City & Guilds unit number	Unit title	Unit Level
Mandatory		
101	Conforming to general health, safety and welfare in the workplace	1
201	Conforming to productive working practices in the workplace	2
202	Moving, handling and storing resources in the workplace	2
216	Installing external wall insulation in the workplace	2
222	Applying surface finishes to external wall insulation in the workplace	2
Elective Unit		
210	Erecting and dismantling access/working platforms in the workplace	2
215	Applying finishing plaster to prepared surfaces in the workplace	2

To achieve the **City & Guilds Level 2 NVQ Diploma in Insulation and Building Treatments (Construction) (Cold/Warm Roof insulation) (5931-24)** learners must achieve all the mandatory units listed below.

Learners can also undertake the elective Unit 210 & 215. The credits from this unit will not contribute to the overall achievement of this qualification pathway.

City & Guilds unit number	Unit title	Unit Level
Mandatory		
101	Conforming to general health, safety and welfare in the workplace	1
201	Conforming to productive working practices in the workplace	2
202	Moving, handling and storing resources in the workplace	2
218	Installing insulation to cold roofs in the workplace	2
223	Installing insulation to warm roofs in the workplace	2
Elective Unit		
210	Erecting and dismantling access/working platforms in the workplace	2
215	Applying finishing plaster to prepared surfaces in the workplace	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, study and assessment.

Title and level	GLH	TQT
City & Guilds Level 2 NVQ Certificate in Insulation and Building Treatments (Construction) (External Wall Insulation – Boarder)	147	290
City & Guilds Level 2 NVQ Certificate in Insulation and Building Treatments (Construction) (Cavity Wall Insulation)	144	280
City & Guilds Level 2 NVQ Certificate in Insulation and Building Treatments (Construction) (Cold Roof Insulation)	124	220
City & Guilds Level 2 NVQ Certificate in Insulation and Building Treatments (Construction) (Draught-proofing)	147	290
City & Guilds Level 2 NVQ Certificate in Insulation and Building Treatments (Construction) (Internal Insulation)	147	290
City & Guilds Level 2 NVQ Certificate in Insulation and Building Treatments (Construction) (Insulate Framed Sections of Buildings)	147	290
City & Guilds Level 2 NVQ Certificate in Insulation and Building Treatments (Construction) (External Wall Insulation – Finisher)	144	280
City & Guilds Level 2 NVQ Certificate in Insulation and Building Treatments (Construction) (Warm Roof Insulation)	151	300
City & Guilds Level 2 NVQ Certificate in Insulation and Building Treatments (Construction) (Floor Insulation)	144	280
City & Guilds Level 2 NVQ Diploma in Insulation and Building Treatments (Construction) (Wood Preserving and Damp-proofing)	197	560
City & Guilds Level 2 NVQ Diploma in Insulation and Building Treatments (Construction) (Wall Tie Replacement)	261	570
City & Guilds Level 2 NVQ Diploma in Insulation and Building Treatments (Construction) (External Wall Insulation – Boarder/Finisher)	224	490

City & Guilds Level 2 NVQ Diploma in Insulation and Building Treatments (Construction) (Cold/Warm Roof Insulation)	214	460

2 Centre requirements

Approval

The approval process for Construction qualifications is available at 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 they have up to date experience, knowledge and understanding of the particular 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
- Unit Accreditation Number (UAN)
- level
- credit value
- recommended Guided Learning Hours (GLH)
- endorsement by a sector or other appropriate body
- learning outcomes which are comprised of a number of assessment criteria.

Unit 101 Conforming to general health, safety and welfare in the workplace

Level:	Level 1
GLH	17
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: • collective protective measures • Personal Protective Equipment (PPE) • Respiratory Protective Equipment (RPE) • 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: • dealing with accidents and emergencies associated with the work and environment • methods of receiving or sourcing information • reporting • stopping work • evacuation • fire risks and safe exit procedures • 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: • recognising when to stop work in the face of serious and imminent danger to self and/or others • contributing to discussions and providing feedback • reporting changed circumstances and incidents in the workplace • 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: • during the working day • on completion of the day's work • for unauthorised personnel (other operatives and the general public) • for theft 5.2 State how security arrangements are implemented in relation to the workplace, the general public, site personnel and resources

Unit 101 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.

Unit 201 Conforming to productive working practices in the workplace

Level:	Level 2
GLH	10
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: • using resources for own and others' work requirements

- allocating appropriate work to employees
- organising the work sequence
- 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: • job cards • worksheets • material/resource lists • 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: • individuals • customer and operative • operative and line management • 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 201 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 202 Moving, handling and storing resources in the workplace

Level:	Level 2
GLH	17
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:

- in the workplace, in confined spaces, below ground level, at height, with tools and equipment, with materials and substances, with movement/storage of materials and 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: • collective protective measures • Personal Protective Equipment (PPE) • Respiratory Protective Equipment (RPE) • 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: • lifting and handling aids • container(s) • 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 work space 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: • progress charts, timetables and estimated times • 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: • 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: • sheet material • loose material • bagged or wrapped material • fragile material • tools and equipment • components • 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 202 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.

Unit 210 Erecting and dismantling access/working platforms in the workplace

Level:	Level 2
GLH:	27
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: • 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: • 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: • ladders/crawler boards • stepladders/platform steps • trestles • proprietary staging/podiums • proprietary towers • mobile scaffold towers • protection equipment and notices • 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 work space. 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: • 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: • moving, positioning/erecting, securing, checking, dismantling and removing. 7.2 Erect, dismantle and store two of the following access equipment to given access regulations: • ladders/crawler boards • stepladders/platform steps • proprietary towers • trestle platforms • mobile scaffold towers • 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: • provide protection to the work area • establish a base for equipment • erect proprietary access equipment to manufacturer's instructions suitable for the work • erect non-proprietary access equipment suitable for the work • place protective screens and notices • check/monitor equipment during the period of use • dismantle and store access equipment • use tools and equipment • 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 210 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 of the following endorsements required:

- Ladders/crawler boards
- Step ladders/platform steps
- Proprietary towers
- Trestle platforms
- Mobile scaffold towers
- Proprietary staging/podiums

Unit 215 Applying finishing plaster to prepared surfaces in the workplace

Level:	2
GLH:	60
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 applying finishing plaster to prepared surfaces

Learning outcome
The learner will: 1. Interpret the given information relating to the work and resources when applying finishing plaster to prepared surfaces
Assessment criteria
The learner can: 1.1 Interpret and extract relevant information from drawings, specifications, schedules, method statements, risk assessments and manufacturers' information. 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: • drawings, specifications, schedules, method statements, risk assessments, manufacturers' information and current regulations governing buildings.

Learning outcome
The learner will: 2. Know how to comply with relevant legislation and official guidance when applying finishing plaster to prepared surfaces.
Assessment criteria
The learner can: 2.1 Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working: • 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 • company • operative. 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 applying finishing plaster to background prepared surfaces
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 finishing plaster to prepared surfaces 3.2 Demonstrate compliance with given information and relevant legislation when applying finishing plaster to prepared surfaces in relation to the following: • safe use of access equipment and work platforms • safe use, storage and handling of materials, tools and equipment • 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 finishing plaster to prepared surfaces, and the types, purpose and limitations of each type, the work situation and general work environment in relation to: • collective protective measures • Local Exhaust Ventilation (LEV) • Personal Protective Equipment (PPE) • Respiratory Protective Equipment (RPE) 3.4 Describe how relevant health and safety control equipment should be used in accordance with 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 finishing plaster to prepared surfaces.
Assessment criteria
The learner can: 4.1 Select resources associated with own work in relation to materials, components, tools and ancillary equipment. 4.2 Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to: • Plaster • clean water • hand tools portable power tools and ancillary 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 apply finishing plaster to prepared surfaces.

Learning outcome
The learner will: 5. Minimise the risk of damage to the work and surrounding area when applying finishing plaster to prepared surfaces
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, statutory regulations and official guidance.

Learning outcome
The learner will: 6. Complete the work within the allocated time when applying finishing plaster to prepared surfaces.
Assessment criteria
The learner can: 6.1 Demonstrate completion of the work within the allocated time 6.2 Describe the purpose of the work programme and explain why deadlines should be kept in relation to: • types of progress charts, timetables and estimated times • 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 finishing plaster to prepared surfaces to the required specification.
Assessment criteria
The learner can: 7.1 Demonstrate the following work skills when applying finishing plaster to prepared surfaces: • checking, applying and finishing. 7.2 Use and maintain hand tools, portable power tools and ancillary equipment 7.3 Check surface, mix and apply finishing plasters to two of the following to given working instructions. • Pre-plastered surfaces • Plasterboard • Finished concrete 7.4 Describe how to apply safe, healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to: • mix plasters • check surface preparation • apply finishing plasters to vertical and horizontal surfaces (pre-plastered, plasterboard and finished concrete) • recognise and determine when specialist skills and knowledge are required and report accordingly • understand specific requirements for structures of special interest, traditional build (pre 1919) and historical significance • use hand tools, portable power tools and ancillary equipment • work at height • use access equipment/working platforms 7.5 Describe the needs of other occupations and how to effectively communicate within a team when applying finishing plaster to prepared surfaces.

7.6 Describe how to maintain the tools and equipment used when applying finishing plaster to prepared surfaces

Unit 215 Applying finishing plaster to prepared surfaces 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 216 Installing external wall insulation in the workplace

Level:	2
GLH:	77
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 external wall insulation

Learning outcome
The learner will: 1. Interpret the given information relating to the work and resources when installing external 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 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: • drawings, specifications, schedules, method statements, risk assessments, manufacturer's 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 external wall insulation.
Assessment criteria
The learner can: 2.1 Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working: • 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 external wall insulation.
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 installing external wall insulation. 3.2 Demonstrate compliance with given information and relevant legislation when installing external wall insulation in relation to the following: • safe use of access equipment and work platforms • safe use, storage and handling of materials, tools and equipment • 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 external wall insulation, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to: • collective protective measures • Personal Protective Equipment (PPE) • Respiratory Protective Equipment (RPE) • 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 external wall insulation.
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: • insulation materials, tracks, adhesives, sealants, mechanical fixing components, pre-formed trims, tracks and shims, beads, joints and cills • vapour control/airtightness layer • 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 and wastage associated with the method/procedure to install external wall insulation.

Learning outcome
The learner will: 5. Minimise the risk of damage to the work and surrounding area when installing external 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 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 installing external wall insulation.
Assessment criteria
The learner can: 6.1 Demonstrate completion of the work within the allocated time 6.2 Decribe the purpose of the work programme and explain why deadlines should be kept in relation to: • types of progress charts, timetables and estimated times • 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 external wall insulation to the required specification.
Assessment criteria
The learner can: 7.1 Demonstrate the following work skills when installing external wall insulation: • removing, measuring, marking out, fitting, filling, finishing, positioning and securing. 7.2 Use and maintain hand tools, portable power tools and ancillary equipment 7.3 Prepare and install external wall insulation to given working instructions, relating to one of the following: • pre-finished insulation systems/methods • non-finished insulation systems/methods. 7.4 Carry out pre and post installation checks 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: • carry out external and internal pre-installation checks: level, plumb, structural integrity, dampness, vents, services (gas, electric, water, media cables) • recognise the procedures to check flues and combustion air ventilation • understand the implications of existing guarantees and warranties • confirm condition of substrate for installation • remove existing defective surface finishes • install pre-finished or non-finished insulation systems/methods to all surface areas including door and window reveals • minimise the effects of thermal bridging • make good existing surface finishes • reinstate ancillary wall fixtures (downpipes, fences, handrails)

- provide temporary protective covers to work areas
- apply treatments to existing walls
- cut and fix pre-formed trims
- cut and fix mounting blocks
- cut, line, level, drill and fix tracks, beads, shims, joints, cills
- complete post installation checks: compliance with specifications, water penetration, anchorage/fixing, vents, services (gas, electric, water, media cables)
- install vapour control barriers/airtightness layers where appropriate
- recognise when specialist skills and knowledge are required and report accordingly
- recognise specific requirements for structures of special interest, traditional construction (pre 1919) and historical significance
- use hand tools, portable power tools and equipment
- working at height
- use access equipment and work platforms.
- work at height
- Use access equipment and work platforms

7.6 Describe the needs of other occupations and how to effectively communicate within a team when installing external wall insulation.

7.7 Describe how to maintain the tools and equipment used when installing external wall insulation.

Unit 216 Installing external 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.

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 217 Installing cavity wall insulation in the workplace

Level:	2
GLH:	73
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 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 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: • 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 installing cavity wall insulation.
Assessment criteria
The learner can: 2.1 describe their responsibilities regarding potential accidents, health hazards and the environment whilst working: • 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 cavity wall insulation.
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 installing cavity wall insulation. 3.2 Demonstrate compliance with given information and relevant legislation when installing cavity wall insulation in relation to the following: • safe use of access equipment and work platforms • safe use, storage and handling of materials, tools and equipment • operative maintenance of installation equipment • specific risks to health 3.3 Demonstrate why and when health and safety control equipment, identified by the principles of prevention, should be used, relating to installing cavity wall insulation, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to: • collective protective measures • Personal Protective Equipment (PPE) • Respiratory Protective Equipment (RPE) • 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 cavity wall insulation.
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: • protective sheeting, warning signs, temporary barriers, airway sleeves, cavity barriers, mortar mix, insulation • hand tools, portable power tools and installation 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, density, area and wastage associated with the method/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 Minimise damage and maintain a clean work space 5.3 Dispose of waste in accordance with 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 cavity wall insulation.
Assessment criteria
The learner can: 6.1 demonstrate completion of the work within the allocated time 6.2 Describe the purpose of the work programme and explain why deadlines should be kept in relation to: • types of progress charts, timetables and estimated times • 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 cavity wall insulation to the required specification.
Assessment criteria
The learner can: 7.1 demonstrate the following work skills when installing loft cavity wall insulation: • measuring, marking out, calibrating, drilling, fitting and filling. 7.2 Use and maintain hand tools, portable power tools, installation equipment and ancillary equipment 7.3 Prepare for and install cavity wall insulation to given working instructions. 7.4 Carry out pre and post installation checks. 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: • remove obstructions and store protect access routes carry out external and internal pre-installation checks to include structural integrity, dampness, exposure ratings, vents, services (gas, electric, water, media cables) • understand the implications of existing guarantees and warranties • install cavity wall insulation from inside and outside of a building including lance techniques • identify insulation materials and their characteristics • ensure pre-installation material checks are within specified parameters • assemble, operate, clean and disassemble installation processing equipment • calibrate equipment to measure density, flow and quality tests • drill holes to patterns • fit cavity barriers

- fill holes with matching and suitable materials.
- complete post installation checks
- check construction ventilation, flues, chimneys and combustion air ventilators pre and post installation
- recognise when specialist skills and knowledge are required and report accordingly
- recognise specific requirements for structures of special interest, traditional construction (pre 1919), hard-to-treat buildings, and historical significance
- Use hand tools, portable power tools and installation/ancillary equipment:
- Working at height
- Use access equipment and work platforms.

7.6 Describe the needs of other occupations and how to effectively communicate within a team when installing cavity wall insulation.

7.7 Describe how to maintain the tools and equipment used when installing cavity wall insulation.

Unit 217 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 218 Installing insulation to cold roofs in the workplace

Level:	2
GLH:	70
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 information relating to the work and resources when installing insulation to cold roofs.
Assessment criteria
The learner can: 1.1 Interpret and extract relevant information 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: • 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 installing insulation to cold roofs.
Assessment criteria
The learner can: 2.1 Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working: • in the workplace, at height, in confined spaces, 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 insulation to cold roofs.
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 installing insulation to cold roofs. 3.2 Demonstrate compliance with given information and relevant legislation when installing insulation to cold roofs in relation to the following: • Safe use of access equipment • Safe use, storage and handling of materials, tools and equipment • Specific risk 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 insulation to cold roofs, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to: • Collective protective measures • personal protective equipment (PPE) • respiratory protective equipment (RPE) • respiratory protective equipment (RPE) 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 insulation to cold roofs.
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: • insulation, pipe insulation, tank and cylinder jackets, fixings and ancillary items • hand tools and installation equipment, portable power tools and ancillary 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, depth area and wastage associated with the method/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 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, statutory regulations and 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 the work within the allocated time. 6.2 Describe the purpose of the work programme and explain why deadlines should be kept in relation to: • types of progress charts, timetables and estimated times • 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 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: • measuring, marking out, calculating, cutting, fitting, positioning and securing. 7.2 Use and maintain hand tools, installation equipment, portable power tools and ancillary equipment 7.3 Prepare and install insulation to cold roofs using two of the following methods in compliance with current regulations and to given working instructions: • injected/blown • placed • mechanically or adhesively fixed • sprayed 7.4 Prepare and install insulation to the following in compliance with current regulations and to given working instructions: • Pipes • Tanks and/or cylinders • Access hatches 7.5 Carry out pre and post installation checks 7.6 Describe how to apply safe, healthy and environmental work practices, follow procedures, report problems and establish the authority needed to rectify them, to: • understand the implications of existing guarantees and warranties • recognise the procedures to check flues and combustion air ventilation • protect access routes • remove obstructions and store • remove unwanted insulation from roof area

- carry out pre-installation checks to include common infestations, protected species, structural integrity, dampness, vents, services (gas, electric, water, media cables)
- check adequacy of ventilation and increase if required
- recognise the potential risk of increased condensation following installation relating to roof coverings (pitched and flat) and roof structures (timber, metal, concrete)
- ensure all work to services (gas, electric, water, media cables) is carried out by suitably qualified people
- check for hidden utilities
- identify insulation materials and their characteristics for cold roofs, pipes, storage tanks, cylinders and access hatches
- prepare and install injected/blown, placed, mechanically or adhesively fixed and sprayed insulation to cold roofs
- minimise the effects of thermal bridging
- insulate up to and under existing walkway boards
- prepare and fix pipe, tank and cylinder insulation
- ensure the insulation is contained within the prescribed areas
- insulate downlighters to the required specification
- ensure insulation around electrical apparatus will not create fire hazards (light fittings and cables)
- restrict or reduce unwanted heat loss (down lights and other fittings)
- maintain fire resistant barriers where appropriate
- insulate access hatches
- complete post installation checks
- provide advice to preserve the integrity of the insulation (insulation data sheet and warning labels)
- recognise when specialist skills and knowledge are required and report accordingly
- recognise specific requirements for structures of special interest, traditional build (pre 1919) and historical significance
- use hand tools, installation equipment, portable power tools and ancillary equipment
- work at height
- work in confined spaces
- use access equipment and work platforms.

7.7 Describe the needs of other occupations and how to effectively communicate within a team when installing insulation to cold roofs.

7.8 Describe how to maintain the tools and equipment used when installing insulation to cold roofs.

Unit 218 Installing insulation to cold roofs 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

- Injected/blown
- Placed
- Mechanically/adhesively
- fixed Sprayed

Unit 219 Installing draught-proofing to openings in the workplace

Level:	2
GLH:	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 materials, components and equipment • preparing and installing draught-proofing to openings in the workplace

Learning outcome
The learner will: 1. Interpret the given information relating to the work and resources when installing draught-proofing to openings.
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: • 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 installing draught-proofing to openings.
Assessment criteria
The learner can: 2.1 Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working:

- 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 draught-proofing to openings.
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 installing draught-proofing to openings. 3.2 Demonstrate compliance with given information and relevant legislation when installing draught-proofing to openings in relation to the following: • safe use of access equipment and work platforms • safe use, storage and handling of materials, tools and equipment • specific risk 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 draught-proofing to openings, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to: • collective protective measures • Personal Protective Equipment (PPE) • Respiratory Protective Equipment (RPE) • 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 draught-proofing to openings.
Assessment criteria
The learner can: 4.1 Select resources associated with own work in relation to materials, components, systems, fixings, tools and equipment. 4.2 Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to: • cleaning agents, draught-proofing, mastic sealants, fixings, fittings as appropriate to the method of draught-proofing • hand tools, portable power tools and ancillary equipment. 4.3 Describe how the resources should be used correctly and how problems associated with the resources are reported. 4.4 Describe how the resources should be used correctly and how problems associated with the resources are reported. 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 draught-proofing to openings.

Learning outcome
The learner will: 5. Minimise the risk of damage to the work and surrounding area when installing draught-proofing to openings.
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 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, statutory regulations and official guidance.

Learning outcome
The learner will: 6. Complete the work within the allocated time when installing draught-proofing to openings.
Assessment criteria
The learner can: 6.1 Demonstrate completion of the work within the allocated time. 6.2 Describe the purpose of the work programme and explain why deadlines should be kept in relation to: • types of progress charts, timetables and estimated times • 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 draught-proofing to openings to the required specification.
Assessment criteria
The learner can: 7.1 demonstrate the following work skills when installing draught-proofing to openings • measuring, marking out, fitting, removing, positioning and securing. 7.2 Use and maintain hand tools, portable power tools and ancillary equipment. 7.3 Install draught-proofing to given working instructions to the following openings: • External and internal doors • Windows • Access hatches 7.4 Carry out pre and post installation checks 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: • understand the implications of existing guarantees and warranties • carry out pre-installation checks to include structural integrity, dampness, vents, condensation, services (gas, electric, water, media cables) • remove existing draught-proofing • degrease and clean surfaces • install draught-proofing to external and internal doors, windows, access hatches • apply mastic seals • apply injected draught-proofing to voids when replacing doors and window frames • complete post installation checks • report any repair requirements

- recognise when specialist skills and knowledge are required and report accordingly
- recognise specific requirements for structures of special interest, traditional construction (pre 1919) and historical significance
- use hand tools, portable power tools and ancillary equipment
- use access equipment and work platforms.

7.6 Describe the needs of other occupations and how to effectively communicate within a team when installing draught-proofing to openings.

7.7 Describe how to maintain the tools and equipment used when installing draught-proofing to openings.

Unit 219 Installing draught-proofing to openings 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 220 Installing internal insulation to walls in the workplace

Level:	2
GLH:	73
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 and installing internal insulation to walls in the workplace

Learning outcome
The learner will: 1. Interpret the given information relating to the work and resources when installing internal insulation to walls.
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: • 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 installing internal insulation to walls.
Assessment criteria
The learner can: 2.1 describe their responsibilities regarding potential accidents, health hazards and environment whilst working:

- 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 internal insulation to walls.
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 installing internal insulation to walls. 3.2 Demonstrate compliance with given information and relevant legislation when installing internal insulation to walls in relation to the following: • safe use of access equipment and work platforms • safe use of access equipment and work platforms • 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 internal insulation to walls. and the types, purpose and limitations of each type, the work situation and general work environment, in relation to • collective protective measures • Personal Protective Equipment (PPE) • Respiratory Protective Equipment (RPE) • Local Exhaust Ventilation (LEV) 3.4 Describe how the relevant health and safety control equipment should be used in accordance with the given 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 internal insulation to walls.
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: • insulation systems, internal insulation materials • hand tools, portable power tools and ancillary 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, thickness, area and wastage associated with the method/procedure to install internal insulation to walls.

Learning outcome
The learner will: 5. Minimise the risk of damage to the work and surrounding area when installing internal insulation to walls.
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 installing internal insulation to walls.
Assessment criteria
The learner can: 6.1 Demonstrate completion of the work within the allocated time. 6.2 Describe the purpose of the work programme and explain why deadlines should be kept in relation to: • types of progress charts, timetables and estimated times • 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 internal insulation to walls. to the required specification.
Assessment criteria
The learner can: 7.1 demonstrate the following work skills when installing internal insulation to walls: • measuring, marking out, cutting, fitting, finishing, positioning sealing and securing 7.2 Use and maintain hand tools, portable power tools and ancillary equipment 7.3 prepare and install internal insulation to internal walls, to given working instructions by using two of the following methods: • injected/blown placed • mechanically or adhesively fixed • sprayed 7.4 Carry out pre and post installation checks 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: • understand the implications of existing guarantees and warranties • carry out pre-installation checks to include structural integrity, dampness, vents, services (gas, electric, water, media cables) • Check for hidden utilities • protect and reinstate existing fixtures and fittings (carpets) • recognise the procedures to check flues and combustion air ventilation • prepare walls for insulation • ensure all work to services (gas, electric, water, media cables) is carried out by suitably qualified people • remove and replace/reinstate skirting, coving and cornices

- construct independent or semi–independent frames, or straps to walls, to contain or hold insulation
- fit mechanically or adhesively fixed insulation
- install injected/blown, placed and sprayed insulation
- fit insulated plasterboard (drylining) on straps by adhesive and mechanical fasteners
- restrict or reduce unwanted heat loss
- ensure the integrity of vapour control/airtightness layer where appropriate
- minimise the effects of thermal bridging
- maintain fire resistant barriers
- maintain sound–proofing where appropriate
- seal joints, perimeters and penetrations
- complete post installation checks
- recognise when specialist skills and knowledge are required and report accordingly
- recognise specific requirements for structures of special interest, traditional construction (pre 1919) and historical significance
- use hand tools, portable power tools and ancillary equipment
- work at height
- use access equipment and work platforms.

7.6 Describe the needs of other occupations and how to effectively communicate within a team when installing internal insulation to walls.

7.7 Describe how to maintain the tools and equipment used when installing internal insulation to walls.

Unit 220 Installing internal insulation to walls 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.

Two of the following endorsements required:

- Injected/blown
- Placed
- Mechanically/adhesively fixed
- Sprayed

Unit 221 Installing insulation to framed sections of buildings in the workplace

Level:	Level 2
GLH:	63
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 and installing insulation to framed sections of buildings in the workplace

Learning outcome
The learner will: 1. Interpret the given information relating to the work and resources when installing insulation to framed sections of buildings.
Assessment criteria
The learner can: 1.1 Interpret and extract relevant information from drawings, specifications, schedules, method statements, risk assessments and 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: • 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 installing insulation to framed sections of buildings.
Assessment criteria
The learner can: 2.1 Describe their responsibilities regarding potential accidents. health hazards and the environment whilst working: • 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 insulation to framed sections of buildings.
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 installing insulation to framed sections of buildings. 3.2 Demonstrate compliance with given information and relevant legislation when installing insulation to framed sections of buildings in relation to the following: • safe use of access equipment and work platforms • safe use, storage and handling of materials, tools and equipment • specific risk 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 insulation to framed sections of buildings, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to: • collective protective measures • Personal Protective Equipment (PPE) • Respiratory Protective Equipment (RPE) • 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 insulation to framed sections of buildings.
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: • protective sheeting, warning signs, temporary barriers • insulation materials, filling materials • installation equipment • hand tools, portable power tools and ancillary 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 insulation to framed sections of buildings.

Learning outcome
The learner will: 5. Minimise the risk of damage to the work and surrounding area when installing insulation to framed sections of buildings.
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 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 insulation to framed sections of buildings.
Assessment criteria
The learner can: 6.1 Demonstrate completion of the work within the allocated time. 6.2 Describe the purpose of the work programme and explain why deadlines should be kept in relation to: • types of progress charts, timetables and estimated times • 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 insulation to framed sections of buildings to the required specification.
Assessment criteria
The learner can: 7.1 Demonstrate the following work skills when installing insulation to framed sections of buildings: • measuring, marking out, calibrating, fitting, filling, positioning and securing. 7.2 Use and maintain hand tools, portable power tools, installation equipment and ancillary equipment 7.3 Install or maintain the integrity of the vapour control/airtightness layer as appropriate 7.4 Prepare for and install insulation to framed sections of roof, floor, wall or ceiling structures, contained frame or open frame, to given working instructions, using one of the following methods: • injected/blown • placed • mechanically or adhesively fixed • sprayed 7.5 Carry out pre and post installation checks 7.6 Describe how to apply safe, healthy and environmental work practices, follow procedures, report problems and establish the authority needed to rectify them, to: • understand the implications of existing guarantees and warranties • carry out pre-installation checks to include structural integrity, dampness, vents, services, (gas, electric, water, media cables) • recognise the procedures to check flues and combustion air ventilation • check framed structures are suitable for insulation • remove existing wall lining • protect and reinstate existing fixtures and fittings (carpets) • check for hidden utilities

- install injected/blown, placed, mechanically or adhesively fixed, sprayed insulation to framed sections, roof, floor, wall or ceiling structures of contained and open framed components
- identify insulation materials and their characteristics
- assemble, operate, clean and disassemble installation processing equipment
- calibrate equipment to measure density, flow and quality tests
- make and drill holes to patterns for injection points
- fill holes
- seal joints, perimeters and penetrations
- maintain the integrity of the vapour control/airtightness layer
- minimise the effects of thermal bridging
- carry out post installation checks
- recognise when specialist skills and knowledge are required and report accordingly
- recognise specific requirements for structures of special interest, traditional construction (pre 1919) and historical significance
- use hand tools, portable power tools and installation/ancillary equipment
- work at height
- use access equipment and work platforms.

7.7 Describe the needs of other occupations and how to effectively communicate within a team when installing insulation to framed sections of buildings.

7.7 Describe how to maintain the tools and equipment used when installing insulation to framed sections of buildings.

Unit 221 Installing insulation to framed sections of buildings 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.

One of the following endorsements required:

- Injected/blown
- Placed
- Mechanically/adhesively fixed
- Sprayed

Unit 222 Applying surface finishes to external wall insulation in the workplace

Level:	2
GLH:	73
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 surface finishes to external wall insulation

Learning outcome
The learner will: 1. Interpret the given information relating to the work and resources when applying surface finishes to external 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 the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented. 1.4 Describe the different types of information, their source and how they are interpreted in relation to: • drawings, specifications, schedules, method statements, risk assessments, manufacturers' information and current regulations governing buildings

Learning outcome
The learner will: 2. Know how to comply with relevant legislation and official guidance when applying surface finishes to external wall insulation.
Assessment criteria
The learner can: 2.1 Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working: • 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 applying surface finishes to external wall insulation.
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 surface finishes to external wall insulation. 3.2 Demonstrate compliance with given information and relevant legislation when applying surface finishes to external wall insulation in relation to the following: • safe use of access equipment and work platforms • safe use, storage and handling of materials, tools and equipment • specific risk 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 surface finishes to external wall insulation, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to: • collective protective measures • Personal Protective Equipment (PPE) • respiratory protective equipment • 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 surface finishes to external wall insulation.
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: • dash finishes, proprietary pre-cast finishes, paints, beads, reinforcement, stress patches, brick slips, renders, sealants, fixings and fittings • 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 and wastage associated with the method/procedure to apply surface finishes to external wall insulation.

Learning outcome
The learner will: 5. Minimise the risk of damage to the work and surrounding area when applying surface finishes to external 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 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 applying surface finishes to external wall insulation.
Assessment criteria
The learner can: 6.1 Demonstrate completion of the work with the allocated time. 6.2 Describe the purpose of the work programme and explain why deadlines should be kept in relation to: • types of progress charts, timetables and estimated times • organisational procedures for reporting circumstances which will affect the work programme

Learning outcome
The learner will: 7. Comply with the given contract information to applying surface finishes to external wall insulation to the required specification.
Assessment criteria
The learner can: 7.1 Demonstrate the following work skills when installing insulation to framed sections of buildings: • measuring, marking out, mixing, applying and fitting. 7.2 Use and maintain hand tools, portable power tools, installation equipment and ancillary equipment 7.3 Apply base coats, reinforcing mesh and stress patches 7.4 Apply finishes to external wall insulation to given working instructions, relating to two of the following: • dash finishes • synthetic or non-synthetic renders • proprietary pre-cast finishes • paint finishes • corner and surface beads • brick slips • brick effect render. 7.5 Carry out pre and post installation checks 7.6 Describe how to apply safe, healthy and environmental work practices, follow procedures, report problems and establish the authority needed to rectify them, to: • carry out pre-installation checks to include structural integrity, dampness, vents, services (gas, electric, water, media cables) • recognise the procedures to check flues and combustion air ventilation • understand the implications of existing guarantees and warranties • apply, dash finishes, synthetic and non-synthetic renders, proprietary pre-cast finishes, paint finishes, brick slips, brick effect render and sealants to previously installed external wall surface insulation including door and window reveals • minimise the effects of thermal bridging

- fix corner and surface beads
- apply base coats, reinforcing mesh and stress patches
- complete post installation checks: compliance with specifications, resistance to water penetration, anchorage/fixing, vents, services (gas, electric, water, media cables
- carry out any maintenance and repair after installation
- recognise when specialist skills and knowledge are required and report accordingly
- recognise specific requirements for structures of special interest, traditional construction (pre 1919) and historical significance
- use hand tools, portable power tools and equipment
- work at height
- use access equipment and work platforms.

7.7 Describe the needs of other occupations and how to effectively communicate within a team when applying surface finishes to external wall insulation.

7.7 Describe how to maintain the tools and equipment used when applying surface finishes to external wall insulation.

Unit 222 Applying surface finishes to external 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.

This unit must be assessed against the endorsements detailed within the relevant NVQ Structure.

Two of the following:

- Dash finishes
- Synthetic/non-synthetic renders
- Proprietary pre-cast finishes
- Paint finishes
- Corner and surface beads
- Brick slips
- Brick effect render

Unit 223 Installing insulation to warm roofs in the workplace

Level:	2
GLH:	70
Unit aim	**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 warm roofs

Learning outcome
The learner will: 1. Interpret the given information relating to the work and resources when installing insulation to warm roofs in the workplace
Assessment criteria
The learner can: 1.1 Interpret and extract relevant information from drawings, specifications, schedules, methods statements, risk assessments and 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: • 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 installing insulation to warm roofs.
Assessment criteria
The learner can: 2.1 Describe their responsibilities regarding potential accidents, health hazards and the environment, whilst working: • 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 insulation to warm roofs.

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 installing insulation to warm roofs.

3.2 Demonstrate compliance with given information and relevant legislation when installing insulation to warm roofs in relation to the following:

- safe use of access equipment and work platforms
- safe use, storage and handling of materials, tools and equipment
- 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 insulation to warm roofs, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:

- collective protective measures
- Personal Protective Equipment (PPE)
- Respiratory Protective Equipment (RPE)
- 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 insulation to warm roofs.

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:

- insulation materials, filling materials, vapour control/airtightness layers
- installation equipment
- hand tools, portable power tools and ancillary 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 insulation to warm roofs.

Learning outcome

The learner will:

5. Minimise the risk of damage to the work and surrounding area when installing insulation to warm 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 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 installing insulation to warm roofs.

Assessment criteria

The learner can:

6.1 Demonstrate completion of the work within the allocated time.

6.2 Describe the purpose of the work programme and explain why deadlines should be kept in relation to:

- types of progress charts, timetables and estimated times
- 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 insulation to warm roofs to the required specification
Assessment criteria
The learner can: 7.1 Demonstrate the following work skills when installing insulation to warm roofs: • measuring, marking out, cutting, fitting, finishing, positioning, sealing, fixing and securing. 7.2 Use and maintain hand tools, portable power tools and ancillary equipment. 7.3 Prepare and install insulation to the plane of the roof pitch to given working instructions using one of the following methods • injected/blown • placed • mechanically or adhesively fixed • sprayed. 7.4 Carry out pre and post installation checks. 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: understand the implications of existing guarantees and warranties • recognise the procedures to check flues and combustion air ventilation • carry out pre-installation checks to include structural integrity, dampness, vents, services, (gas, electric, water, media cables) • protect access routes • remove obstructions and store • remove unwanted insulation from roof area • ensure all work to services (gas, electric, water, media cables) is carried out by suitably qualified people • check for hidden utilities • identify insulation materials and their characteristics • install injected/blown, placed, mechanically or adhesively fixed and sprayed insulation to warm roofs • restrict or reduce unwanted heat loss • ensure adequate ventilation above and below insulation • recognise the potential risk of increased condensation following installation relating to roof coverings (pitched and flat) and roof structures (timber, metal, concrete) • maintain fire resistant barriers where appropriate • assemble, operate, clean and disassemble installation processing equipment • calibrate equipment to measure density, flow and quality tests • seal joints, perimeters and penetrations • minimise the effects of thermal bridging • complete post installation checks • recognise when specialist skills and knowledge are required and report accordingly

- recognise specific requirements for structures of special interest, traditional construction (pre 1919) and historical significance
- use hand tools, portable power tools and installation/ancillary equipment
- work at height
- work in confined spaces
- use access equipment and work platforms

7.6 Describe the needs of other occupations and how to effectively communicate within a team when installing insulation to warm roofs

7.7 Describe how to maintain the tools and equipment used when installing insulation to warm roofs.

Unit 223 Installing insulation to warm roofs 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 224 Installing insulation to floors in the workplace

Level:	2
GLH:	70
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 information relating to the work and resources when installing insulation to floors.
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: • 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 installing insulation to floors.
Assessment criteria
The learner can: 2.1 Describe their responsibilities regarding potential accidents, health hazards and the environment, whilst working:

- 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 insulation to floors
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 installing insulation to floors. 3.2 Demonstrate compliance with given information and relevant legislation when installing insulation to floors in relation to the following: • safe use of access equipment and work platforms • safe use, storage and handling of materials, tools and equipment • 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 insulation to floors, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to: • collective protective measures • Personal Protective Equipment (PPE) • Respiratory Protective Equipment (RPE) • 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 insulation to floors.
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:

- protective sheeting, warning signs, temporary barriers
- insulation materials, filling materials, vapour control/airtightness layers
- installation equipment
- hand tools, portable power tools and ancillary 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 insulation to floors.

Learning outcome
The learner will: 5. Minimise the risk of damage to the work and surrounding area when installing insulation to 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 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 installing insulation to floors
Assessment criteria
The learner can: 6.1 Demonstrate completion of the work within the allocated time 6.2 Describe the purpose of the work programme and explain why deadlines should be kept in relation to: • types of progress charts, timetables and estimated times • 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 insulation to floors to the required specification.
Assessment criteria
The learner can: 7.1 Demonstrate the following work skills when installing insulation to floors: • measuring, marking out, levelling, cutting, fitting, finishing, positioning, sealing, fixing and securing. 7.2 Use and maintain hand tools, portable power tools and ancillary equipment 7.3 Prepare and install insulation to suspended or solid floors using one of the following methods to given working instructions: • injected/blown • placed • mechanically/adhesively fixed • sprayed 7.4 Carry out pre and post installation checks 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: • understand the implications of existing guarantees and warranties • recognise the procedures to check flues and combustion air ventilation • carry out pre-installation checks to include structural integrity, dampness, vents, services (gas, electric, water, media cables) • recognise the potential risk of increased condensation following installation relating to suspended floors • prepare floor for insulation • ensure all work to services (gas, electric, water) is carried out by suitably qualified people • remove and reinstate floorcoverings – • check for hidden utilities • identify insulation materials and their characteristics • maintain integrity of damp-proof membranes and gas membranes • install injected/blown, placed, mechanically or adhesively fixed, and sprayed insulation torestrict or reduce unwanted heat loss • ensure the integrity of vapour control/airtightness layers where appropriate • ensure adequate ventilation above and below insulation • maintain sound-proofing where appropriate • maintain fire resistant barriers where appropriate • assemble, operate, clean and disassemble installation processing equipment • calibrate equipment to measure density, flow and quality tests • seal joints, perimeters and penetrations • minimise the effects of thermal bridging • complete post installation checks

- recognise when specialist skills and knowledge are required and report accordingly
- recognise specific requirements for structures of special interest, traditional construction (pre 1919) and historical significance
- use hand tools, portable power tools and installation/ancillary equipment
- work at height
- use access equipment and work platforms

7.6 Describe the needs of other occupations and how to effectively communicate within a team when installing insulation to floors.

7.7 Describe how to maintain the tools and equipment used when installing insulation to floors

Unit 224 Installing insulation to 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 225 Preparing structures for treatment in the workplace

Level:	2
GLH:	43
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: • 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:

- 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 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.

2.3 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 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: • safe use of access equipment and work platforms • safe use, storage and handling of materials, tools and equipment • 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: • collective protective measures • Personal Protective Equipment (PPE) • Respiratory Protective Equipment (RPE) • 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:

- cleaning fluids, neutralisers, inhibitors, water repellents, stabilisers and wall ties
- signs, barriers, props, fixings
- 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:

- types of progress charts, timetables and estimated times
- 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: • 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: • clean substrates • erect temporary barriers and signs • removal of non-structural and/or structural components for access to treatment areas • 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: • understand the implications of existing guarantees and warranties • 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 • protect the site from all treatments (dust sheets, plastic sheets) • measure areas for treatment and volumes of treatment products: cleaning fluids, neutralisers, inhibitors, biocides, water repellents stabilisers and wall ties • erect temporary barriers and signs • remove non-structural and structural components for access to treatment areas • check hidden utilities • provide temporary supports to structure • store items to be reinstated after treatment • recognise when specialist skills and knowledge are required and report accordingly • recognise specific requirements for structures of special interest, traditional construction (pre 1919) and historical significance and report accordingly • use hand tools, portable tools and equipment • work at height • 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 225 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 226 Applying preservation treatment in the workplace

Level:	2
GLH:	53
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: • 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:

- 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: • safe use of access equipment and work platforms • safe use, storage and handling of materials, tools and equipment • 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: • collective protective measures • Personal Protective Equipment (PPE) • Respiratory Protective Equipment (RPE) • 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: • biocides, damp-proofing products and water • cementitious, liquid and physical membranes • 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 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 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: • types of progress charts, timetables and estimated times • 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: • 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: • understand the implications of existing guarantees and warranties • 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 • prepare two-part treatment mixes • identify and complete drilling patterns • measure areas for treatment and volumes of treatment mixes, biocides and additives • apply cementitious and liquid membranes and fix physical membranes • recognise when specialist skills and knowledge are required and report accordingly • recognise specific requirements for structures of special interest, traditional construction (pre 1919) and historical significance • use hand tools, portable tools and equipment • work at height • 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 226 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

Unit 227 Reinstating the structure after building treatments in the workplace

Level:	2
GLH:	57
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: • 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: • 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: • safe use of access equipment and work platforms • safe use, storage and handling of materials, tools and equipment • 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: • collective protective measures • Personal Protective Equipment (PPE) • Respiratory Protective Equipment (RPE) • 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: • removed components, sand, cement, lime, bricks, masonry, stone, plasters, plasterboards, damp-proof course (DPC), insulation, timber, wall ties, dyes, fixings, fittings • 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: 6.5 Demonstrate completion of the work within the allocated time 6.6 Demonstrate the following work skills when preparing structures for treatment: • types of progress charts, timetables and estimated times • 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: • 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: • Air bricks • Masonry • Plasterwork and/or renders • structural timbers (wall plates, joists, flooring/decking) wood preservation and/or damp-proofing only • non-structural components (doors, windows, skirting, architraves and services that have been temporarily moved for treatment purposes) • damp-proof courses • 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: • reinstate structures after treatments above or (wood preservation only) below ground • understand the implications of existing guarantees and warranties • reinstate air bricks and ventilation • reinstate masonry • rebuild (sleeper walls, piers, walls) • apply plasterwork where removed

- install structural timbers (wall plates, joists, flooring/decking)
- replace doors, windows, skirting, architraves
- replace services, to the point of connection, that were temporarily removed for treatment purposes
- arrange the re-commission of services (electric, gas, water, media cables)
- insert damp-proof courses
- replace insulation
- mix lime and cement mortars and concrete
- clean cavities
- complete post installation checks: compliance with specifications, water penetration, anchorage/fixing, vents, services (gas, electric, water, media cables)
- recognise when specialist skills and knowledge are required and report accordingly
- recognise specific requirements for structures of special interest, traditional construction (pre 1919) and historical significance
- use hand tools, portable power tools and equipment
- work at height
- 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 227 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 228 Installing wall ties in existing structures in the workplace

Level:	2
GLH:	57
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: • 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:

- 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: • safe use of access equipment and work platforms • safe use, storage and handling of materials, tools and equipment • 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: • collective protective measures • Personal Protective Equipment (PPE) • Respiratory Protective Equipment (RPE) • 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:

- ties, fixings, fittings, resins and grouts
- 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 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 installing wall ties in existing structures

Assessment criteria

The learner can:

6.7 Demonstrate completion of the work within the allocated time

6.8 Demonstrate the following work skills when preparing structures for treatment:

- types of progress charts, timetables and estimated times
- 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: • 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: • Driven • Grouted • Resin • 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: • carry out pre and post installation checks • install driven, grouted, resin and mechanical wall tie/fixing systems into existing stone, concrete, masonry, brick, block, timber and manufactured unit structures • understand the implications of existing guarantees and warranties • understand the implications of existing cavity wall insulation • test pull wall ties • remove existing defective wall ties • isolate existing defective wall ties • recognise when specialist skills and knowledge are required and report accordingly • recognise specific requirements for structures of special interest, traditional construction (pre 1919) and historical significance • use hand tools, portable power tools and equipment • work at height • 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 228 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

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 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.

Our Quality Assurance Requirements encompasses all of the relevant requirements of key regulatory documents such as:

- Regulatory Arrangements for the Qualifications and Credit Framework (2008)
- SQA Awarding Body Criteria (2007)
- NVQ Code of Practice (2006)

and sets out the criteria that centres should adhere to pre and post centre and qualification approval.

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

About City & Guilds

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

City & Guilds Group

The City & Guilds Group 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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