GQA LEVEL 3 NVQ DIPLOMA IN INSULATION AND BUILDING TREATMENTS (CONSTRUCTION)

Qualification Number 603/7375/1

Issue 2: September 2021

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PERSONAL COMPETENCE SUMMARY

Name	Company/Centre
Job Title	GQA Registration Number

	UNITS OF COMPETENCE			ASSESSOR SIGNATURE Performance and knowledge assessment completed and supplemented with evidence overtime	DATE
Unit Number	**Mandatory Units**	**Level**	**Credit**		
A/503/2772 209v2	Confirming Work Activities and Resources for an Occupational Work Area in the Workplace	3	10		
K/507/9537 C1	Developing and Maintaining Good Occupational Working Relationships in the Workplace	5	8		
R/503/2924 211v2	Confirming the Occupational Method of Work in the Workplace	3	11		
A/503/1170 641	Conforming to General Health, Safety and Welfare in the Workplace	1	2		
M/618/7006 817v1	Insulation and Building Treatments Building Construction, Defects and Interfaces	3	19		

RELIABLE EVIDENCE: The forms of evidence available include (mark as appropriate)

Observation in the workplace	☐	Assessment of knowledge	☐
Records of prior experience	☐	Witness statement(s)	☐
Testimonial(s)	☐	Photographic evidence	☐
Work records	☐	External testing	☐

Passport Style Candidate Photo (Mandatory)

COMPETENCE COMPLETION SIGNATURES

By signing here, the Candidate and Assessor confirm that evidence presented is authentic and that the assessments took place in accordance with the relevant assessment strategy. Details of the assessments and evidence must be recorded in the assessment decision record/summaries at the end of each unit.

	Name and Signature	Date
Candidate		
Lead Assessor		
Internal Verifier		

EQA		

Introduction to the Qualification

Who is this Qualification for?

This qualification enables the learner to demonstrate and recognise their skills, knowledge and understanding and to demonstrate their competence in a real workplace environment so that they can work as an Insulation and Building treatments Operative within the construction industry. It is accepted there are a number of specialisms in the sector and the qualification has been developed with Pathways to allow as wide an uptake as possible. All work must be completed following Industry recognised Safe Working Practices and in accordance with relevant legislation.

This qualification is at Level 3, although some units may be at different levels and should be taken by those who are fully trained to deal with routine assignments. Candidates should require minimum supervision in undertaking the job. The qualification has been developed in a way to allow employees from companies of all sizes and specialisms equal opportunity to complete.

What is required from candidates?

GQA qualifications are made up of a number of units. This qualification has a group of 5 mandatory units, and 8 Pathways all of which have a number of units that mut be achieved along with the qualification manfatory units.

The units are made up of the things those working in these job roles need to know and the tasks they need to be able to do to carry out the work safely and correctly. These are called Learning Outcomes, and all must be met to achieve the unit.

Unit Number	Mandatory Units	Level	Credit
A/503/2772 209v2	Confirming Work Activities and Resources for an Occupational Work Area in the Workplace	3	10
K/507/9537 C1	Developing and Maintaining Good Occupational Working Relationships in the Workplace	5	8
R/503/2924 211v2	Confirming the Occupational Method of Work in the Workplace	3	11
A/503/1170 641	Conforming to General Health, Safety and Welfare in the Workplace	1	2
M/618/7006 817v1	Insulation and Building Treatments Building Construction, Defects and Interfaces	3	19
Pathway 1 Room in Roof - Group RR1 (2 units must be achieved)			
D/618/6997 644v3	Installing internal insulation to walls in the workplace	3	22
H/618/6998 645v3	Installing insulation to framed sections of buildings in the workplace	3	22
A/618/7008 819v1	Injecting, blowing or spraying insulation to framed sections of buildings in the workplace	3	24
Pathway 1 Room in Roof - Group RR2 (1 unit must be achieved) (NB ICBS2 cannot be used in both groups)			
Y/618/6996 451v4	Installing insulation to cold roofs in the workplace	2	19
Y/618/7002 813v1	Installing blown insulation to cold roofs in the workplace	2	19
J/617/8828 ICSB2	Develop customer relationships	2	6

Pathway 1 Room in Roof - Group RR3 (1 unit must be achieved)			
K/618/6999	Installing insulation to create warm roofs in the workplace	3	19
748v2			
R/618/7001	Spraying insulation to create warm roofs in the workplace	3	19
812v1			
J/617/8828	Develop customer relationships	2	6
ICSB2			
Pathway 2 Park Homes - Group PH1-Mandatory units (2 units required)			
L/618/6994	Installing external wall insulation (EWI Boarder) in the workplace	3	25
448v4			
K/618/7005	Park homes insulation	3	25
816v1			
Pathway 2 Park Homes - Group PH2 (1 unit must be achieved)			
L/618/7000	Installing insulation to suspended floors in the workplace	2	19
749v2			
T/618/7007	Spraying insulation to suspended floors in the workplace	3	20
818v1			
Pathway 2 Park Homes Group PH3 (1 unit must be achieved)			
Y/618/6996	Installing insulation to cold roofs in the workplace	2	19
451v4			
Y/618/7002	Installing blown insulation to cold roofs in the workplace	2	19
813v1			
J/617/8828	Develop customer relationships	2	6
ICSB2			
Pathway 3 Hybrid Wall Group HW1 1 unit required			
L/618/6994	Installing external wall insulation (EWI Boarder) in the workplace	3	25
448v4			
H/618/7004	Injecting, blowing and spraying insulation to internal walls in the workplace	3	22
815v1			
D/618/6997	Installing internal insulation to walls in the workplace	3	22
644v3			
Pathway 4 Insulating Framed Sections of Buildings Group FS1-1 unit required			
H/618/6998	Installing insulation to framed sections of buildings in the workplace	3	22
645v3			
A/618/7008	Injecting, blowing or spraying insulation to framed sections of buildings in the workplace	3	24
819v1			
Pathway 5 External Wall Insulation (Boarder) Mandatory Unit			
L/618/6994	Installing external wall insulation (EWI Boarder) in the workplace	3	25
448v4			
Pathway 6 External Wall Insulation (Finisher) Mandatory Unit			
R/618/6995	Applying surface finishes to external wall insulation in the workplace	3	21
449v4			
Pathway 7 External Wall Insulation (Boarder and Finisher)			
A/618/7008	Installing external wall insulation (EWI Boarder) in the workplace	3	25
448v4			
R/618/6995	Applying surface finishes to external wall insulation in the workplace	3	21
449v4			

Pathway 8 Internal Insulation (Walls)			
D/618/6997	Installing internal insulation to walls in the workplace	3	22
644v3			
H/618/7004	Injecting, blowing and spraying insulation to internal walls in the workplace	3	22
815v1			

Potential sources of evidence:

Suggested sources of evidence are shown above, these can be supplemented by physical or documentary evidence, e.g.:

- Accident book/reporting system
- Safety record
- Training record
- Audio evidence
- Witness testimonies
- Photographic/ video evidence
- Notes and memos
- Telephone/e-mail records
- Customer and colleague feedback
- Records of equipment and materials
- Work records

Please note that photocopied or downloaded documents such as manufacturers' or industry guidance, H&S policies, Risk Assessments etc, are not normally acceptable evidence for GQA qualifications unless accompanied by a record of a professional discussion or Assessor statement confirming candidate knowledge of the subject. If you are in any doubt about the validity of evidence, please contact your GQA EQA.

GQA Qualification Implementation Requirements covering Centre Approval, Candidate Assessment and ongoing Quality Assurance

This document indicates the requirements of Approved Centres delivering GQA qualifications and / or units of credit.

1. Equality of Opportunity
Equality of access to fair and valid assessment is necessary for all candidates undergoing assessment. This may mean making reasonable adjustments to normal assessment methods for candidates with particular or special assessment requirements. Candidates work patterns should not become a barrier to assessment, the organisation of which may have to be flexible. In the same way, reasonable adjustment arrangements may be necessary for candidates with a disability. For example, a candidate who is unable, through disability, to produce oral or written evidence, may be allowed to use the method they normally use as a substitute for the required form of communication. Reasonable adjustments need to be approved by GQA.

2. Recognised/Approved Assessment Centres
2.1 Individual centres must be approved by GQA to offer specific qualifications and / or units of credit. A centre may be a single organisation or a partnership of two or more organisations. It may operate at a single location or have satellites. For further details see the GQA booklet "Guide to Centre Approval". The Centre Approval process is carried out by a GQA approved EQA. Each Centre must maintain a centre file. It is important to be clear what the steps in the assessment process are:
• plan evidence collection and opportunities for assessment
• collect evidence
• judge evidence
• determine whether sufficient evidence has been presented
• make an assessment decision and give feedback to the candidate

NB Any deviation from the norm must be approved by a GQA EQA

2.2 Assessors and Verifiers

All Assessors of candidate performance must be competent, to make qualitative judgements, both in the skills they are assessing and in the assessment of candidates and hold the appropriate Assessor national award. Assessor occupational knowledge related to the qualifications being assessed is essential and must be illustrated to GQA prior to approval.

Internal Verifiers are responsible for the quality assurance of the assessment process within a centre. They should have a relevant occupational background, be competent in internal verification and hold the Internal Verifier national award. It is recommended that Internal Verifiers work towards national recognition of assessor competence.

EQAs are responsible for ensuring accurate and consistent standards of assessment across centres, qualifications, units of credit and over time. They should have a relevant occupational background, be competent in external verification and hold the EQA national award
GQA will approve and licence all individuals involved in the assessment and verification of its approved qualifications and / or units of credit. Individuals who are working towards the Assessor or Internal Verifier national awards can only be provisionally licensed. The judgement of provisional licence holders will need to be agreed/authorised by a fully qualified and GQA licensed individual who cannot carry out a dual role in relation to a specific candidate.

All GQA Assessors and Verifiers must undertake a minimum of 2 significant CPD activities in both occupational areas and assessment and verification. Reflective CPD records must be maintained and made available to GQA EV's for review.

2.3 Centre Approval, Monitoring Reviews and Quality Assurance
The centre recognition/approval process is the start of a significant part of the awarding body's quality assurance system. The Approval process will begin with an EQA review of centre procedures to ascertain the potential centres ability to deliver GQA qualifications and / or units of credit. Centres will be expected to meet the relevant regulatory authority criteria for delivery of qualifications prior to initial approval; continued compliance with the criteria will be monitored through regular EQA visits. It is recommended that centre reviews are conducted at minimum every six months by a GQA EQA.

New or multi-site centres may be required to undertake quarterly or more frequent EV reviews to ensure that different locations can be seen to satisfy the national requirements.

GQA will ensure that unacceptable barriers relating to the assessment and internal verification of candidates in small companies do not deny recognition of competence to competent young workers. In such circumstances, GQA will demonstrate that its quality assurance procedures remain sufficient and rigorous to ensure that the competence outcomes have standing and credibility in the occupational area.

Enhanced quality procedures to ensure consistency of assessment and verification will be necessary and will include:
• a high level of sampling of assessment decisions N.B. In some instances the EQA may visit each assessment location and qualification / unit of credit candidate (e.g. single candidates dispersed throughout different small companies on government funded programmes)
• an in-depth scrutiny of assessment plans, materials and records
• specific centre guidance aimed at the successful implementation of qualifications and / or units of credit in SMEs via approved centre partnerships. This can include guidance on the quantity and quality of valid, authentic, and transferable evidence expected to be attributed to individual candidates
• ensuring centres are following the requirements prescribed in any appropriate assessment strategies and applicable codes of practice
• the identification and publication of good practice in centres

As part of the Quality Assurance process Proskills require an Enhanced External Verification process. This will be in the form of 1 significant underpinning knowledge question answered by the candidate for each unit of the qualification. The questions will be decided by GQA, and guideline answers must be submitted for approval and once approved kept in the Centre File to allow independent assessment

3. Qualification / Unit of Credit Candidates
All candidates must register with a GQA recognised/approved centre. The centre must maintain appropriate candidate personal details for external audit purposes etc.
The centre will provide candidates with advice and guidance on how to prepare for assessment and allocate an Assessor who will assess candidate ability to meet the requirements of the relevant qualifications / unit of credit. It is the candidate's responsibility to demonstrate competence and to do this they must:
• prove they can consistently meet all the qualification and / or unit of credit criteria
• provide evidence from work, that they can perform competently in all the contexts specified in the qualification / unit of credit requirements
• prove that they have the knowledge and understanding required to perform competently, even where they have not provided evidence from the workplace

It is therefore critical that quality evidence is provided in a format to allow the Assessor to make a decision and for the Internal Verifier to audit/verify his/her decision.

4. Evidence
A qualification and / or credit is awarded when a person has achieved the necessary outcomes of the qualification and / or unit of credit.
The specific combination of units necessary to achieve a qualification is detailed in the qualification structure. Certificates of Unit Credit can be awarded when candidates achieve any one, or more, units from the qualification.
The evidence the candidate brings forward is primarily evidence of performance of what he/she can do, not just what he/she knows. The assessment criteria / qualification requirements are described within the qualification and / or unit of credit itself and can incorporate practical skills and knowledge.
The assessor's role is to judge each relevant item of evidence. Each must be judged against the qualification and / or unit of credit requirements. It is not sensible to collect evidence against individual criteria. Nor is it effective. If items of evidence were collected for each of the criteria, the candidate may have to produce many items of evidence, well above the number actually required. GQA recommend holistic assessment.

When judging each item of evidence, the assessor is deciding whether the evidence:
• is authentic – i.e. actually produced by the candidate
• meets the criteria
• relates as appropriate to a context defined within the qualification and / or unit of credit
• confirms that the candidate has the required underpinning knowledge

When the assessor makes a decision about the candidate's competence, he or she examines all the evidence available to determine:
• if the evidence, as a whole, covers all the evidence of achievement
• whether the evidence indicates consistency in competent performance
• whether there is enough evidence on which to base an inference of competence
The answer can only be:
• yes (the candidate is competent)
• no (the candidate is not yet competent)
• there is insufficient evidence to make a decision

Consistency means that the individual is likely to achieve the standard in their work role, in the different activities defined in the qualification and / or unit of credit over time and range of work. The assessor must judge how long a time period is enough to be confident that the candidate can perform reliably to the standard. Unsupported evidence i.e. based on a single assessment/visit will not normally prove consistency.

Performance evidence
Performance evidence can be what the individual actually produces, or the way the individual achieves the standard. One is called product evidence and the other process evidence.
Product evidence is tangible – you can look at it and feel it. Products can be inspected and the candidate can be asked questions about them.

In order to make a fair and objective assessment, the assessor must be able to answer the question: Is there sufficient evidence that the candidate can consistently meet the requirements of the qualification and / or unit of credit?
Process evidence describes the way the candidate has achieved an outcome – how they went about it. This may be, for example, the way the quality of products is checked or the way customer complaints are handled. This usually means observing the candidate in action.

Performance evidence may cover a number of outcomes. It makes sense to plan evidence collection so that what the candidate does, in the normal course of their job, can be related to different outcomes and units. The activities that clearly link to the qualification and / or unit of credit requirements are the things to concentrate on when planning evidence collection and assessment and when monitoring the candidate's progress. Look for opportunities in the candidate's job when evidence can be collected against a number of units at the same time.

Performance evidence can be:
• Naturally occurring – evidence produced in the normal course of work. Evidence of this sort is usually of high quality and reliable. It is also cost effective to collect naturally occurring evidence
• Taken from previous achievements – the candidate may be able to bring forward evidence from previous work experience to show that they are still competent to the standard.
• Evidence of prior achievement can be used when it can be shown to support a judgment that the candidate can still achieve the standard. So, the assessor must be satisfied that the evidence of prior achievement is sufficiently reliable to justify saying that the candidate is currently competent.
• Simulated – from circumstances specially designed to enable the candidate's performance to be assessed. Simulation is generally not acceptable. The exceptions to this are:

o Dealing with emergencies
o Dealing with accidents
o Certain pre-approved real time simulators
o Limited other procedures that cannot be practically performed in the workplace, and for which sufficient evidence can be collected through other means.

NB:It is not always possible or feasible to collect naturally occurring evidence. It is likely that some simulation may be needed, when it may take too long to wait for the evidence to arise e.g. it may be an aspect of performance which occurs infrequently. An example of this may be evidence of how to deal with emergencies i.e. it makes sense to look for evidence from sources other than naturally occurring ones, rather than for, say, waiting for the building to burn down. Centres must obtain GQA EQA approval prior to the use of simulation.

Knowledge evidence
Being able to achieve a standard requires the ability to put knowledge to work. The qualification and / or unit of credit indicates the knowledge each person should use if they are to perform competently.
It should not be necessary to test all of the candidate's knowledge separately; however, any exception to this would be detailed in the relevant Assessment Strategy. Performance evidence could show that the candidate knows what he or she is doing. When this is not the case, or if the assessor is not convinced from the performance evidence, it may be necessary to check the individual's knowledge separately.

Oral or written assessments must clearly provide a suitable means of checking the breadth and depth of an individual's knowledge. Assessors will need to judge the best mix of knowledge evidence according to individual circumstances. Knowledge evidence is useful when deciding the quality of performance evidence, but must not be used in isolation to judge competence or as an alternative to performance evidence. Care must be taken that candidate evidence is auditable and verifiable.

NB: These Qualification implementation guidelines are generic across the full range of GQA qualifications. Further guidance on acceptable evidence on each qualification will be found in the Introduction to the Qualification section of the candidate booklet

Collation of Evidence for Level 3 Qualifications

The definition of a Level 3 NVQ/SVQ is that competence in a broad range of varied work activities is performed in a wide variety of contexts, most of which are complex and non-routine. There is considerable responsibility and autonomy, and control or guidance of others is often required.

By the very nature of this, it is anticipated that Level 3 candidates will be able to provide evidence of their achievement drawn from successful work activities or projects, in other words, real examples of their work over time and range. All evidence should be dated, signed and authenticated/authorised by a recognised responsible person.

The following comments will help in the planning of evidence collection for Level 3 qualifications:

- Level 3 assessments are not normally carried out by the use of checklists
- Level 3 candidates are encouraged to provide evidence of their achievements drawn from their actual current work activities
- In many cases, evidence of achievement is not difficult to find
- Level 3 candidates should produce a CV that clearly indicates their relevant experience and achievement that contribute to the qualification
- A collation of evidence in the form of a Level 3 portfolio may be used to demonstrate competence against the standard
- The evidence must be cross referenced against the NVQ/SVQ standard (and where necessary justified)
- It may be appropriate for Level 3 candidates to undertake the related Level 2 qualification or some Level 2 units as a milestone/interim qualification
- Level 3 qualifications may include units of competence from Level 2 qualifications. If the candidate has already achieved any unit(s) and is regarded as currently competent then he/she will not be required to be reassessed on the same unit(s)
- Assessors will need to carry out performance and knowledge assessments for units/elements/pcs etc but the need for ongoing formal observations should not be as great if the candidate has produced a quality portfolio.

Some aspects of evidence may be subjected to independent assessment or enhanced external verification to satisfy the requirements of the standards setting body's assessment strategy

Candidate Declaration

Candidate Name.....

Centre/Company Name.....

Assessor(s) Name(s).....

I acknowledge receipt of this copy of GQA qualification booklet. The unit structure provides information on which units must be achieved to be awarded the qualification. The individual units detail in the necessary requirements etc that I must achieve.
I understand that I will have an important role in preparing for and planning assessments and with guidance from the Assessor I will Collect and record relevant evidence.

I have been informed of the appeals system, should I want to appeal against any part of the assessment process.

I understand the assessments will be carried out with regard to the company's/centre's Equal Opportunities Policy.

Candidate signature.....

Date.....

Production/Process Activity Guideline

To aid new or established workers, a centre may wish to describe a normal production/process activity relevant to the achievement of the national vocational qualification and identify which units/elements it will contribute to, e.g. the act of preparation for work, implementation and completion will contribute to a number of units of competence.

Production/Process Activity Relevant to the Achievement of this Qualification	Contributory to: Units/Elements

A/503/2772 209v2	Confirming Work Activities and Resources for an Occupational Work Area in the Workplace	Level 3	10 Credits

The aim of this unit is to ensure that the candidate has the skills and knowledge required to understand and plan work activities to complete the work programme, including how to identify and obtain the necessary resources. Candidates must also understand the factors that can affect progress and the sequence of work carried out, understand the impact of changes to work schedules and why and how to inform relevant people of required changes. Candidates must also have an understanding of how work activities can make a positive contribution to the environment, including knowledge of low and zero carbon requirements.

Learning outcome. The learner will:	Assessment criteria. The learner can:	Evidence.Ref.No		
1 Identify work activities, assess required resources and plan the sequence of work.	1.1 Identify work activities, assess required resources and plan the sequence of work.			
	1.2 Identify work activities and formulate a plan for their own sequence of work.			
	1.3 Explain the types of work relative to the occupational area and how to identify different work activities.			
	1.4 Explain methods of assessing the resources needed from a range of available information.			
	1.5 Explain the required information and the different methods used to prepare a work programme relative to the occupational area.			
2 Obtain clarification and advice where the resources required are not available.	2.1 Seek advice and clarity from appropriate sources on resources available and the alternatives that can be used for the work when required resources are not available.			
	2.2 Explain the different sources and methods that can be used to obtain clarification and advice when the required resources are not available.			
3 Evaluate the work activities and the requirements of any significant external factors against the project requirements.	3.1 Assess progress of work against project requirements, taking into account external factors relating to: – other occupations and /or customers – resources – weather conditions – health and safety requirements.			
	3.2 Explain different methods of evaluating work activities against the following project requirements: – contract conditions – contract programme – health and safety requirements of operatives.			
	3.3 Evaluate the requirements of significant external factors that could affect the progress of work, in relation to: – other related programmes – special working conditions – weather conditions – other occupations/people – resources – health and safety requirements.			
4 Identify work activities which influence each other and make the best use of theresources available.	4.1 Determine work activities that have an influence on each other.			
	4.2 Evaluate which work activities make the best use of available resources in relation to: – occupations and/or customers associated with the work – tools, plant and/or ancillary equipment – materials and components.			
	4.3 Explain different methods and sources that can identify which work activities influence each other.			

	4.4 Describe how to determine the sequence of work activities and how long each work activity will take.			
	4.5 Describe what zero and low carbon requirements are.			
	4.6 Explain how work activities and different ways of using resources can impact on zero and low carbon requirements, and make a positive contribution to the environment.			
5 Identify changed circumstances that require alterations to the work programme and justify them to decision makers.	5.1 Evaluate project progress against the work programme to identify any changed circumstances.			
	5.2 Inform line management and/or customers on the type and extent of any required changes to the work programme.			
	5.3 Explain how to identify possible alterations to the work programme to meet changed circumstances relating to action lists, method statements, duration, schedules and/or occupation specific requirements.			
	5.4 Explain how to assess contractual/work effects resulting from alterations to the work programme.			
	5.5 Explain the methods used to justify to decision makers on the effects resulting from alterations to the work programme.			

Assessor comments/feedback

K/507/9537 C1	Developing and Maintaining Good Occupational Working Relationships in the Workplace	Level 5	8 Credits

The aim of this unit is to ensure that the candidate has the skills and knowledge required to develop and maintain effective working relationships in communicating information on proposed work activities with colleagues, employers, customers, contractors, suppliers and others involved in, or affected by, the work activities. Candidates will be required to provide the appropriate level and amount of information and provide clarification and advice where it is required. Candidates must be able to discuss alternatives and options and resolve any differences of opinion in ways that minimise offence and maintain goodwill, trust and respect

Learning outcome. The learner will:	Assessment criteria. The learner can:	Evidence.ref.no		
1 Develop, maintain and encourage working relationships to promote good will and trust.	1.1 Give appropriate advice and information to relevant people about the occupational work activities and/or associated occupations involved			
	1.2 Apply the principles of equality and diversity by considering the needs of individuals when working and communicating with others.			
	1.3 Explain the methods and techniques used and personal attributes required to encourage and maintain working relationships that promote goodwill and trust with relevant people			
	1.4 Explain the principles of equality and diversity and how to apply them when working and communicating with others			
2 Inform relevant people about work activities in an appropriate level of detail, with the appropriate level of urgency.	2.1 Communicate on the following work activity information to relevant people following organisational procedures: • appropriate timescales • health and safety requirements • coordination of work procedures			
	2.2 Explain the different methods and techniques used to inform relevant people about work activities.			
	2.3 Explain the effects of not informing relevant people with the expected level of urgency.			
	2.4 Explain the different types of work activity related information and to what level of detail the following people would expect to receive: • colleagues • employers • customers • contractors • suppliers of products and services • other people affected by the work/project			

Assessor comments/feedback

K/507/9537 C1	Developing and Maintaining Good Occupational Working Relationships in the Workplace (continued)	Level 5	8 Credits

3 Offer advice and help to relevant people about work activities and encourage questions/ requests for clarification and comments	3.1 Give appropriate advice and information to relevant people about the different methods of carrying out occupational work activities to achieve the required outcome.			
	3.2 Explain the techniques of encouraging questions and/or requests for clarification and comments			
	3.3 Explain the different ways of offering advice and help to different people about work activities, in relation to: • progress • results • achievement • occupational problems • occupational opportunities • health and safety requirements • coordinated work			
4 Clarify proposals with relevant people and discuss alternative suggestions	4.1 Engage regular discussions with relevant people about the occupational work activity and/or other occupations involved.			
	4.2 Explain the methods of clarifying alternative proposals with relevant people			
	4.3 Explain the methods of suggesting alternative proposals			
5 Resolve differences of opinion in ways that minimise offence and maintain goodwill, trust and respect.	5.1 Examine and agree the work activities that satisfy all people involved and will meet the required outcome of the proposed method of work.			
	5.2 Explain the methods and techniques used to resolve differences of opinion in ways which minimise offence and maintain goodwill, trust and respect			

Assessor comments/feedback

R/503/2924 211v2	Confirming the Occupational Method of Work in the Workplace.	Level 3	11 Credits

The aim of this unit is to provide the learner with the knowledge and skills to interpret information from project data to evaluate and confirm work methods that will meet the project requirements, be cost effective and comply with statutory and contractual requirements and taking into account environmental issues. Candidates must be able to communicate recommended methods to all relevant persons.

Learning outcome. The learner will:	Assessment criteria. The learner can:	Evidence.ref.no		
1 Assess available project data accurately to determine the occupational method of work.	1.1 Interpret and extract information from drawings, specifications, schedules, manufacturer's information, methods of work, risk assessments and programmes of work.			
	1.2 Explain how to summarise the following project data: • Required quantities • Specifications • Detailed drawings • Health and safety requirements • Timescales • Scope of works.			
	1.3 Explain the different methods of assessing available project data.			
	1.4 Explain how to use project data to interpret the work method, In relation to: • Standard work procedures • Sequence of work • Organisation of resources (people, equipment, materials) • Work techniques • Working conditions (health, safety and welfare) • Risk assessment.			
2 Obtain additional information from alternative sources in cases where the available project data is insufficient.	2.1 Collect and collate additional information from alternative sources to clarify the work to be carried out.			
	2.2 Explain different methods and techniques of obtaining additional information from the following alternative sources when available project data is insufficient: • Customers or representatives • Suppliers • Regulatory authorities • Manufacturer's literature.			
3 Identify work methods that will make best use of resources and meet project, statutory and contractual requirements.	3.1 Examine potential work methods to carry out the occupational work activity.			
	3.2 Determine which work methods will make best use of relevant resources and meet health and safety requirements relating to technical and/or project criteria.			
	3.3 Explain how to identify work methods that make best use of resources and meet project, statutory and contractual requirements against technical criteria, in relation to: • Health and safety welfare (principles of protection) • Fire protection • Access and egress • Equipment availability • Availability of competent workforce • Pollution risk • Waste and disposal • Zero and low carbon outcomes • Weather conditions.			

	3.4 Explain how to identify work methods that make best use of resources and meet project, statutory and contractual requirements against project criteria, in relation to: • Conforming to statutory requirements • Customer and user needs • Contract requirements in terms of time, quantity and quality • Environmental considerations.			
	3.5 Explain how different methods of work can achieve zero/low carbon outcomes.			
4 Confirm and communicate the selected work method to relevant personnel.	4.1 Confirm the selected occupational work method that meets project, statutory and contractual requirements.			
	4.2 Communicate appropriately to relevant people on the selected occupational work method.			
	4.3 Describe the different techniques and methods of confirming and communicating work methods to relevant people.			
	4.4 Explain the principles of equality and diversity and how to apply them when working and communicating with others.			

Assessor comments/feedback

A/503/1170 641	Conforming to General Health, Safety and Welfare in the Workplace	Level 1	2 Credits

The aim of this unit is to ensure that the Candidate has the skills and knowledge required to work safely in the Construction Industry, in accordance with Organisation guidance, legislation and statutory requirements. Candidates must understand safety and warning notices, potential hazards, risk assessments, health risks and the recording and reporting of all Health and Safety related matters. Knowledge of protective and Health and Safety control equipment, accident and emergency procedures including evacuation and types of fire extinguishers are also required. This knowledge must cover the safety of the general public as well as site personnel and resources. All work carried out must also comply with legislation that covers the disposal of waste or consumable items.

Learning outcome. The learner will:	Assessment criteria. The learner can:	Evidence.Ref.No		
1 Comply with all workplace health, safety and welfare legislation requirements.	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 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.			
2 Recognise hazards associated with the workplace that have not been previously controlled and report them in accordance with organisational procedures.	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.			

A/503/1170 641	Conforming to General Health, Safety and Welfare in the Workplace (continued)	Level 1	2 Credits

3 Comply with organisational policies and procedures to contribute to health, safety and welfare.	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.			
4 Work responsibly to contribute to workplace health, safety and welfare whilst carrying out work in the relevant occupational area.	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.			
5 Comply with and support all organisational security arrangements and approved procedures.	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.			

Assessor comments

M/618/7006 817v1	Insulation and Building Treatments, Building Construction, Defects and Interfaces	Level 3	19 Credits

The aim of this unit is to ensure the candidate has the skills and knowledge to confirm competency in identifying common building defects including but not limited to: salt contamination, causes of dampness, rain penetration, rising damp, internal moisture vapour, damaged services and structural defects.

Candidates must demonstrate completion of the work within the estimated, allocated time and performance requirements of the system design, method statement and the required standard. Specific details of the skills and knowledge are shown within the unit criteria.

Learning outcome. The learner will:	Assessment criteria. The learner can:	Evidence.Ref.No		
1 Interpret the given design information relating to the work and resources and identify its suitability, taking into consideration building type, defects and detailing and recording and reporting issues in regard to building construction, defects and interfaces.	1.1 Interpret and extract relevant information from: • drawings • specifications • schedules • method statements • risk assessments • manufacturers' information • data sheets			
	1.2 Comply with information and/or instructions derived from risk assessments and method statements.			
	1.3 Explain the importance of organisational procedures to solve problems and why it is important to follow them.			
	1.4 Describe different types of information, their source, accuracy, completeness and how they are interpreted in relation to: • types of construction • energy efficiency measures • building treatments • drawings • method statements • design • standards • manufacturers' information • data sheets • official guidance • current legislation and regulations governing buildings			
2 Comply with current, relevant legislation, standards and official guidance to carry out your work and maintain safe and healthy work practices as stated for each measure to be installed.	2.1 Describe the relevant, current legislation, standards and official guidance and how they are applied.			
	2.2 Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills in relation to: • fires • spillages • injuries • emergencies relating to occupational activities • identification of and reporting of asbestos containing materials			
	2.3 Describe how to report risks and hazards identified by the following: • risk assessment • personal assessment • methods of work • safe systems of work • manufacturers' technical information • data sheets • statutory regulations • official guidance • Control of Substances Hazardous to Health (COSHH)			

	2.4 Explain the accident reporting procedures and who is responsible for making reports.			
3 Select the required quantity and quality of resources for the methods of work in relation to building construction, defects and interfaces.	3.1 Select resources associated with own work.			
	3.2 Check the suitability, compatibility and characteristics of the materials, components and finishes and determine if they are moisture open or moisture closed and their impact on the building.			
	3.3 Record and report issues or defects.			
	3.4 Describe why the characteristics, compatibility, quality, uses, sustainability, limitations and defects associated with the resources are important and how defects should be rectified.			
	3.5 Describe how the resources should be used and how problems associated with the resources are reported.			
	3.6 Describe how to confirm that the resources and materials conform to the specification.			
	3.7 Explain why the organisational procedures have been developed and how they are used for the selection of required resources.			
	3.8 Describe how to identify the hazards associated with the resources and methods of work and how they are overcome.			
4 Minimise the risk of damage to the work and surrounding area in relation to building construction, defects and interfaces	4.1 Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures.			
	4.2 Maintain a safe, clear and tidy work area.			
	4.3 Explain why it is important to maintain a safe, clear and tidy work area.			
	4.4 Dispose of waste in accordance with current legislation.			
	4.5 Describe how to protect work and its surrounding area from damage by general workplace activities, other occupations and adverse weather conditions and how to minimise damage to existing building fabric.			
	4.6 Explain the importance of protecting the work and its surrounding area against the risk of damage.			
5 Comply with the given contract information when identifying common building construction, defects and interfaces to the required specification.	5.1 Comply with the given contract information to carry out the work efficiently to the required specification.			
	5.2 Demonstrate work skills to carry out external and internal pre installation checks in regard to building construction, defects and material interfaces:			
	5.3 Identify common building defects including but not limited to: • salt contamination • causes of dampness • rain penetration • rising damp • internal moisture vapour • damaged services • structural defects			

	5.4 Describe how the methods of work to meet the specification, are carried out and how problems are identified and reported by the application of knowledge for safe, healthy and environmental work practices, procedures and skills relating to the method and area of work relating to the following: • the suitability, compatibility and characteristics of the materials, components and finishes, and determine if they are moisture open or moisture closed, their impact on the building and their appropriateness to the design and physical application • how to record and report issues or defects with the materials, components and finishes • why it is important to carry out external and internal pre-installation checks • how to carry out external and internal pre-installation checks, assessing, recording and reporting issues to include but not limited to: - property suitability - structural integrity - dampness - decay - exposure ratings - vents and ventilation - services (gas, electric, water, media cables) • why it is important to ensure that all necessary repairs are completed prior to installation • the implications that types of construction and materials have on the introduction of energy efficiency measures and other forms of building treatments with specific reference to: - roofs - walls including internal and external finishes - floors - windows and doors - chimneys and fireplaces - flues and combustion ventilation - fabric interfaces - existing services • the importance of the correct sequencing of installation of energy efficiency measures and building treatments • how performance varies in different construction types, locations and through the impact of habitation and usage • how alterations, additions and extensions to the original construction can affect the performance of the building • how to identify common building defects including but not limited to: salt contamination and causes of dampness, rain penetration, rising damp, internal moisture vapour, damaged services, structural defects and understand the implications of these when they are present			
	• how achieving continuity of the insulation and building treatments can prevent problems such as water ingress, poor energy efficiency and thermal bridges, whilst understanding the unique circumstances at party walls and the associated risks to adjacent properties			

	• how to recognise unintended consequences, why they happen, how to avoid them and the importance of moisture content in external fabric including but not limited to: - impacts on neighbouring properties - insulation fitting and placement for different insulation types - junctions - thermal bridging and condensation risks - thermal bypassing - void ventilation • the potential causes of mould and fungal decay in buildings and the impact of ventilation and air flow following the installation of thermal efficiency measures • the implications of building defects and the repairs required and how they will affect the choice of energy efficiency measures and building treatments • the importance of compatibility and interactions between measures and the fabric of the underlying building • how to identify when specialist skills and knowledge are required and report accordingly, including but not limited to: - fire safety - electrical - gas - asbestos - Radon - heritage - ecology - archaeological and architectural features - ventilation - dampness and building exposure • the relevance of an assessment of significance and how to recognise specific requirements for structures of special interest, traditional construction, hard-to-treat buildings and historical significance • how your actions can lead to unintended consequences, why they happen, how to avoid them and the importance of reporting them			
	5.5 Describe the needs of other occupations and the importance of team work and communication how to effectively communicate within a team when identifying building construction, defects and interfaces.			

Assessor comments

D/618/6997 644v3	Installing internal insulation to walls in the workplace	Level 3	22 Credits

The aim of this unit is to ensure the candidate has the skills and knowledge to confirm competency in installation of internal insulation to walls in the workplace.

Candidates must demonstrate completion of the work within the estimated, allocated time and performance requirements of the system design, method statement and the required standard.
Specific details of the skills and knowledge are shown within the unit criteria.

Learning outcome. The learner will:	Assessment criteria. The learner can:	Evidence.Ref.No		
1 Interpret the given design information relating to the work and resources to confirm its accuracy, completeness and relevance to the building type, fabric and condition when installing internal insulation to walls.	1.1 Interpret and extract relevant information from: •drawings •specifications •schedules •method statements •risk assessments •suppliers and manufacturers' information •data sheets			
	1.2 Comply with information and/or instructions derived from risk assessments and method statements.			
	1.3 Describe why the organisational procedures have been developed and how they are implemented.			
	1.4 Explain the importance of organisational procedures to solve problems and why it is important to follow them.			
	1.5 Describe different types of information, their source, accuracy, completeness and how they are interpreted in relation to: •drawings •specifications •schedules •method statements •risk assessments •design •suppliers and manufacturers' information •data sheets •official guidance •standards •current legislation and regulations governing buildings			
2 Know how to comply with environmentally responsible work practices to meet current, legislation standards and official guidance when installing internal insulation to walls.	2.1 Describe their responsibilities regarding potential accidents, health hazards and the environment in relation to: •the workplace •below ground level •confined spaces •at height •tools and equipment •materials and substances •movement and storage of materials by manual handling and mechanical lifting			
	2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to: •site •workplace •siting and location of vehicles •company •customer •access equipment •materials and waste storage •the general public			
	2.3 Explain the accident reporting procedures and who is responsible for making reports.			

	2.4 Describe the types of fire extinguishers available when installing internal insulation to walls and describe how and when they are used in relation to: • water •CO2 •foam •powder			
3 Comply with current, relevant legislation, standards and official guidance to carry out your work and maintain safe and healthy work practices	3.1 Demonstrate compliance with, relevant legislation, standards and official guidance when installing internal insulation to walls in relation to the following: •methods of work •safe use of health and safety control equipment •safe use of access equipment and harness systems •safe use, storage and handling of materials, tools and equipment •specific risks to health including mental health •specific risks associated with ventilation and combustion appliances			
	3.2 Explain why, when and how health and safety control equipment, identified by the principles of prevention, should be used when installing internal insulation to walls in relation to: •collective protective measures •personal protective equipment (PPE) •respiratory protective equipment (RPE) •local exhaust ventilation (LEV)			
	3.3 Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills in relation to: •fires •spillages •injuries •emergencies relating to occupational activities •identification of and reporting of asbestos containing materials			
	3.4 Describe how to report risks and hazards identified by the following: •risk assessment •personal assessment •methods of work •suppliers and manufacturers' technical information •data sheets •statutory regulations •official guidance •Control of Substances Hazardous to Health (COSHH)			

Assessor comments

D/618/6997 644v3	Installing internal insulation to walls in the workplace	Level 3	22 Credits

4 Select the required quantity and quality of resources for the methods of work to install internal insulation to walls.	4.1 Select resources associated with own work in relation to materials, components, fixings, finishes, tools and equipment.			
	4.2 Check the suitability, compatibility characteristics of the materials, components, fixing and finishes determine if they are moisture open or moisture closed and their impact on the building.			
	4.3 Record and report issues or defects.			
	4.4 Describe why the characteristics, compatibility, quality, uses, sustainability, limitations and defects associated with the resources are important and how defects should be rectified.			
	4.5 Describe how the resources should be used and how problems associated with the resources are reported in relation to: •protective sheeting internal •masking materials •warning signs •vent sleeves •insulation materials •fixings and adhesives •vapour control and breather membranes •finishing board and coat •combustion vents •all work tools equipment			
	4.6 Describe how to confirm that the resources and materials conform to the specification.			
	4.7 Explain why the organisational procedures have been developed and how they are used for the selection of required resources.			
	4.8 Describe how to identify the hazards associated with the resources and methods of work and how they are overcome.			
	4.9 Describe how to calculate the quantity of materials, length, thickness, area and wastage associated with the method and procedure to install insulation to internal walls.			
5 Minimise the risk of damage to the work and surrounding area when installing internal insulation to walls.	5.1 Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures.			
	5.2 Maintain a safe, clear and tidy work area.			
	5.3 Explain why it is important to maintain a safe, clear and tidy work area			
	5.4 Dispose of waste in accordance with current legislation.			
	5.5 Describe how to protect work and its surrounding area from damage by general workplace activities, other occupations and adverse weather conditions and how to minimise damage to existing building fabric.			
	5.6 Explain why and how the disposal of waste must be carried out safely in accordance with the following: •current legislation •environmental responsibilities •organisational procedures •suppliers and manufactures' information •data sheets •statutory regulations •official guidance			

D/618/6997 644v3	Installing internal insulation to walls in the workplace	Level 3	22 Credits

6 Complete the work within the allocated time when installing internal insulation to walls.	6.1 Demonstrate completion of your work within the estimated, allocated time and performance requirements of the system design, method statement and the required standard.			
	6.2 Describe the purpose of the work programme, including the estimated and allocated time and explain why deadlines should be kept in relation to: • types of progress charts, timetables and estimated times • organisational procedures for reporting circumstances which will affect the work programme.			
7 Comply with the given contract information to carry out the work efficiently to install internal insulation to walls. to the required specification.	7.1 Demonstrate the following work skills when installing internal insulation to walls: •measuring •marking out •fixing •finishing •positioning •sealing •securing			
	7.2 Use and maintain all work tools and equipment			
	7.3 Carry out external and internal pre-installation check, assessing, recording and reporting issues to include: •suitable access •property suitability •structural integrity •dampness •decay •vents and ventilation •services (gas, electric, water, media cables)			
	7.4 Check, record and report issues with construction ventilation, flues, chimneys and combustion air ventilators pre and post installation.			
	7.5 Fit breather membrane and vapour control layers.			
	7.6 Prepare and install internal wall insulation system to given system designer specification, method statement and the required standard using the following methods to given working instructions - placed - mechanically or adhesively fixed including thermal boards			
	7.7 Protect and reinstate, access routes, existing fixtures and fittings (carpets).			
	7.8 Remove, replace and reinstate skirting, coving and cornices, radiators and electrical sockets.			
	7.9 Carry out repairs after installation.			
	7.10 Handover and sign off to the customers satisfaction.			
	7.11 Carry out post installation checks.			

Assessor comments

	7.12 Describe how the methods of work to meet the specification, are carried out and how problems are identified and reported by the application of knowledge for safe, healthy and environmental work practices, procedures and skills relating to the method and area of work relating to the following: •the suitability, compatibility and characteristics of the materials, components and finishes, and determine if they are moisture open or moisture closed, their impact on the building and their appropriateness to the design and physical application •how to record and report issues or defects with the materials, components and finishes •why it is important to carry out external and internal pre-installation checks •how to carry out external and internal pre-installation checks, assessing, recording and reporting issues to include but not limited to: - suitable access - property suitability - structural integrity - dampness - condensation - penetrating damp - rising damp - decay - vents and ventilation - services (gas, electric, water, media cables) - architectural features - condition of down pipes, -roof overhangs and gutters - external and internal finish condition - wall moisture content - damp proof course height above floor level - condition of ground and suspended floor joists •why it is important to ensure that all necessary repairs are completed prior to installation •how to identify thermal bridges and understand solutions and limitations •the implications for party wall thermal bridge •how and why it is important to check, record and report issues with construction ventilation, flues, chimneys and combustion air ventilators pre and post installation •how to check for hidden utilities			

Assessor comments

	• how to recognise, record and report the key issues that may inhibit commencement of the work including but not limited to: - condition of building fabric - identification of any areas of potential water penetration - visibility and completeness of damp proof course - condition of window and door seals - height of internal floors in relation to external floor height - condition of roof - damaged or spalled brickwork - drainage and down pipes - protection and existence of sub floor ventilation - cavity width and identification of any debris - electrical cables, media cables, junction and meter boxes, signal receiving equipment - flues, gas pipes, chimneys and combustion air ventilators - identification of protected wildlife (nesting birds, bees, bats) • how to identify when specialist skills and knowledge are required and report accordingly including but not limited to: -fire safety -electrical -media cables -signal receiving equipment -junction boxes -asbestos -Radon -heritage -architectural and archaeological features -ecology -ventilation -rot • the relevance of an assessment of significance and how to recognise specific requirements for structures of special interest, traditional construction, hard-to-treat buildings and historical significance			

Assessor comments

	•how to identify, record, report and rectify unintended consequences not addressed in the; •design, including but not limited to the existence of: thermal bridges, thermal bypassing and water ingress, inadequate ventilation and condensation risk •why it is important to avoid unintended consequences •why it is important to explain installation procedure to building occupants to include but not limited to the following: - scope and work programme - safety requirements during the installation process - protection of property and personal items - specific benefits and implications to include homeowner information - agreed standards of making good •the implications of existing guarantees and warranties that may be compromised by the installation to include but not limited to: - wall ties - windows - damp proof course (dpc) - renders - Tyrolean coatings - silicone weather proof coatings •how to work with, around and in close proximity to plant and machinery •how to direct and guide the operations and movement of plant and machinery to ensure protection of a safe working environment •how to identify and follow the installation quality requirements •which wall types are unsuitable for internal wall insulation •the implications of insulating a terrace or semi-detached house regarding party wall bridge •why it is important to ensure pre-installation material checks are within specified parameters to include checking and recording batch number and reporting defects •how to protect and reinstate, access routes, existing fixtures and fittings (carpets) •how to prepare Internal walls for insulation			

Assessor comments

	• how to treat external walls in line with system holder specification • the importance of ensuring all work to services (gas, electric, water, media cables) is carried out by suitably qualified people • how to remove, replace and reinstate skirting, coving and cornices, radiators and electrical sockets • how to construct straps to walls to contain or hold insulation • how to fit mechanically or adhesively fixed insulation including thermal boards • how to fit breather membrane and vapour control layers • the importance of ensuring the integrity of breather membranes and vapour control layers • the different types of air and vapour control layers and breather membranes, where and how they should be used and why it is important to install them correctly • the importance of ensuring the integrity of air and vapour control layers and breather membranes following installation and the need to maintain continuity • why it is important to immediately record and report unforeseen events including but not limited to equipment malfunctions, situations and faults not identified in the original design • why it is important to maintain or install fire resistant barriers • how to maintain sound-proofing • how to seal joints, perimeters and penetrations • why it is important to minimise thermal bridging through compliance with design detail ensuring a consistent level of insulation to the area being insulated • how to carry out any repair after installation • why it is important to complete post installation checks in accordance with the system designer installations operations manual and report issues • why it is important to provide post installation advice and guidance to building occupants and client including homeowner packs • how to handover and sign off to the customers satisfaction • how to use all work tools and installation equipment in line with manufacturers' and system specification • how to work at height using access equipment and • harness systems • how and why maintenance of all work tools and installation equipment is carried out			
	7.13 Describe the needs of other occupations and the importance of team work and communication when installing external wall insulation.			

Assessor comments

H/618/6998	Installing insulation to framed sections of buildings in the workplace	Level 3	22 Credits
645v3			

The aim of this unit is to ensure the candidate has the skills and knowledge to confirm competency in installing insulation to framed sections of buildings in the workplace.

Candidates must demonstrate completion of the work within the estimated, allocated time and performance requirements of the system design, method statement and the required standard.
Specific details of the skills and knowledge are shown within the unit criteria.

Learning outcome. The learner will:	Assessment criteria. The learner can:	Evidence.Ref.No		
1 Interpret the given design information relating to the work and resources to confirm its accuracy, completeness and relevance to the building type, fabric and condition when installing insulation to framed sections of buildings.	1.1 Interpret and extract relevant information from: •drawings •specifications •schedules •method statements •risk assessments •manufacturers' information •data sheets			
	1.2 Comply with information and/or instructions derived from risk assessments and method statements.			
	1.3 Describe why the organisational procedures have been developed and how they are implemented.			
	1.4 Explain the importance of organisational procedures to solve problems and why it is important to follow them.			
	1.5 Describe different types of information, their source accuracy, completeness and how they are interpreted in relation to: •drawings •specifications •schedules •method statements •risk assessments •design •standards •manufacturers' information •data sheets •official guidance •current legislation and regulations governing buildings			
2 Know how to comply with environmentally responsible work practices to meet current, legislation standards and official guidance when installing insulation to framed sections of buildings.	2.1 Describe their responsibilities regarding potential accidents, health hazards and the environment in relation to: •the workplace •at height •tools and equipment •materials and substances •movement and storage of materials by manual handling and mechanical lifting			
	2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to: •site •workplace •siting and location of vehicles •company •customer •access equipment •materials and waste storage •the general public			
	2.3 Explain the accident reporting procedures and who is responsible for making reports.			

	2.4 Describe the types of fire extinguishers available when Installing insulation to framed sections of buildings and describe how and when they are used in relation to: • water •CO2 •foam •powder			
3 Comply with current, relevant legislation, standards and official guidance to carry out your work and maintain safe and healthy work practices	3.1 Demonstrate compliance with, relevant legislation, standards and official guidance when installing insulation to framed sections of buildings in relation to the following: •methods of work •safe use of health and safety control equipment •safe use of access equipment and harness systems •safe use, storage and handling of materials, tools and equipment •specific risks to health including mental health •specific risks associated with ventilation and combustion appliances			
	3.2 Explain why, when and how health and safety control equipment, identified by the principles of prevention, should be used when installing insulation to framed sections of buildings in relation to: •collective protective measures •personal protective equipment (PPE) •respiratory protective equipment (RPE) •local exhaust ventilation (LEV)			
	3.3 Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills in relation to: •fires •spillages •injuries. •emergencies rela`ting to occupational activities •identification of and reporting of asbestos containing materials			
	3.4 Describe how to report risks and hazards identified by the following: •risk assessment •personal assessment •methods of work •manufacturers' technical information •data sheets •statutory regulations •official guidance •Control of Substances Hazardous to Health (COSHH)			
4 Select the required quantity and quality of resources for the methods of work to install insulation to framed sections of buildings.	4.1 Select resources associated with own work in relation to materials, components, fixings, finishes, tools and equipment.			
	4.2 Check the suitability, compatibility characteristics of the materials, components, fixing and finishes determine if they are moisture open or moisture closed and their impact on the building.			
	4.3 Record and report issues or defects			
	4.4 Describe why the characteristics, compatibility, quality, uses, sustainability, limitations and defects associated with the resources are important and how defects should be rectified.			

	4.5 Describe how the resources should be used and how problems associated with the resources are reported in relation to: •protective sheeting •masking materials •warning signs •public protection equipment •Insulation materials •sheathing board •timber and metal studwork •breather membranes and vapour control layers •fire stops •acoustic treatments •plasterboard or finishing board •vent sleeves •down lighters •primers •expansion and movement joints, compression joints •metal lath and plaster beads •seal tapes and joints •joint strips and mesh •plaster finish •sealants •mechanical fixing components •pre-formed trims •all work tools and equipment			
	4.6 Describe how to confirm that the resources and materials conform to the specification.			
	4.7 Explain why the organisational procedures have been developed and how they are used for the selection of required resources.			
	4.8 Describe how to identify the hazards associated with the resources and methods of work.			
5 Minimise the risk of damage to the work and surrounding area when installing insulation to framed sections of buildings	5.1 Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures.			
	5.2 Maintain a safe, clear and tidy work area.			
	5.3 Explain why it is important to maintain a safe, clear and tidy work area			
	5.4 Dispose of waste in accordance with current legislation.			
	5.5 Describe how to protect work and its surrounding area from damage by general workplace activities, other occupations and adverse weather conditions and how to minimise damage to existing building fabric.			
	5.6 Explain the importance of protecting the work and its surrounding area against the risk of damage			
	5.7 Explain why and how the disposal of waste must be carried out safely in accordance with the following: •current legislation •environmental responsibilities •organisational procedures •suppliers and manufactures' information •data sheets •statutory regulations •official guidance			

H/618/6998 645v3	Installing insulation to framed sections of buildings in the workplace (Continued)	Level 3	22 Credits

6 Complete the work within the allocated time when installing insulation to framed sections of buildings.	6.1 Demonstrate completion of your work within the estimated, allocated time and performance requirements of the system design, method statement and the required standard.			
	6.2 Describe the purpose of the work programme, including the estimated and allocated time and explain why deadlines should be kept in relation to: • types of progress charts, timetables and estimated times • organisational procedures for reporting circumstances which will affect the work programme			
7 Comply with the given contract information to carry out the work efficiently to install insulation to framed sections of buildings to the required specification	7.1 Demonstrate the following work skills when installing insulation to framed sections of buildings: •removing •measuring •marking out •cutting •line •levelling •drilling •fitting •fixing •filling •finishing •positioning •securing			
	7.2 Use and maintain all work tools and equipment.			
	7.3 Carry out external and internal pre-installation check, assessing, recording and reporting issues to include: •suitable access •property suitability •structural integrity •dampness •decay •vents and ventilation •services (gas, electric, water, media cables)			
	7.4 Prepare and remove existing defective insulation, boarding, breather membranes and vapour control layers.			
	7.5 Remove defective timber, localised plaster and render.			
	7.6 Fix finishing board, sheathing board and plasterboard.			
	7.7 Make good any marks or screw and nail holes.			
	7.8 Fit insulation between and/or to timber and metal studwork.			
	7.9 Carry out installation checks to ensure insulation complies with the design.			
	7.10 Provide post installation advice and guidance to building occupants including homeowner packs.			
	7.11 Hand over and sign off to the customers satisfaction.			

Assessor comments

	Describe how the methods of work to meet the specification, are carried out and how problems are identified and reported by the application of knowledge for safe, healthy and environmental work practices, procedures and skills relating to the method and area of work relating to the following: •the suitability, compatibility and characteristics of the materials, components and finishes, and determine if they are moisture open or moisture closed, their impact on the building and their appropriateness to the design and physical application •how to record and report issues or defects with the materials, components and finishes •why it is important to explain installation procedure to building occupants to include but not limited to the following: - scope and work programme - safety requirements during the installation process - protection of property and personal items - specific benefits and implications to include homeowner information - agreed standards of making good •how to work with, around and in close proximity to plant and machinery •how to direct and guide the operations and movement of plant and machinery to ensure protection of a safe working environment •how to identify and follow the installation quality requirements •how and why it is important to check, record and report issues with construction ventilation, flues, chimneys and combustion air ventilators pre and post installation •why it is important to carry out external and internal pre-installation checks •how to carry out external and internal pre-installation checks, assessing, recording and reporting issues to include: -suitable access -property suitability -structural integrity			

Assessor comments

	-dampness -decay -vents and ventilation -services (gas, electric, water, media cables) •why it is important to ensure that all necessary repairs are completed prior to installation •how to identify when specialist skills and knowledge are required and report accordingly including but not limited to: -fire safety -acoustics -condensation analysis -electrical -gas -asbestos -Radon -rot -heritage -architectural features -ecology -ventilation •the relevance of an assessment of significance and how to recognise specific requirements for structures of special interest, traditional construction, hard-to-treat buildings and historical significance •how to identify, record, report and rectify unintended consequences not addressed in the design, including but not limited to the existence of thermal bridges, thermal bypassing and water ingress, inadequate ventilation and condensation risk •why it is important to avoid unintended consequences •how to identify potential thermal bridges •weather restrictions of the frame materials when temporarily exposed to the elements •the implications of existing guarantees and warranties that may be compromised by the installation to include but not limited to: -blocked and restricted ventilation -windows and door replacement -firestops -weather seals -silicone weather proof coatings •how to protect adjacent surfaces			

Assessor comments

	•how to check for and protect hidden utilities •how to remove wall fixtures including but not limited to light switches, radiators, down lighters, handrails, as necessary to install the insulation in accordance with the specification, design, drawings and method statements •how to prepare and remove existing wall lining, defective insulation, boarding, breather membranes and vapour control layers •how to remove defective timber, localised plaster and render •how to fix any holes, broken or damaged boards that form the backdrop for fixed, insulation. •how to identify and report the existence of thermal bridges and water ingress not addressed in the design •how to ensure pre-installation material checks are within specified parameters •how to cut, apply, fix or fit insulation between and or to timber and metal studwork •how to ensure insulation thickness and type meets the design specification for fire, thermal and acoustic requirements •how to fit breather membrane and vapour control layer in conjunction with design, maintaining their integrity •how to fix finishing board, sheathing board and plasterboard in conjunction with design •how to apply mastic aesthetic sealant to all interface, joints and penetrations •how to make good any marks or screw and nail holes •how to scrim and tape joints ready for surface finish •how to reinstate fixtures and fittings •the different types of air and vapour control layers and breather membranes, where and how they should be used and why it is important to install them correctly •the importance of ensuring the integrity of air and vapour control layers and breather membranes following installation and the need to maintain continuity •why it is important to immediately record and report unforeseen events including but not limited to equipment malfunctions, situations and faults not identified in the original design			

Assessor comments

	• why it is important to complete post installation checks in accordance with the design, method statement and installations operations manual and report issues to include but not limited to safeguarding the combustion ventilation and report defects •how to handover and sign off to the customers' satisfaction •how to use all work tools and equipment •how to work at height using access equipment and harness systems •how and why maintenance of all work tools and equipment is carried out			
	7.13 Describe the needs of other occupations and the importance of team work and communication when installing insulation to framed sections of buildings.			

Assessor comments

A/618/7008 819v1	Injecting, blowing or spraying insulation to framed sections of buildings in the workplace	Level 3	24 Credits

The aim of this unit is to ensure the candidate has the skills and knowledge to confirm competency in injecting, blowing or spraying insulation to framed sections of buildings in the workplace.
More specifically candidates must be able to 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 at least one of the following methods:

- injected
- blown
- sprayed

Candidates must demonstrate completion of the work within the estimated, allocated time and performance requirements of the system design, method statement and the required standard.
Specific details of the skills and knowledge are shown within the unit criteria

Learning outcome. The learner will:	Assessment criteria. The learner can:	Evidence.Ref.No		
1 Interpret the given design information relating to the work and resources to confirm its accuracy, completeness and relevance to the building type, fabric and condition when injecting, blowing or spraying insulation to framed sections of buildings	1.1 Interpret and extract relevant information from: •drawings •specifications •schedules •method statements •risk assessments •suppliers and manufacturers' information •data sheets			
	1.2 Comply with information and/or instructions derived from risk assessments and method statements.			
	1.3 Describe why the organisational procedures have been developed and how they are implemented.			
	1.4 Explain the importance of organisational procedures to solve problems and why it is important to follow them.			
	1.5 Describe different types of information, their source, accuracy, completeness and how they are interpreted in relation to: •drawings •specifications •schedules •method statements •risk assessments •design •standards •suppliers and manufacturers' information •data sheets •official guidance •current legislation and regulations governing buildings			
2 Know how to comply with environmentally responsible work practices to meet current legislation standards and official guidance when injecting, blowing or spraying insulation to framed sections of buildings.	2.1 Describe their responsibilities regarding potential accidents, health hazards and the environment in relation to: •the workplace •confined spaces •at height •tools and equipment •materials and substances •movement and storage of materials by manual handling and mechanical lifting			

	2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to: •site •workplace •siting and location of vehicles •company •customer •access equipment •material and waste storage •the general public			
	2.3 Explain the accident reporting procedures and who is responsible for making reports.			
	2.4 Describe the types of fire extinguishers available when injecting, blowing or spraying insulation to framed sections of buildings and describe how and when they are used in relation to: • water •CO2 •foam •powder			
3 Comply with current, relevant legislation, standards and official guidance to carry out your work and maintain safe and healthy work practices	3.1 Demonstrate compliance with relevant legislation, standards and official guidance when injecting, blowing or spraying insulation to framed sections of buildings in relation to the following: •methods of work •safe use of health and safety control equipment •safe use of access equipment and harness systems •safe use, storage and handling of materials, tools and equipment •operative maintenance of installation equipment •specific risks to health including mental health •specific risks associated with ventilation and combustion appliances			
	3.2 Explain why, when and how health and safety control equipment, identified by the principles of prevention, should be used when injecting, blowing or spraying insulation to framed sections of buildings in relation to: •collective protective measures •personal protective equipment (PPE) •respiratory protective equipment (RPE) •local exhaust ventilation (LEV)			
	3.3 Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills in relation to: •fires •spillages •injuries •emergencies relating to occupational activities •identification of and reporting of asbestos containing materials			
	3.4 Describe how to report risks and hazards identified by the following: •risk assessment •personal assessment •methods of work •manufacturers' technical information •data sheets •statutory regulations •official guidance •Control of Substances Hazardous to Health (COSHH)			

A/618/7008 819v1	Injecting, blowing or spraying insulation to framed sections of buildings in the workplace (Continued)	Level 3	24 Credits

4 Select the required quantity and quality of resources for the methods of work to inject, blow or spray insulation to framed sections of buildings.	4.1 Select resources associated with own work in relation to materials, components, fixings and finishes, tools and equipment.			
	4.2 Check the suitability, compatibility and characteristics of the materials, components, fixings and finishes and determine if they are moisture open or moisture closed and their impact on the building.			
	4.3 Record and report issues or defects.			
	4.4 Describe why the characteristics, compatibility, quality, uses, sustainability, limitations and defects associated with the resources are important and how defects should be rectified.			
	4.5 Describe how the resources should be used and how problems associated with the resources are reported in relation to: •protective sheeting •masking materials •warning signs •public protection equipment •insulation materials •sheathing board •timber and metal studwork •breather membranes and vapour control layers •fire stops •acoustic treatments •plasterboard or finishing board •vent sleeves •down lighters •primers •expansion and movement joints, compression joints •metal lath and plaster beads •seal tapes and joints •joint strips and mesh •plaster finish •sealants •pre-formed trims •all work tools and installation equipment			
	4.6 Describe how to confirm that the resources and materials conform to the specification.			
	4.7 Explain why the organisational procedures have been developed and how they are used for the selection of required resources.			
	4.8 Describe how to identify the hazards associated with the resources and methods of work and how they are overcome.			
	4.9 Describe how to calculate the quantity of materials required and used to ensure adequacy of fill as per the system designer specification and wastage associated with the method and procedure to inject, blow or spray insulation to framed sections of buildings.			
5 Minimise the risk of damage to the work and surrounding area when injecting, blowing or spraying insulation to framed sections of buildings.	5.1 Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures.			
	5.2 Maintain a safe, clear and tidy work area.			
	5.3 Explain why it is important to maintain a safe, clear and tidy work area.			
	5.4 Dispose of waste in accordance with current legislation.			

	5.5 Describe how to protect work and its surrounding area from damage by general workplace activities, other occupations and adverse weather conditions and how to minimise damage to existing building fabric.			
	5.6 Explain the importance of protecting the work and its surrounding area against the risk of damage.			
	5.7 Explain why and how the disposal of waste must be carried out safely in accordance with the following: •current legislation •environmental responsibilities •organisational procedures •manufacturers' information •data sheets •statutory regulations •official guidance			
6 Complete the work within the allocated time when injecting, blowing or spraying insulation to framed sections of buildings.	6.1 Demonstrate completion of your work within the estimated, allocated time and performance requirements of the system design, method statement and the required standard.			
	6.2 Describe the purpose of the work programme, including the estimated and allocated time and explain why deadlines should be kept in relation to: •types of progress charts, timetables and estimated times •organisational procedures for reporting circumstances which will affect the work programme			
7 Comply with the given contract information to carry out the work efficiently to inject, blow or spray insulation to framed sections of buildings to the required specification.	7.1 Carry out external and internal pre installation checks assessing, recording and reporting issues to include: •suitable access •property suitability •structural integrity •dampness •decay •vents and ventilation •services (gas, electric, water, media cables)			
	7.2 Demonstrate the following work skills injecting, blowing or spraying insulation to framed sections of buildings: •removing •measuring •calibrating •marking out •cutting •line and level •drilling •fitting •fixing •filling •finishing •positioning and securing			
	7.3 Use and maintain all work tools and installation equipment			
	7.4 Remove existing defective insulation, boarding, breather membranes and vapour control layers.			
	7.5 Assemble and operate installation processing equipment in line with manufacturers and system manuals.			
	7.6 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 at least one of the following methods: • injected • blown • sprayed			

A/618/7008 819v1	Injecting, blowing or spraying insulation to framed sections of buildings in the workplace (Continued)	Level 3	24 Credits

	7.7 Calibrate equipment to measure density, flow and quality tests to ensure they are in line with manufacturers' specifications and material requirements.			
	7.8 Remove defective timber, localised plaster and render.			
	7.9 Fix finishing board, sheathing board and plasterboard.			
	7.10 Make good any marks or screw and nail holes.			
	7.11 Fit insulation between and/or to timber and metal studwork.			
	7.12 Clean and disassemble installation processing equipment and pack away for transportation.			
	7.13 Carry out post installation checks to ensure insulation complies with the design.			
	7.14 Hand over and sign off to the customers satisfaction.			

Assessor comments

	7.15 Describe how the methods of work to meet the specification, are carried out and how problems are identified and reported by the application of knowledge for safe, healthy and environmental work practices, procedures and skills relating to the method and area of work relating to the following: • the suitability, compatibility and characteristics of the materials, components and finishes, and determine if they are moisture open or moisture closed, their impact on the building and their appropriateness to the design and physical application • how to record and report issues or defects with the materials, components and finishes • why it is important to explain installation procedure to building occupants to include but not limited to the following: - scope and work programme - safety requirements during the installation process - protection of property and personal items - specific benefits and implications to include homeowner information - agreed standards of making good • how to work with, around and in close proximity to plant and machinery • how to direct and guide the operations and movement of plant and machinery to ensure protection of a safe working environment • how to identify and follow the installation quality requirements			

Assessor comments

	•how and why it is important to check, record and report issues with construction ventilation, flues, chimneys and combustion air ventilators pre and post installation •why it is important to carry out external and internal pre-installation checks •how to carry out external and internal pre-installation checks, assessing, recording and reporting issues to include: -suitable access -property suitability -structural integrity -dampness -decay -vents and ventilation -services (gas, electric, water, media cables) •why it is important to ensure that all necessary repairs are completed prior to installation •how to identify when specialist skills and knowledge are required and report accordingly including but not limited to: -fire safety -acoustics -condensation analysis -electrical -gas -asbestos -Radon -rot -heritage -architectural features -ecology -ventilation •the relevance of an assessment of significance and how to recognise specific requirements for structures of special interest, traditional construction, hard-to-treat buildings and historical significance •how to identify, record, report and rectify unintended consequences not addressed in the design, including but not limited to the existence of: thermal bridges, thermal bypassing and water ingress, inadequate ventilation and condensation risk •weather restrictions of the frame materials when temporarily exposed to the elements			

Assessor comments

	• the implications of existing guarantees and warranties that may be compromised by the installation to include but not limited to: -blocked and restricted ventilation -windows and door replacement -firestops -weather seals -silicone weather proof coatings •how to protect adjacent surfaces •how to check for and protect hidden utilities •how to remove wall fixtures including but not limited to: light switches, radiators, down lighters, handrails, as necessary to install the insulation in accordance with the specification, design, drawings and method statements •how to prepare and remove existing wall lining, defective insulation, boarding, breather membranes and vapour control layers •how to remove defective timber, localised plaster and render •how to fix any holes, broken or damaged boards that form the backdrop for injected, blown and sprayed insulation. •how to identify and report the existence of thermal bridges and water ingress not addressed in the design •how to ensure pre-installation material checks are within specified parameters, to include checking and recording batch number and reporting defects •how to calibrate equipment to measure density, flow and quality tests to ensure they are in line with manufacturers specifications and material requirements •how to inject, blow and spray insulation between and or to timber and metal studwork •how to ensure insulation thickness and type meets the design specification for fire, thermal and acoustic requirements •how to fit breather membrane and vapour control layer in conjunction with design, maintaining their integrity •how to fix finishing board, sheathing board and plasterboard in conjunction with design •how to apply mastic aesthetic sealant to all interface, joints and penetrations •how to make good any marks or screw and nail holes •how to scrim and tape joints ready for surface finish •how to reinstate fixtures and fittings •the different types of air and vapour control layers and breather membranes, where and how they should be used and why it is important to install them correctly			

Assessor comments

	should be used and why it is important to install them correctly •the importance of ensuring the integrity of air and vapour control layers and breather membranes following installation and the need to maintain continuity •why it is important to immediately record and report unforeseen events including but not limited to equipment malfunctions, situations and faults not identified in the original design •how to clean and disassemble installation processing equipment and pack away for transportation •why it is important to complete post installation checks in accordance with the design, method statement and installations operations manual and report issues to include but not limited to safeguarding the combustion ventilation and report defects •how to handover and sign off to the customers' satisfaction •how to use all work tools and installation equipment •how to work at height using access equipment and harness systems •how and why maintenance of all work tools and installation equipment is carried out			
	7.16 Describe the needs of other occupations and the importance of team work and when injecting, blowing or spraying insulation to framed sections of buildings.			

Assessor comments

Y/618/6996	Installing insulation to cold roofs in the workplace	Level 2	19 Credits
451v4			

The aim of this unit is to ensure the candidate has the skills and knowledge to confirm competency in installation of insulation to cold roofs in the workplace. More specifically, this must include preparation and installation of insulation to cold roofs using at least one of the following methods in compliance with current regulations and to given working instructions.

Candidates must demonstrate completion of the work within the estimated, allocated time and performance requirements of the system design, method statement and the required standard.
Specific details of the skills and knowledge are shown within the unit criteria.

Learning outcome. The learner will:	Assessment criteria. The learner can:	Evidence.Ref.No		
1 Interpret the given design information relating to the work and resources to confirm its accuracy, completeness and relevance to the building type, fabric and condition when installing insulation to cold roofs.	1.1 Interpret and extract relevant information from: •drawings •specifications •schedules •method statements •risk assessments •manufacturers' information •data sheets			
	1.2 Comply with information and/or instructions derived from risk assessments and method statements.			
	1.3 Describe why the organisational procedures have been developed and how they are implemented.			
	1.4 Explain the importance of organisational procedures to solve problems and why it is important to follow them.			
	1.5 Describe different types of information, their source, accuracy, completeness and how they are interpreted in relation to: •drawings •specifications •schedules •method statements •risk assessments •design •standards •manufacturers' information •data sheets •official guidance •current legislation and regulations governing buildings			
2 Know how to comply with environmentally responsible work practices to meet current legislation standards and official guidance when installing insulation to cold roofs.	2.1 Describe their responsibilities regarding potential accidents, health hazards and the environment in relation to: •the workplace •below ground level •confined spaces •at height •tools and equipment •materials and substances •movement and storage of materials by manual handling and mechanical lifting			

Assessor comments

	2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to: •site •workplace •siting and location of vehicles •company •customer •assess equipment •materials and waste storage •the general public			
	2.3 Explain the accident reporting procedures and who is responsible for making reports.			
	2.4 Describe the types of fire extinguishers available when installing to cold roofs and describe how and when they are used in relation to: • water •CO2 •foam •powder			
3 Comply with current, relevant legislation, standards and official guidance to carry out your work and maintain safe and healthy work practices	3.1 Demonstrate compliance with, relevant legislation, standards and official guidance when installing insulation to cold roofs in relation to the following: •methods of work •safe use of health and safety control equipment •safe use of access equipment and harness systems •safe use, storage and handling of materials, tools and equipment •specific risks to health including mental health •specific risks associated with ventilation (roof space, inside the property and under floor) and combustion appliances			
	3.2 Explain why, when and how health and safety control equipment, identified by the principles of prevention, should be used when installing insulation to cold roofs in relation to: •collective protective measures •personal protective equipment (PPE) •respiratory protective equipment (RPE) •local exhaust ventilation (LEV)			
	3.3 Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills in relation to: •fires •spillages •injuries •emergencies relating to occupational activities •identification of and reporting of asbestos containing materials			
	3.4 Describe how to report risks and hazards identified by the following: •risk assessment •personal assessment •methods of work •manufacturers' technical information •data sheets •statutory regulations •official guidance •Control of Substances Hazardous to Health (COSHH)			

Y/618/6996 451v4	Installing insulation to cold roofs in the workplace (Continued)	Level 2	19 Credits

4 Select the required quantity and quality of resources for the methods of work to install insulation to cold roofs.	4.1 Select resources associated with own work in relation to materials, components, fixings, finishes, tools and equipment.			
	4.2 Check the suitability, compatibility characteristics of the materials, components, fixing and finishes determine if they are moisture open or moisture closed and their impact on the building.			
	4.3 Record and report issues or defects			
	4.4 Describe why the characteristics, compatibility, quality, uses, sustainability, limitations and defects associated with the resources are important and how defects should be rectified.			
	4.5 Describe how the resources should be used and how problems associated with the resources are reported in relation to: •protective sheeting •warning signs •temporary barriers •insulation •pipe insulation •tank and cylinder jackets •insulation fixings and ancillary items •access boards •loft hatches •light wells •soffit and fascia boards •tile vents •ridge tiles •sarking felt vents •draught-proofing materials •fire rated caps •cable protection •all work tools , equipment			
	4.6 Describe how to confirm that the resources and materials conform to the specification			
	4.7 Explain why the organisational procedures have been developed and how they are used for the selection of required resources			
	4.8 Describe how to identify the hazards associated with the resources and methods of work and how they are overcome			
	4.9 Describe how to calculate the quantity of materials required and used to ensure, adequacy of fill as per system designer specification and wastage associated with the method and procedure to install insulation to cold roofs			
5 Minimise the risk of damage to the work and surrounding area when installing insulation to cold roofs.	5.1 Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures			
	5.2 Maintain a safe, clear and tidy work area			
	5.3 Explain why it is important to maintain a safe, clear and tidy work area			
	5.4 Dispose of waste in accordance with current legislation.			
	5.5 Describe how to protect work and its surrounding area from damage by general workplace activities, other occupations and adverse weather conditions and how to minimise damage to existing building fabric			
	5.6 Explain the importance of protecting the work and its surrounding area against the risk of damage			

	5.7 Explain why and how the disposal of waste must be carried out safely in accordance with the following: •current legislation •environmental responsibilities •organisational procedures •manufacturers' information •data sheets •statutory regulations •official guidance			
6 Complete the work within the allocated time when installing insulation to cold roofs.	6.1 Demonstrate completion of your work within the estimated, allocated time and performance requirements of the system design, method statement and the required standard			
	6.2 Describe the purpose of the work programme, including the estimated and allocated time and explain why deadlines should be kept in relation to: •types of progress charts, timetables and estimated times •organisational procedures for reporting circumstances which will affect the work programme.			
7 Comply with the given contract information to carry out the work efficiently to install insulation to cold roofs to the required specification	7.1 Demonstrate the following work skills when installing insulation to cold roofs •measuring •marking out •calculating •cutting •fitting •filling •positioning •securing •making good			
	7.2 Use and maintain all work tools and equipment			
	7.3 Carry out external and internal pre installation checks assessing, recording and reporting issues to include: •suitable access •property suitability •structural integrity •dampness •decay •vents and adequate ventilation •services (gas, electric, water, media cables)			
	7.4 Prepare and install insulation to cold roofs using at least one of the following methods in compliance with current regulations and to given working instructions: •placed •mechanically or adhesively fixed			
	7.5 Prepare and install insulation to the following in compliance with current regulations and to given working instructions: •pipes •tanks and/or cylinders •access hatches •light wells			
	7.6 Protect electrical services, lighting, media, high amperage cables			
	7.7 Create and protect platforms and walkways for access and storage.			

	7.8 Remove and secure building occupants stored items.			
	7.9 Install passive ventilation and safe guarding existing ventilation.			
	7.10 Insulate and draught-proof access hatches.			
	7.11 Insulate light wells.			
	7.12 Minimise the effects of thermal bridging.			
	7.13 Carry out post installation checks to ensure insulation complies with the design.			
	7.14 Provide post installation advice and guidance to building occupants including homeowner packs.			
	7.15 Hand over and sign off to the customers satisfaction.			
	7.16 Describe how the methods of work to meet the specification, are carried out and how problems are identified and reported by the application of knowledge for safe, healthy and environmental work practices, procedures and skills relating to the method and area of work relating to the following: •the suitability, compatibility and characteristics of the materials, components and finishes, and determine if they are moisture open or moisture closed, their impact on the building and their appropriateness to the design and physical application •how to record and report issues or defects with the materials, components and finishes •why it is important to carry out external and internal pre-installation checks •how to carry out external and internal pre-installation checks, assessing, recording and reporting issues to include: -common infestations -protected species -suitable access -property suitability -structural integrity -dampness -decay -vents and ventilation -services (gas, electric, water, media cables) •why it is important to ensure that all necessary repairs are completed prior to installation •how and why it is important to check, record and report issues with construction ventilation, flues, chimneys and combustion air ventilators pre and post installation •how to identify and follow the installation quality requirements •how to recognise, record and report the key issues			

Assessor comments

	•that may inhibit commencement of the work including but not limited to: -condition of building fabric -identification of any areas of potential water penetration -condition of roof -drainage and down pipes •how to identify when specialist skills and knowledge are required and report accordingly including but not limited to: -fire safety -electrical -asbestos -Radon -heritage -architectural features -ecology -ventilation •the relevance of an assessment of significance and how to recognise specific requirements for structures of special interest, traditional (pre 1919) construction, hard-to-treat buildings and historical significance •how to identify, record, report and rectify unintended consequences not addressed in the design, including but not limited to the existence of: thermal bridges, thermal bypassing and water ingress, inadequate ventilation and condensation risk •why it is important to avoid unintended consequences •why it is important to explain installation procedure to building occupants to include but not limited to the following: -scope and work programme -safety requirements during the installation process -protection of property and personal items -specific benefits and implications to include homeowner information -agreed standards of making good •the implications of existing guarantees and warranties that may be compromised by the installation to include but not limited to: -roof skylights -loft guarantees -building warranties			

Assessor comments

	-timber treatment •how to work with, around and in close proximity to plant and machinery •how to direct and guide the operations and movement of plant and machinery to ensure protection of a safe working environment •how to work in confined spaces •how to create and protect platforms and walkways •why it is important to identify and remove infested, damaged and contaminated insulation from the roof area •how to remove and secure building occupants stored items •how to identify and install passive ventilation and report any ventilation limitations identified •why it is important to recognise and report the potential risk of increased condensation following installation relating to roof coverings (pitched and flat) and roof structures (timber, metal, concrete) •the importance of ensuring all work to services (gas, electric, water, media cables) is carried out by suitably qualified people •how to check for and protect hidden utilities •how to identify insulation materials and their characteristics for cold roofs, pipes, storage tanks, cylinders and access hatches •how to prepare and install, placed, mechanically or adhesively fixed insulation to cold roofs •why it is important to minimise the effects of thermal bridging through compliance with design detail ensuring consistent insulation of the area being insulated •how to check serviceability and provision of walkway boards and platforms •how to prepare and fix pipe, tank and cylinder insulation •how to ensure the insulation is contained within the prescribed areas •how to protect downlighters by installation of fire rated caps to the required specification •how to ensure insulation around electrical apparatus will not create fire hazards (light fittings, electrical units and cables) •how to insulate and draught-proof access hatches •how to Insulate light wells to ensure continuity of insulation			

Assessor comments

	•how to maintain fire resistant barriers •the different types of air and vapour control layers and breather membranes, where and how they should be used and why it is important to install them correctly •the importance of ensuring the integrity of air and vapour control layers and breather membranes following installation and the need to maintain continuity •why it is important to immediately record and report unforeseen events including but not limited to equipment malfunctions, situations and faults not identified in the original design •why it is important to complete post installation checks in accordance with the design, method statement and installations operations manual and report issues to include but not limited to safeguarding the combustion ventilation and report defects •why it is important to provide advice to building occupants to preserve the integrity of the insulation (insulation data sheet and warning labels) •how to handover and sign off to the customers' satisfaction •how to use all work tools and equipment •how to work at height using access equipment and harness systems •how and why maintenance of all work tools and equipment is carried out			
	7.17 Describe the needs of other occupations and the importance of team work and communication when installing insulation to cold roofs.			

Assessor comments

Y/618/7002	Installing blown insulation to cold roofs in the workplace	Level 2	19 Credits
813v1			

The aim of this unit is to ensure the candidate has the skills and knowledge to confirm competency in installation of blown insulation to cold roofs in the workplace.

Candidates must demonstrate completion of the work within the estimated, allocated time and performance requirements of the system design, method statement and the required standard.
Specific details of the skills and knowledge are shown within the unit criteria.

Learning outcome. The learner will:	Assessment criteria. The learner can:	Evidence.Ref.No		
1 Interpret the given design information relating to the work and resources to confirm its accuracy, completeness and relevance to the building type, fabric and condition when installing blown insulation to cold roofs.	1.1 Interpret and extract relevant information from: •drawings •specifications •schedules •method statements •risk assessments •manufacturers' information •data sheets			
	1.2 Comply with information and/or instructions derived from risk assessments and method statements.			
	1.3 Describe why the organisational procedures have been developed and how they are implemented.			
	1.4 Explain the importance of organisational procedures to solve problems and why it is important to follow them			
	1.5 Describe different types of information, their source, accuracy, completeness and how they are interpreted in relation to: •drawings •specifications •schedules •method statements •risk assessments •design •standards •manufacturers' information •data sheets •official guidance •current legislation and regulations governing buildings			
2 Know how to comply with environmentally responsible work practices to meet current, legislation standards and official guidance when installing blown insulation to cold roofs.	2.1 Describe their responsibilities regarding potential accidents, health hazards and the environment in relation to: •the workplace •confined spaces •at height •tools and equipment •materials and substances •movement and storage of materials by manual handling and mechanical lifting			
	2.3 Explain the accident reporting procedures and who is responsible for making reports.			
	2.4 Describe the types of fire extinguishers available when installing blown insulation to cold roofs and describe how and when they are used in relation to: • water • CO2 • foam • powder			

Y/618/7002 813v1	Installing blown insulation to cold roofs in the workplace (Continued)	Level 2	19 Credits

3 Comply with current, relevant legislation, standards and official guidance to carry out your work and maintain safe and healthy work practices.	3.1 Demonstrate compliance with, relevant legislation, standards and official guidance when installing blown insulation to cold roofs in relation to the following: •methods of work •safe use of health and safety control equipment •safe use of access equipment and harness systems •safe use, storage and handling of materials, tools and equipment •operative maintenance of installation equipment •specific risks to health including mental health •specific risks associated with ventilation and combustion appliances			
	3.2 Explain why, when and how health and safety control equipment, identified by the principles of prevention, should be used when installing blown insulation to cold roofs in relation to: •collective protective measures •personal protective equipment (PPE) •respiratory protective equipment (RPE) •local exhaust ventilation (LEV)			
	3.3 Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills in relation to: •fires •spillages •injuries •emergencies relating to occupational activities •identification of and reporting of asbestos containing materials			
	3.4Describe how to report risks and hazards identified by the following: •risk assessment •personal assessment •methods of work •manufacturers' technical information •data sheets •statutory regulations •official guidance •Control of Substances Hazardous to Health (COSHH)			
4 Select the required quantity and quality of resources for the methods of work to install blown insulation to cold roofs.	4.1 Select resources associated with own work in relation to materials, components, fixings and finishes, tools and equipment.			
	4.2 Check the suitability, compatibility and characteristics of the materials, components, fixings and finishes, determine if they are moisture open or moisture closed and their impact on the building.			
	4.3 Record and report issues or defects.			
	4.4 Describe why the characteristics, compatibility, quality, uses, sustainability, limitations and defects associated with the resources are important and how defects should be rectified.			

	4.5 Describe how the resources should be used and how problems associated with the resources are reported in relation to: •insulation •pipe insulation •tank and cylinder jackets •fixings and ancillary items •access boards •loft hatches •soffit and fascia boards •tile vents •ridge tiles •sarking felt vents •draught-proofing materials •fire rated caps •cable protection •all work tools •installation equipment			
	4.6 Describe how to confirm that the resources and materials conform to the specification.			
	4.7 Explain why the organisational procedures have been developed and how they are used for the selection of required resources.			
	4.8 Describe how to identify the hazards associated with the resources and methods of work and how they are overcome.			
	4.9 Describe how to calculate the quantity of materials required and used to ensure adequacy of fill as per the system designer specification and wastage associated with the method and procedure to install blown insulation to cold roofs.			
5 Minimise the risk of damage to the work and surrounding area when installing blown insulation to cold roofs.	5.1 Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures.			
	5.2 Maintain a safe, clear and tidy work area.			
	5.3 Explain why it is important to maintain a safe, clear and tidy work area.			
	5.4 Dispose of waste in accordance with current legislation.			
	5.5 Describe how to protect work and its surrounding area from damage by general workplace activities, other occupations and adverse weather conditions and how to minimise damage to existing building fabric.			
	5.6 Explain the importance of protecting the work and its surrounding area against the risk of damage.			
	5.7 Explain why and how the disposal of waste must be carried out safely in accordance with the following: •current legislation •environmental responsibilities •organisational procedures •manufacturers' information •data sheets •statutory regulations •official guidance			

Y/618/7002 813v1	Installing blown insulation to cold roofs in the workplace (Continued)	Level 2	19 Credits

6 Complete the work within the allocated time when installing blown insulation to cold roofs.	6.1 Demonstrate completion of your work within the estimated, allocated time and performance requirements of the system design, method statement and the required standard.			
	6.2 Describe the purpose of the work programme, including the estimated and allocated time and explain why deadlines should be kept in relation to: • types of progress charts, timetables and estimated times • organisational procedures for reporting circumstances which will affect the work programme			
7 Comply with the given contract information to carry out the work efficiently to install blown insulation to cold roofs to the required specification.	7.1 Demonstrate the following work skills when installing blown insulation to cold roofs: •removing •measuring •marking out •calculating •making good			
	7.2 Use and maintain all work tools and installation equipment.			
	7.3 Carry out pre-installation checks, assessing, recording and reporting issues to include: •suitable access •property suitability •structural integrity •dampness •decay •exposure ratings •vents and ventilation •services (gas, electric, water, media cables)			
	7.4 Prepare and install blown insulation to cold roofs in accordance with the specification, design, drawings and method statements to given working instructions.			
	7.5 Recognise, record and report the key issues that may inhibit commencement of the work including but not limited to: •condition of building fabric •identification of any areas of potential water penetration •condition of roof			
	7.6 Create and protect platforms and walkways for access and storage.			
	7.7 Remove and secure building occupants stored items.			
	7.8 Identify and remove infested, damaged and contaminated insulation from roof area.			
	7.9 Identify and install passive ventilation as required by the design and report any identified ventilation limitations.			
	7.10 Identify and report the potential risk of uninsulated omitted areas in relation to increased condensation following installation relating to roof coverings (pitched and flat) and roof structures (timber, metal, concrete).			
	7.11 Check for and protect hidden utilities.			
	7.12 Identify insulation materials and their characteristics for cold roofs, pipes, storage tanks, cylinders and access hatches.			
	7.13 Confirm pre-installation material checks are within specified parameters to include checking and recording batch number and reporting defects.			

	7.14 Assemble and operate installation processing equipment in line with manufacturers and system manuals.			
	7.15 Calibrate equipment to measure density, flow and quality tests to ensure they are in line with manufacturers' specifications and material requirements.			
	7.16 Install passive ventilation and safeguard existing ventilation.			
	7.17 Prepare and fix pipe, tank and cylinder insulation.			
	7.18 Ensure the insulation is contained within the prescribed areas.			
	7.19 Protect downlighters by installation of fire rated caps to the required specification.			
	7.20 Ensure insulation around electrical apparatus will not create fire hazards (light fittings, electrical units and cables).			
	7.21 Minimise the effects of thermal bridging through compliance with design detail and ensuring a consistent level of insulation of the installed area.			
	7.22 Install and maintain fire resistant barriers.			
	7.23 Clean and disassemble installation processing equipment and pack away for transportation.			
	7.24 Complete post installation checks in accordance with the system designer installations operations manual and report issues including but not limited to safeguarding the combustion ventilation and report defects.			
	7.25 Provide post installation advice and guidance to building occupants including homeowner packs, warning labels and data sheets.			
	7.26 Use all work tools and installation equipment in line with manufacturers and system specifications.			
	7.27 Work at height using access equipment and harness systems.			
	7.28 Use and maintain all work tools and installation equipment.			
	7.29 Handover and sign off to the customers satisfaction.			

Assessor comments

	7.30 Describe how the methods of work to meet the specification, are carried out and how problems are identified and reported by the application of knowledge for safe, healthy and environmental work practices, procedures and skills relating to the method and area of work relating to the following: •the suitability, compatibility and characteristics of the materials, components and finishes, and determine if they are moisture open or moisture closed, their impact on the building and their appropriateness to the design and physical application •how to record and report issues or defects with the materials, components and finishes •why it is important to carry out external and internal pre-installation checks •how to carry out external and internal pre-installation checks, assessing, recording and reporting issues to include: -suitable access -property suitability -structural integrity -dampness -decay -vents and ventilation -services (gas, electric, water, media cables) •why it is important to ensure that all necessary repairs are completed prior to installation •the implications of existing guarantees and warranties that may be compromised by the installation to include but not limited to: - timber treatment - re-wiring - loft guarantees - building warranties •how and why it is important to check, record and report issues with construction ventilation, flues, chimneys and combustion air ventilators pre and post installation •how to identify when specialist skills and knowledge are required and report accordingly including but not limited to: -fire safety -electrical -asbestos -Radon -heritage -ecology -architectural features -ventilation			

Assessor comments

	•the relevance of an assessment of significance and how to recognise specific requirements for structures of special interest, traditional construction, hard-to-treat buildings and historical significance •how to identify, record, report and rectify unintended consequences not addressed in the design, including but not limited to the existence of: thermal bridges, thermal bypassing and water ingress, inadequate ventilation and condensation risk •why it is important to avoid unintended consequences •why it is important to recognise, record and report the key issues that may inhibit commencement of the work including but not limited to: - condition of building fabric - identification of any areas of potential water penetration - condition of roof - damaged or spalled brickwork into gable ridge - drainage and down pipes •how to work with, around and in close proximity to plant and machinery •how to direct and guide the operations and movement of plant and machinery to ensure protection of a safe working environment •why it is important to explain installation procedure to building occupants to include but not limited to the following: - scope and work programme - safety requirements during the installation process - protection of property and personal items - specific benefits and implications to include homeowner information - agreed standards of making good •how to identify and follow the installation quality requirements •how to create and protect platforms and walkways •how to remove and secure stored items •why it is important to identify and remove infested, damaged and contaminated insulation from roof area •how to install passive ventilation as required by the design and report any identified ventilation limitations •how to identify and report the potential risk of uninsulated omitted areas in relation to increased condensation following installation relating to roof coverings (pitched and flat) and roof structures (timber, metal, concrete)			

Assessor comments

	•the importance of ensuring all work to services (gas, electric, water, media cables) is carried out by suitably qualified people •how to check for and protect hidden utilities •how to ensure pre-installation material checks are within specified parameters to include checking and recording batch number and reporting defects •how to assemble and operate installation processing equipment in line with manufacturers and system manuals •how to calibrate equipment to measure density, flow and quality tests to ensure they are in line with manufacturers specifications and material requirements •how to install passive ventilation and safeguard existing ventilation •how to prepare and install blown insulation to cold roofs •why it is important to minimise thermal bridging through compliance with design detail and ensuring a consistent level of insulation of the installed area •how to prepare and fix pipe, tank and cylinder insulation •how to ensure the insulation is contained within the prescribed areas •how to protect downlighters by installation of fire rated caps to the required specification •how to ensure insulation around electrical apparatus will not create fire hazards (light fittings, electrical units and cables) •how to install and maintain fire resistant barriers •how to clean and disassemble installation processing equipment and pack away for transportation •the different types of air and vapour control layers and breather membranes, where and how they should be used and why it is important to install them correctly •the importance of ensuring the integrity of air and vapour control layers and breather membranes following installation and the need to maintain continuity •why it is important to immediately record and report unforeseen events including but not limited to equipment malfunctions, situations and faults not identified in the original design •why it is important to complete post installation checks in accordance with the system designer installations operations manual and report issues to include but not limited to safeguarding the combustion ventilation and report defects			

Assessor comments

	•why it is important to provide post installation advice and guidance to building occupants including homeowner packs, warning labels and data sheets •how to handover and sign-off to the customers satisfaction •how to use all work tools and installation equipment in line with manufacturers and system specifications •how to work at height using access equipment and harness systems •how and why maintenance of all work tools and installation equipment is carried out			
	7.31 Describe the needs of other occupations and the importance of team work and communication when installing blown insulation to cold roofs.			

Assessor comments

J/617/8828	Develop customer relationships	Level 2	6 Credits
ICSB2			

The aim of this unit is to ensure the candidate has the skills and knowledge to deliver customer service professionally and in a way that will build positive working relationships with customers.

Learning outcome. The learner will:	Assessment criteria. The learner can:	Evidence.ref.no		
1 Build their customer's confidence that the service they give will be excellent	1.1 show that they behave assertively and professionally with customers			
	1.2 allocate the time they take to deal with their customer following organisational guidelines			
	1.3 reassure their customer that they are doing everything possible to keep the service promises made by the organisation			
2 Meet the expectations of their customers	2.1 recognise when there may be a conflict between their customer's expectations and your organisation's service offer			
	2.2 balance their customer's expectations with their organisation's service offer by offering an alternative or explaining the limits of the service offer			
	2.3 work effectively with others to resolve any difficulties in meeting their customer's expectations			
3 Develop the long-term relationship between their customer and their organisation	3.1 give additional help and information to their customer in response to customer questions and comments about their organisation's services or products			
	3.2 discuss expectations with their customer and explain how these compare with their organisation's services or products			
	3.3 advise others of feedback received from their customer			
	3.4 identify new ways of helping customers based on the feedback customers have given them			
	3.5 identify added value that their organisation could offer to long-term customers			
4 Know how to develop customer relationships	4.1 describe their organisation's services or products			
	4.2 explain the importance of customer retention			
	4.3 explain how their own behaviour affects the behaviour of the customer			
	4.4 describe how to behave assertively and professionally with customers			
	4.5 describe how to defuse potentially stressful situations			
	4.6 identify the limitations of their organisation's service offer			
	4.7 compare how customer expectations may change as the customer deals with their organisation			
	4.8 identify the cost and resource implications of an extension of the service offer to meet or exceed customer expectations			
	4.9 explain the cost implications of bringing in new customers as opposed to retaining existing customers			
	4.10 identify who to refer to when considering any variation to their organisation's service offer			

Assessor comments/feedback

K/618/6999 748v2	Installing insulation to create warm roofs in the workplace	Level 3	19 Credits

The aim of this unit is to ensure the candidate has the skills and knowledge to confirm competency in installation to create warm roofs in the workplace.

More specifically candidates must be able to prepare and install insulation to the roof pitch using at least one of the following methods in compliance with system specification, manufacturers' instructions, current regulations and to given work instructions:

•placed
•mechanically or adhesively fixed

Candidates must demonstrate completion of the work within the estimated, allocated time and performance requirements of the system design, method statement and the required standard. Specific details of the skills and knowledge are shown within the unit criteria.

Learning outcome. The learner will:	Assessment criteria. The learner can:	Evidence.ref.no		
1 Interpret the given design information relating to the work and resources to confirm its accuracy, completeness and relevance to the building type, fabric and condition when installing insulation to create warm roofs in the workplace	1.1 Interpret and extract relevant information from: •drawings •specifications •schedules •method statements •risk assessments •manufacturers' information •data sheets			
	1.2 Comply with information and/or instructions derived from risk assessments and method statements.			
	1.3 Describe why the organisational procedures have been developed and how they are implemented.			
	1.4 Explain the importance of organisational procedures to solve problems and why it is important to follow them.			
	1.5 Describe different types of information, their source, accuracy, completeness and how they are interpreted in relation to: •drawings •specifications •schedules •method statements • risk assessments •design •standards •manufacturers' information •data sheets •official guidance •current legislation and regulations governing buildings			
2 Know how to comply with environmentally responsible work practices to meet current, legislation standards and official guidance when installing insulation to create warm roofs.	2.1 Describe their responsibilities regarding potential accidents, health hazards and the environment in relation to: •the workplace •confined spaces •at height •tools and equipment •materials and substances •movement and storage of materials by manual handling and mechanical lifting			

	2.3 Explain the accident reporting procedures and who is responsible for making reports.			
	2.4 Describe the types of fire extinguishers available when installing insulation to create warm roofs and describe how and when they are used in relation to: • water •CO2 •foam •powder			
3 Comply with current, relevant legislation, standards and official guidance to carry out your work and maintain safe and healthy work practices.	3.1 Demonstrate compliance with, relevant legislation, standards and official guidance when installing insulation to create warm roofs in relation to the following: •methods of work •safe use of health and safety control equipment •safe use of access equipment and harness systems •safe use, storage and handling of materials, tools and equipment •specific risks to health including mental health •specific risks associated with ventilation and combustion appliances			
	3.2 Explain why, when and how health and safety control equipment, identified by the principles of prevention, should be used when installing external wall insulation in relation to: •collective protective measures •personal protective equipment (PPE) •respiratory protective equipment (RPE) •local exhaust ventilation (LEV)			
	3.3 Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills in relation to: •fires •spillages • injuries. •emergencies relating to occupational activities •identification of and reporting of asbestos containing materials			
	3.4 Describe how to report risks and hazards identified by the following: •risk assessment •personal assessment •methods of work •manufacturers' technical information •data sheets •statutory regulations •official guidance •Control of Substances Hazardous to Health (COSHH)			
4 Select the required quantity and quality of resources for the methods of work to install insulation to create warm roofs.	4.1 Select resources associated with own work in relation to materials, components, finishes, tools and equipment.			
	4.2 Check the suitability, compatibility characteristics of the materials, components and finishes determine if they are moisture open or moisture closed and their impact on the building.			
	4.3 Record and report issues or defects			
	4.4 Describe why the characteristics, compatibility, quality, uses, sustainability, limitations and defects associated with the resources are important and how defects should be rectified.			

	4.5 Describe how the resources should be used and how problems associated with the resources are reported in relation to: •protective sheeting •warning signs •temporary barriers •insulation materials •air and vapour control materials •insulation fixings •soffit and fascia boards •tile vents •ridge tiles •sarking felt vents •fire rated caps •cable protection •all work tools			
	4.6 Describe how to confirm that the resources and materials conform to the specification			
	4.7 Explain why the organisational procedures have been developed and how they are used for the selection of required resources.			
	4.8 Describe how to identify the hazards associated with the resources and methods of work and how they are overcome.			
	4.9 Describe how to calculate the quantity of materials required and used to ensure, adequacy of fill as per system designer specification and wastage associated with the method and procedure to install insulation to create warm roofs.			
5 Minimise the risk of damage to the work and surrounding area when installing insulation to create warm roofs.	5.1 Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures.			
	5.2 Maintain a safe, clear and tidy work area.			
	5.3 Explain why it is important to maintain a safe, clear and tidy work area			
	5.4 Dispose of waste in accordance with current legislation.			
	5.5 Describe how to protect work and its surrounding area from damage by general workplace activities, other occupations and adverse weather conditions and how to minimise damage to existing building fabric.			
	5.6 Explain why and how the disposal of waste must be carried out safely in accordance with the following: •current legislation •environmental responsibilities •organisational procedures •suppliers and manufactures' information •data sheets •statutory regulations •official guidance			
6 Complete the work within the allocated time when installing insulation to create warm roofs	6.1 Demonstrate completion of your work within the estimated, allocated time and performance requirements of the system design, method statement and the required standard.			

	6.2 Describe the purpose of the work programme, including the estimated and allocated time and explain why deadlines should be kept in relation to: •types of progress charts, timetables and estimated times •organisational procedures for reporting circumstances which will affect the work programme			
7 Comply with the given contract information to carry out the work efficiently to install insulation to create warm roofs to the required specification.	7.1 Demonstrate the following work skills when installing insulation to create warm roofs: •measuring •marking out •cutting •fitting •positioning •securing •making good			
	7.2 Use and maintain all work tools and equipment.			
	7.3 Carry out external and internal pre-installation check, assessing, recording and reporting issues to include: •suitable access •property suitability •structural integrity •dampness •decay •vents and ventilation •services (gas, electric, water, media cables)			
	7.4 Prepare and install insulation to the roof pitch using at least one of the following methods in compliance with system specification, manufacturers' instructions, current regulations and to given work instructions: • placed • mechanically or adhesively fixed			
	7.5 Prepare and install insulation to pipes, tanks and/or cylinders in compliance with current regulations and to given working instructions.			
	7.6 Install air and vapour control layers.			
	7.7 Protect electrical services, lighting, media, high amperage cables.			
	7.8 Create and protect platforms and walkways for access and storage.			
	7.9 Remove and secure building occupants stored items.			
	7.10 Install passive ventilation and safeguard existing ventilation in accordance with the system design.			
	7.11 Carry out post installation checks to ensure adequate ventilation above and below insulation.			
	7.12 Maintain fire resistant barriers.			
	7.13 Seal joints, perimeters and penetrations.			
	7.14 Minimise the effects of thermal bridging.			
	7.15 Complete post installation checks in accordance with the system designer installations operations manual and report issues to include but not limited to safeguarding the combustion ventilation and report defects.			

	7.16 Provide post installation advice and guidance to building occupants including homeowner packs.			
	7.17 Hand over and sign off to the customers satisfaction.			
	7.18 Describe how the methods of work to meet the specification, are carried out and how problems are identified and reported by the application of knowledge for safe, healthy and environmental work practices, procedures and skills relating to the method and area of work relating to the following: • the suitability, compatibility and characteristics of the materials, components and finishes, and determine if they are moisture open or moisture closed, their impact on the building and their appropriateness to the design and physical application • how to record and report issues or defects with the materials, components and finishes • why it is important to carry out external and internal pre-installation checks • how to carry out external and internal pre-installation checks, assessing, recording and reporting issues to include: -suitable access -property suitability -structural integrity -dampness -decay -vents and ventilation -services (gas, electric, water, media cables) •why it is important to ensure that all necessary repairs are completed prior to installation •how and why it is important to check, record and report issues with construction ventilation, flues, chimneys and combustion air ventilators pre and post installation • how to identify and follow the installation quality requirements •how to recognise, record and report the key issues that may inhibit commencement of the work including but not limited to: -condition of building fabric -identification of any areas of potential water penetration -condition of roof -damaged or spalled brickwork (gable end) -drainage and down pipes			

Assessor comments/feedback

	• how to identify when specialist skills and knowledge are required and report accordingly including but not limited to: -fires safety -electrical -asbestos -Radon -Heritage -architectural features -ecology -ventilation •the relevance of an assessment of significance and how to recognise specific requirements for structures of special interest, traditional construction hard-to-treat buildings and historical significance •how to identify, record, report and rectify unintended consequences not addressed in the design, including but not limited to the existence of: thermal bridges, thermal bypassing and water ingress, inadequate ventilation and condensation risk •why it is important to avoid unintended consequences •why it is important to explain installation procedure to building occupants to include but not limited to the following: -scope and work programme -safety requirements during the installation process -protection of property and personal items -specific benefits and implications to include homeowner information -agreed standards of making good •the implications of existing guarantees and warranties that may be compromised by the installation to include but not limited to: -timber treatment -replacement roof tiles and felt -re-wiring -loft guarantees -roof replacement warranties			

Assessor comments/feedback

	•how to work with, around and in close proximity to plant and machinery •how to direct and guide the operations and movement of plant and machinery to ensure protection of a safe working environment •how to work in confined spaces •how to create and protect platforms and walkways •why it is important to identify and remove infested, damaged and contaminated insulation from roof areas •how to remove and secure building occupants stored items •how to identify and install passive ventilation, maintain existing ventilation and report any ventilation limitations identified •the importance of ensuring all work to services (gas, electric, water, media cables) is carried out by suitably qualified people •how to check for and protect hidden utilities •why it is important to ensure pre-installation material checks are within specified parameters to include checking and recording batch number and reporting defects •how to prepare and install, placed, mechanically or adhesively fixed insulation to create warm roofs •the different types of air and vapour control layers and breather membranes, where and how they should be used and why it is important to install them correctly •the importance of ensuring the integrity of air and vapour control layers and breather membranes following installation and the need to maintain continuity •why it is important to immediately record and report unforeseen events including but not limited to equipment malfunctions, situations and faults not identified in the original design •why it is important to ensure adequate ventilation above and below insulation •why it is important to minimise thermal bridging through compliance with design detail ensuring a consistent level of insulation to the area being insulated •how to fit cavity barriers in accordance with specification from roof to ground level in order to avoid overspill and underspill between the two separated cavity elements			

Assessor comments/feedback

	•how to ensure the insulation is contained within the prescribed areas •how to ensure insulation around electrical apparatus will not create fire hazards (lighting, media and high amperage cables) •why it is important to maintain fire resistant barriers •how to seal joints, perimeters and penetrations •why it is important to recognise the potential risk of increased condensation following installation relating to roof coverings (pitched and flat) and roof structures (timber, metal, concrete) •why it is important to complete post installation checks in accordance with the design, method statement and installations operations manual and report issues to include but not limited to safeguarding the combustion ventilation and report defects •why it is important to provide advice to building occupants to preserve the integrity of the insulation (insulation data sheet and warning labels) •how to handover and sign off to the customers satisfaction •how to use all work tools and equipment •how to work at height using access equipment and harness systems •how and why maintenance of all work tools and equipment is carried out			
	7.19 Describe the needs of other occupations and the importance of team work and communication when installing insulation to create warm roofs.			

Assessor comments/feedback

R/618/7001 812v1	Spraying insulation to create warm roofs in the workplace	Level 3	19 Credits

The aim of this unit is to ensure the candidate has the skills and knowledge to confirm competency in spraying insulation to create warm roofs in the workplace.

Candidates must demonstrate completion of the work within the estimated, allocated time and performance requirements of the system design, method statement and the required standard.

Specific details of the skills and knowledge are shown within the unit criteria.

Learning outcome. The learner will:	Assessment criteria. The learner can:	Evidence.ref.no		
1 Interpret the given design information relating to the work and resources to confirm its accuracy, completeness and relevance to the building type, fabric and condition when spraying insulation to create warm roofs.	1.1 Interpret and extract relevant information from: •drawings •specifications •schedules •method statements •risk assessments •manufacturers' information •data sheets			
	1.2 Comply with information and/or instructions derived from risk assessments and method statements.			
	1.3 Describe why the organisational procedures have been developed and how they are implemented.			
	1.4 Explain the importance of organisational procedures to solve problems and why it is important to follow them			
	1.5 Describe different types of information, their source, accuracy, completeness and how they are interpreted in relation to: •drawings •specifications •schedules •method statements •risk assessments •design •standards •manufacturers' information •data sheets •official guidance •current legislation and regulations governing buildings			
2 Know how to comply with environmentally responsible work practices to meet current, legislation standards and official guidance when spraying insulation to create warm roofs.	2.1 Describe their responsibilities regarding potential accidents, health hazards and the environment in relation to: •the workplace •confined spaces •at height •tools and equipment •materials and substances •movement and storage of materials by manual handling and mechanical lifting			
	2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to: •site •workplace •siting and location of vehicles •company •customer •access equipment •material and waste storage •the general public			

	2.3 Explain the accident reporting procedures and who is responsible for making reports.			
	2.4 Describe the types of fire extinguishers available when spraying insulation to create warm roofs and describe how and when they are used in relation to: • water •CO2 •foam •powder			
3 Comply with current, relevant legislation, standards and official guidance to carry out your work and maintain safe and healthy work practices	3.1 Demonstrate compliance with relevant legislation, standards and official guidance when spraying insulation to create warm roofs in relation to the following: •methods of work •safe use of health and safety control equipment •safe use of access equipment and harness systems •safe use, storage and handling of materials, tools and equipment •operative maintenance of installation equipment •specific risks to health including mental health •specific risks associated with ventilation and combustion appliances			
	3.2 Explain why, when and how health and safety control equipment, identified by the principles of prevention, should be used when spraying insulation to create warm roofs in relation to: •collective protective measures •personal protective equipment (PPE) •respiratory protective equipment (RPE) •local exhaust ventilation (LEV)			
	3.3 Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills in relation to: •fires, spillages, injuries •emergencies relating to occupational activities •identification of and reporting of asbestos containing materials			
	3.4 Describe how to report risks and hazards identified by the following: •risk assessment •personal assessment •methods of work •manufacturers' technical information •data sheets •statutory regulations •official guidance •Control of Substances Hazardous to Health (COSHH)			
4 Select the required quantity and quality of resources for the methods of work to spray insulation to create warm roofs.	4.1 Select resources associated with own work in relation to materials and components, tools and equipment.			
	4.2 Check the suitability, compatibility and characteristics of the materials, components and finishes, determine if they are moisture open or moisture closed and their impact on the building.			
	4.3 Record and report issues or defects.			
	4.4 Describe why the characteristics, compatibility, quality, uses, sustainability, limitations and defects associated with the resources are important and how defects should be rectified.			

	4.5 Describe how the resources should be used and how problems associated with the resources are reported in relation to: •insulation •fixings and ancillary items •access boards •fire rated caps •cable protection •all work tools •installation equipment			
	4.6 Describe how to confirm that the resources and materials conform to the specification.			
	4.7 Explain why the organisational procedures have been developed and how they are used for the selection of required resources.			
	4.8 Describe how to identify the hazards associated with the resources and methods of work and how they are overcome.			
	4.9 Describe how to calculate the quantity of materials required and used to ensure adequacy of fill as per the system designer specification and wastage associated with the method and procedure to spray insulation to create warm roofs.			
5 Minimise the risk of damage to the work and surrounding area when spraying insulation to create warm roofs.	5.1 Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures.			
	5.2 Maintain a safe, clear and tidy work area.			
	5.3 Explain why it is important to maintain a safe, clear and tidy work area.			
	5.4 Dispose of waste in accordance with current legislation.			
	5.5 Describe how to protect work and its surrounding area from damage by general workplace activities, other occupations and adverse weather conditions and how to minimise damage to existing building fabric.			
	5.6 Explain the importance of protecting the work and its surrounding area against the risk of damage.			
	5.7 Explain why and how the disposal of waste must be carried out safely in accordance with the following: •current legislation •environmental responsibilities •organisational procedures •manufacturers' information •data sheets •statutory regulations •official guidance			
6 Complete the work within the allocated time when spraying insulation to create warm roofs.	6.1 Demonstrate completion of your work within the estimated, allocated time and performance requirements of the system design, method statement and the required standard.			
	6.2 Describe the purpose of the work programme, including the estimated and allocated time and explain why deadlines should be kept in relation to: • types of progress charts, timetables and estimated times • organisational procedures for reporting circumstances which will affect the work programme			

R/618/7001 812v1	Spraying insulation to create warm roofs in the workplace	Level 3	19 Credits

7 Comply with the given contract information to carry out the work efficiently to spray insulation to create warm roofs to the required specification.	7.1 Demonstrate the following work skills when spraying insulation to create warm roofs: •measuring •marking out •calculating •making good			
	7.2 Use and maintain all work tools and installation equipment.			
	7.3 Carry out external and internal pre-installation checks assessing, recording and reporting issues to include: •suitable access •property suitability •structural integrity •dampness •decay •exposure ratings •vents and ventilation •services (gas, electric, water, media cables)			
	7.4 Prepare and install sprayed insulation to create a warm roof in accordance with the specification, design, drawings and method statements to given working instructions.			
	7.5 Avoid damage to the building, recognise, record and report the key issues that may inhibit commencement of the work including but not limited to: • condition of building fabric • identification of any areas of potential water penetration • condition of roof			
	7.6 Create and protect walkways and platforms for access and storage.			
	7.7 Remove and secure building occupants stored items.			
	7.8 Identify and install passive ventilation as required by the design and report any identified ventilation limitations.			
	7.9 Identify and report the potential risk of uninsulated omitted areas in relation to increased condensation following installation relating to roof coverings (pitched and flat) and roof structures (timber, metal, concrete).			
	7.10 Check for and protect hidden utilities.			
	7.11 Protect electrical services, lighting, media, high amperage cables.			
	7.12 Use and maintain all work tools and installation equipment.			
	7.13 Confirm pre-installation material checks are within specified parameters to include checking and recording batch number and reporting defects.			
	7.14 Assemble and operate installation processing equipment in line with manufacturers and system manuals.			
	7.15 Calibrate equipment to measure density, flow and quality tests to ensure they are in line with manufacturers specifications and material requirements.			

Assessor comments/feedback

	7.15 Calibrate equipment to measure density, flow and quality tests to ensure they are in line with manufacturers specifications and material requirements.			
	7.16 Install passive ventilation and safeguard existing ventilation.			
	7.17 Prepare and fix pipe, tank and cylinder insulation.			
	7.18 Ensure the insulation is contained within the prescribed areas.			
	7.19 Ensure insulation around electrical apparatus will not create fire hazards (light fittings, electrical units and cables).			
	7.20 Install and maintain fire resistant barriers where appropriate.			
	7.21 Minimise the effects of thermal bridging through compliance with design detail and ensuring a consistent level of insulation of the installed area.			
	7.22 Clean and disassemble installation processing equipment and pack away for transportation.			
	7.23 Provide post installation advice and guidance to building occupants to include homeowner packs and data sheets.			
	7.24 Complete post installation checks in accordance with the system designer installations operations manual and report issues to include but not limited to safeguarding the combustion ventilation and report defects.			
	7.25 Use all work tools.			
	7.26 Work at height using access equipment and harness systems.			
	7.27 Carry out post installation checks.			

Assessor comments/feedback

	7.28 Describe how the methods of work to meet the specification, are carried out and how problems are identified and reported by the application of knowledge for safe, healthy and environmental work practices, procedures and skills relating to the method and area of work relating to the following: •the suitability, compatibility and characteristics of the materials, components and finishes, and determine if they are moisture open or moisture closed, their impact on the building and their appropriateness to the design and physical application •how to record and report issues or defects with the materials, components and finishes •why it is important to carry out external and internal pre-installation checks •how to carry out external and internal pre-installation checks, assessing, recording and reporting issues to include but not limited to: -suitable access -property suitability -structural integrity -dampness -decay -exposure ratings -vents and ventilation -services (gas, electric, water, media cables) •why it is important to ensure that all necessary repairs are completed prior to installation •how to identify when specialist skills and knowledge are required and report accordingly including but not limited to: -fire safety -electrical -asbestos -Radon -heritage -architectural features -ecology -ventilation			

Assessor comments/feedback

	•the relevance of an assessment of significance and how to recognise specific requirements for structures of special interest, traditional construction, hard-to-treat buildings and historical significance •how to identify, record, report and rectify unintended consequences not addressed in the design, including but not limited to the existence of: thermal bridges, thermal bypassing and water ingress, inadequate ventilation and condensation risk •why it is important to avoid unintended consequences •the implications of existing guarantees and warranties that may be compromised by the installation to include but not limited to: -building warranties -roof skylights -loft guarantees -timber treatment •recognise the procedures to check flues and combustion air ventilation •check, record and report issues with construction ventilation, flues, chimneys and combustion air ventilators pre and post installation •how to recognise, record and report the key issues that may inhibit commencement of the work including but not limited to: -condition of building fabric -identification of any areas of potential water penetration -condition of roof •how to work with, around and in close proximity to plant and machinery			

Assessor comments/feedback

	•how to direct and guide the operations and movement of plant and machinery to ensure protection of a safe working environment •why it is important to explain installation procedure to building occupants to include but not limited to the following: -scope and work programme -safety requirements during the installation process -protection of property and personal items -specific benefits and implications to include homeowner information -agreed standards of making good •how to identify and follow the installation quality requirements •how to create and protect walkways and platforms •how to remove and secure building occupants stored items •how to identify and install passive ventilation as required by the design and report any identified ventilation limitations •how to identify and report the potential risk of uninsulated omitted areas in relation to increased condensation following installation relating to roof coverings (pitched and flat) and roof structures (timber, metal, concrete) •the importance of ensuring all work to services (gas, electric, water, media cables) is carried out by suitably qualified people •how to check for and protect hidden utilities •how to protect electrical services, lighting, media, high amperage cables •how to ensure pre-installation material checks are within specified parameters to include checking and recording batch number and reporting defects			

Assessor comments/feedback

	•how to assemble and operate installation processing equipment in line with manufacturers and system manuals •how to calibrate equipment to measure density, flow and quality tests to ensure they are in line with manufacturers specifications and material requirements •how to prepare and install sprayed insulation to create a warm roof •how to ensure the insulation is contained within the prescribed areas •how to ensure insulation around electrical apparatus will not create fire hazards (light fittings, electrical units and cables) •how to install and maintain fire resistant barriers where appropriate •why it is important to minimise the effects of thermal bridging through compliance with design detail and ensuring a consistent level of insulation of the installed area •how to clean and disassemble installation processing equipment and pack away for transportation •the different types of air and vapour control layers and breather membranes, where and how they should be used and why it is important to install them correctly •the importance of ensuring the integrity of air and vapour control layers and breather membranes following installation and the need to maintain continuity •why it is important to complete post installation checks in accordance with the system designer installations operations manual and report issues to include but not limited to safeguarding the combustion ventilation and report defects installations operations manual and report issues to include but not limited to safeguarding the combustion ventilation and report defects			

Assessor comments/feedback

	•why it is important to provide post installation advice and guidance to building occupants including homeowner packs •how to handover and sign off to the customers satisfaction •how to use all work tools and installation equipment in line with manufacturers and system specifications •how to work at height using access equipment and harness systems •why it is important to immediately record and report unforeseen events including but not limited to equipment malfunctions, situations and faults not identified in the original design •how and why maintenance of all work tools and installation equipment is carried out			
	7.29 Describe the needs of other occupations and the importance of team work and communication when spraying insulation to create warm roofs.			

Assessor comments/feedback

L/618/6994 448v4	Installing external wall insulation (EWI Boarder) in the workplace	Level 3	25 Credits

The aim of this unit is to ensure the candidate has the skills and knowledge to confirm competency in installation of external wall insulation in the workplace.

Candidates must demonstrate completion of the work within the estimated, allocated time and performance requirements of the system design, method statement and the required standard.
Specific details of the skills and knowledge are shown within the unit criteria.

Learning outcome. The learner will:	Assessment criteria. The learner can:	Evidence.ref.no		
1 Interpret the given design information relating to the work and resources to confirm its accuracy, completeness and relevance to the building type, fabric and condition when installing external wall insulation.	1.1 Interpret and extract relevant information from: •drawings •specifications •schedules •method statements •risk assessments •suppliers and manufacturers' information •data sheets			
	1.2 Comply with information and/or instructions derived from risk assessments and method statements.			
	1.3 Describe why the organisational procedures have been developed and how they are implemented.			
	1.4 Explain the importance of organisational procedures to solve problems and why it is important to follow them			
	1.5 Describe different types of information, their source, accuracy, completeness and how they are interpreted in relation to: •drawings •specifications •schedules •method statements •risk assessments •design •standards •suppliers and manufacturers' information •data sheets •official guidance •current legislation and regulations governing buildings			
2 Know how to comply with environmentally responsible work practices to meet current, legislation standards and official guidance when installing external wall insulation.	2.1 Describe their responsibilities regarding potential accidents, health hazards and the environment in relation to: •the workplace •below ground level •confined spaces •at height •tools and equipment •materials and substances •movement and storage of materials by manual handling and mechanical lifting.			
	2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to: site •workplace •siting and location of vehicles •company •customer •access equipment •material and waste storage •the general public			

	2.3 Explain the accident reporting procedures and who is responsible for making reports.			
	2.4 Describe the types of fire extinguishers available when installing external wall insulation and describe how and when they are used in relation to: • water •CO2 •foam •powder			
3 Comply with current, relevant legislation, standards and official guidance to carry out your work and maintain safe and healthy work practices	3.1 Demonstrate compliance with, relevant legislation, standards and official guidance when installing external wall insulation in relation to the following: •methods of work •safe use of health and safety control equipment •safe use of access equipment and harness systems •safe use, storage and handling of materials, tools and equipment •operative maintenance of installation equipment •specific risks to health including mental health •specific risks associated with ventilation and combustion appliances			
	3.2 Explain why, when and how health and safety control equipment, identified by the principles of prevention, should be used when installing external wall insulation in relation to: •collective protective measures •personal protective equipment (PPE) •respiratory protective equipment (RPE) •local exhaust ventilation (LEV)			
	3.3 Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills in relation to: •fires •spillages •injuries •emergencies relating to occupational activities •identification of and reporting of asbestos containing materials			
	3.4 Describe how to report risks and hazards identified by the following: •risk assessment •personal assessment •methods of work •suppliers and manufacturers' technical information •data sheets •statutory regulations •official guidance •Control of Substances Hazardous to Health (COSHH)			
	3.5 Select resources associated with own work in relation to materials, components and finishes, tools and equipment.			
4 Select the required quantity and quality of resources for the methods of work to install external wall insulation.	4.1 Check the suitability, compatibility and characteristics of the materials, components and finishes, determine if they are moisture open or moisture closed and their impact on the building.			
	4.2 Record and report issues or defects.			
	4.3 Describe why the characteristics, compatibility, quality, uses, sustainability, limitations and defects associated with the resources are important and how defects should be rectified.			

	4.4 Describe how the resources should be used and how problems associated with the resources are reported in relation to: •protective sheeting •masking materials •insulation and fixings •warning signs •public protection equipment •renders, reinforcements, •base tracks and fixings •vent sleeves •primers •adhesives •fire stops •expansion and movement joints, compression joints •pattress's •corner beads and profiles •base coats •seal tapes and joints •mesh and stress patches •topcoats and finishes •sealants •mechanical fixing components •pre-formed trims •tracks and shims •beads •joints and cills •air and vapour control materials •all work tools and equipment			
	4.5 Describe how to confirm that the resources and materials conform to the specification.			
	4.6 Explain why the organisational procedures have been developed and how they are used for the selection of required resources.			
	4.7 Describe how to identify the hazards associated with the resources and methods of work and how they are overcome.			
	4.8 Describe how to calculate the quantity of materials required as per the system designer specification and wastage associated with the method and procedure to install external wall insulation.			
5 Minimise the risk of damage to the work and surrounding area when installing external wall insulation.	5.1 Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures.			
	5.2 Maintain a safe, clear and tidy work area.			
	5.3 Explain why it is important to maintain a safe, clear and tidy work area.			
	5.4 Dispose of waste in accordance with current legislation.			
	5.5 Describe how to protect work and its surrounding area from damage by general workplace activities, other occupations and adverse weather conditions and how to minimise damage to existing building fabric.			
	5.6 Explain the importance of protecting the work and its surrounding area against the risk of damage.			

	5.7 Explain why and how the disposal of waste must be carried out safely in accordance with the following: •current legislation •environmental responsibilities •organisational procedures •suppliers and manufacturers' information •data sheets •statutory regulations •official guidance			
6 Complete the work within the allocated time when installing external wall insulation.	6.1 Demonstrate completion of your work within the estimated, allocated time and performance requirements of the system design, method statement and the required standard.			
	6.2 Describe the purpose of the work programme, including the estimated and allocated time and explain why deadlines should be kept in relation to: •types of progress charts, timetables and estimated times •organisational procedures for reporting circumstances which will affect the work programme		`	
7 Comply with the given contract information to carry out the work efficiently to install external wall insulation to the required specification.	7.1 Demonstrate the following work skills when installing external wall insulation: •removing •measuring •marking out •cutting •line and level •drilling •fitting •fixing •filling •finishing •positioning and securing			
	7.2 Use and maintain all work tools and equipment.			
	7.3 Carry out external and internal pre installation checks assessing, recording and reporting issues to include: •suitable access •property suitability •structural integrity •dampness •decay •vents and adequate ventilation •services (gas, electric, water, media cables) •architectural features •vegetation •rainwater goods •loose surface finishes •external cracking •water ingress •damp proof course			
	7.4 Prepare and install insulated external wall system in accordance with the specification, design, drawings and method statements.			

	7.5 Cut and fix pre-formed trims and mounting blocks.			
	7.6 Install pattresses for fixtures and fittings.			
	7.7 Apply treatments to existing walls.		`	
	7.8 Embed mesh and stress patches in accordance with specification.			
	7.9 Carry out mid-install checks to boarding and basecoat stage.			
	7.10 Apply mastic aesthetic sealant to all interface, joints and penetrations.			
	7.11 Install air and vapour control layers.			
	7.12 Make good any marks and holes following scaffold removal.			
	7.13 Handover and sign off to the customers satisfaction.			
	7.14 Carry out post installation checks.			
	7.15 Describe how the methods of work to meet the specification, are carried out and how problems are identified and reported by the application of knowledge for safe, healthy and environmental work practices, procedures and skills relating to the method and area of work relating to the following: •the suitability, compatibility and characteristics of the materials, components and finishes, and determine if they are moisture open or moisture closed, their impact on the building and their appropriateness to the design and physical application •how to record and report issues or defects with the materials, components and finishes •why it is important to carry out external and internal pre-installation checks •how to carry out external and internal pre-installation checks, assessing, recording and reporting issues to include but not limited to: -suitable access -property suitability -structural integrity -dampness -decay -vents and ventilation -services (gas, electric, water, media cables) -vegetation -rainwater goods -loose surface finishes -external cracking -water ingress -damp proof course •why it is important to ensure that all necessary repairs are completed prior to installation			

Assessor comments/feedback

	•the importance and function of pull out tests •how to identify when specialist skills and knowledge are required and report accordingly including but not limited to: -fire safety -electrical -media cables -signal receiving equipment -junction boxes -asbestos -Radon -heritage -architectural features -ecology -ventilation -flues •the relevance of an assessment of significance and how to recognise specific requirements for structures of special interest, traditional construction, hard-to-treat buildings and historical significance •how to identify, record, report and rectify unintended consequences not addressed in the design, including but not limited to the existence of: thermal bridges, thermal bypassing and water ingress, inadequate ventilation and condensation risk •why it is important to avoid unintended consequences •the effects of weather and the restrictions when applying an external wall system •the implications of existing guarantees and warranties that may be compromised by the installation to include but not limited to: -wall ties -windows -damp proof course -renders -Tyrolean coatings -silicone weather proof coatings			

Assessor comments/feedback

	•how to protect the adjacent surfaces •how to remove ancillary wall fixtures including but not limited to: downpipes, soil pipes, alarm boxes, fences, handrails, as necessary to install the system in accordance with the specification, design, drawings and method statements •how to prepare surfaces by removing existing defective surface finishes, repairing and using appropriate materials to make good the following, including but not limited to: holes, loose render, belcasts, painted surfaces, remove existing vegetation and treat •how to apply surface treatments to existing walls •why it is important to identify and report architectural features not addressed on the design •why it is important to provide temporary protective covers to work areas •how to recognise, record and report the key issues that may inhibit commencement of the work including but not limited to: -confirm condition of substrate building fabric -identification of any areas of potential water penetration -visibility and completeness of damp proof course -condition of window and door seals -height of internal floors in relation to external floor height -condition of roof -damaged brickwork -drainage and down pipes -protection and existence of sub floor ventilation -cavity width and identification of any debris -electrical cables, media cables, junction and meter boxes, signal receiving equipment -flues, gas pipes, chimneys and combustion air ventilators -identification of protected wildlife (nesting birds, bees, bats)			

Assessor comments/feedback

	•why it is important to explain installation procedure to building occupants to include but not limited to the following: -scope and work programme -safety requirements during the installation process -protection of property and personal items -specific benefits and implications to include homeowner information -agreed standards of making good •how to work with, around and in close proximity to plant and machinery •how to direct and guide the operations and movement of plant and machinery to ensure protection of a safe working environment •how to identify and follow the installation quality requirements •how and why it is important to check, record and report issues with construction ventilation, flues, chimneys and combustion air ventilators pre and post installation •how to ensure pre-installation material checks are within specification •how to prepare and install insulated external wall system in accordance with the system design, specification and details, method statement and the require standard •how to cut and fix pre-formed trims and mounting blocks •how to cut, line, level, drill and fix tracks, beads, shims, joints, cills •how to install pattresses for fixtures and fittings •how to apply weather sealing and compressive tapes at interfaces and penetrations •how to install insulation to walls with specified fixing pattern using adhesive and mechanical fasteners •how to apply base coat to insulation •how to embed mesh and stress patches in accordance with specification •how to apply second coat and primers •how to reinstate ancillary wall fixtures including but not limited to downpipes, alarm boxes, fences, handrails •how to apply mastic aesthetic sealant to all interface, joints and penetration •how to make good any marks and holes following scaffold removal •the different types of air and vapour control layers and breather membranes, where and how they should be used and why it is important to install them correctly •the importance of ensuring the integrity of air and vapour control layers and breather membranes, following installation and the need to maintain continuity			

Assessor comments/feedback

	•why it is important to immediately record and report unforeseen events including but not limited to equipment malfunctions, situations and faults not identified in the original design •how to handover and sign off to the customers satisfaction and explain maintenance requirements •why it is important to complete post installation checks in accordance with the system designer installations manual, specifications, water penetration, anchorage and fixing, vents, services (gas, electric, water, media cables) •why it is important to provide post installation advice and guidance to building occupants and client including homeowner packs •how to use all work tools and installation equipment in line with manufacturers' and system specifications •how to work at height using access equipment and harness systems •how and why operative/technician care maintenance of all work tools and installation equipment is carried out			
	7.16 Describe the needs of other occupations and the importance of teamwork and communication when installing external wall insulation.			

Assessor comments/feedback

K/618/7005	Park homes insulation	Level 3	25 Credits
816v1			

The aim of this unit is to ensure the candidate has the skills and knowledge to confirm competency in installation of insulation to park homes in the workplace.

Candidates must demonstrate completion of the work within the estimated, allocated time and performance requirements of the system design, method statement and the required standard.
Specific details of the skills and knowledge are shown within the unit criteria.

Learning outcome. The learner will:	Assessment criteria. The learner can:	Evidence.ref.no		
1 Interpret the given design information relating to the work and resources to confirm its accuracy, completeness and relevance to the building type, fabric and condition when reviewing the suitability of Park Homes for insulation measures.	1.1 Interpret and extract relevant information from: •drawings •specifications •schedules •method statements •risk assessments •manufacturers' information •data sheets •surveys •Park Home site rules and restrictions			
	1.2 Comply with information and/or instructions derived from risk assessments and method statements.			
	1.3 Describe why the organisational procedures have been developed and how they are implemented.			
	1.4 Explain the importance of organisational procedures to solve problems and why it is important to follow them.			
	1.5 Describe different types of information, their source, accuracy, completeness and how they are interpreted in relation to: •drawings •specifications •schedules •method statements •risk assessments •designs •manufacturers' information •data sheets •official guidance •current legislation and regulations governing Park Homes •Park Home site rules			

Assessor comments/feedback

K/618/7005	Park homes insulation	Level 3	25 Credits
816v1			

The aim of this unit is to ensure the candidate has the skills and knowledge to confirm competency in installation of insulation to park homes in the workplace.

Candidates must demonstrate completion of the work within the estimated, allocated time and performance requirements of the system design, method statement and the required standard.
Specific details of the skills and knowledge are shown within the unit criteria.

Learning outcome. The learner will:	Assessment criteria. The learner can:	Evidence.ref.no		
1 Interpret the given design information relating to the work and resources to confirm its accuracy, completeness and relevance to the building type, fabric and condition when reviewing the suitability of Park Homes for insulation measures.	1.1 Interpret and extract relevant information from: •drawings •specifications •schedules •method statements •risk assessments •manufacturers' information •data sheets •surveys •Park Home site rules and restrictions			
	1.2 Comply with information and/or instructions derived from risk assessments and method statements.			
	1.3 Describe why the organisational procedures have been developed and how they are implemented.			
	1.4 Explain the importance of organisational procedures to solve problems and why it is important to follow them.			
	1.5 Describe different types of information, their source, accuracy, completeness and how they are interpreted in relation to: •drawings •specifications •schedules •method statements •risk assessments •designs •manufacturers' information •data sheets •official guidance •current legislation and regulations governing Park Homes •Park Home site rules			

Assessor comments/feedback

K/618/7005 816v1	Park homes insulation (Continued)	Level 3	25 Credits

2 Know how to comply with environmentally responsible work practices to meet current, legislation standards and official guidance when reviewing the suitability of Park Homes for insulation measures.	2.1 Describe their responsibilities regarding potential accidents, health hazards and the environment in relation to: •the workplace •below suspended structures •confined spaces •at height •tools and equipment •materials and substances •movement and storage of materials by manual handling and mechanical lifting •vehicles			
	2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to: •site •workplace •siting and location of vehicles •company •customer •access equipment •material and waste storage •park personnel, visitors and other park residents			
	2.3 Explain the accident reporting procedures and who is responsible for making reports.			
	2.4 Describe the types of fire extinguishers available when reviewing the suitability of Park Homes for insulation measures and describe how and when they are used in relation to: • water •CO2 •foam •powder			
3 Comply with current, relevant legislation, standards and official guidance to carry out your work and maintain safe and healthy work practices	3.1 Demonstrate compliance with relevant legislation, standards and official guidance when reviewing the suitability of Park Homes for insulation measures in relation to the following: •methods of work •safe use of health and safety control equipment •safe use of access equipment •safe use, storage and handling of materials, tools and equipment •operative maintenance of installation equipment •specific risks to health including mental health •specific risks associated with ventilation (roof space, inside the property, working below suspended supported floor structure) and also including combustion appliances			
	3.2 Explain why, when and how health and safety control equipment, identified by the principles of prevention, should be used when reviewing the suitability of Park Homes for insulation measures in relation to: •collective protective measures •personal protective equipment (PPE) •respiratory protective equipment (RPE) •local exhaust ventilation (LEV)			

	3.3 Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills in relation to: •fires •spillages •injuries •emergencies relating to occupational activities including but not limited to the following: -partial or full collapse of suspension system -electrical cabling -Radon, methane, LPG or other gases -identification of and reporting of asbestos containing materials			
	3.4 Describe how to report risks and hazards identified by the following: •risk assessment •personal assessment •methods of work •manufacturers' technical information •data sheets •statutory regulations •official guidance •Control of Substances Hazardous to Health (COSHH) •Park Home site rules			
4 Select the required quantity and quality of resources as per the designs for the methods of work when reviewing the suitability of Park Homes for insulation measures.	4.1 Select resources associated with own work in relation to materials, components and finishes, tools and equipment.			
	4.2 Check the suitability, compatibility and characteristics of the materials, components and finishes, determine if they are moisture open or moisture closed and their impact on the building.			
	4.3 Record and report issues or defects.			
	4.4 Describe why the characteristics, compatibility, quality, uses, sustainability, limitations and defects associated with the resources are important and how defects should be rectified.			
	4.5 Describe how the resources should be used and how problems associated with the resources are reported in relation to: •protective sheeting •warning signs •public protection equipment •calibration equipment			
	4.6 Describe how to confirm that the resources and materials conform to the specification.			
	4.7 Explain why the organisational procedures have been developed and how they are used for the selection of required resources.			
	4.8 Describe how to identify the hazards associated with the resources and methods of work and how they are overcome.			
	4.9 Describe how to calculate the quantity of materials required and used to carry out remediation and preparatory work.			

K/618/7005 816v1	Park homes insulation (Continued)	Level 3	25 Credits

5 Minimise the risk of damage to the work and surrounding area when reviewing the suitability of Park Homes for insulation measures.	5.1 Protect the work and its surrounding internal and external area from damage in accordance with safe working practices and organisational procedures.			
	5.2 Maintain a safe, clear and tidy work area.			
	5.3 Explain why it is important to maintain a safe, clear and tidy work area.			
	5.4 Dispose of waste in accordance with current legislation.			
	5.5 Describe how to protect work and its surrounding area from damage by general workplace activities, other occupations and adverse weather conditions and how to minimise damage to existing building fabric.			
	5.6 Explain the importance of protecting the work and its surrounding area against the risk of damage.			
	5.7 Explain why and how the disposal of waste must be carried out safely in accordance with the following: •current legislation •environmental responsibilities •organisational procedures •manufacturers' information •data sheets •statutory regulations •official guidance •Park Home site rules			
6 Complete the work within the allocated time when reviewing the suitability of Park Homes for insulation measures.	6.1 Demonstrate completion of your work within the estimated, allocated time and performance requirements of the system design, method statement and the required standard.			
	6.2 Describe the purpose of the work programme, including the estimated and allocated time and explain why deadlines should be kept in relation to: •types of progress charts, timetables and estimated times •organisational procedures for reporting circumstances which will affect the work programme			
7 Comply with the given contract information to carry out the work efficiently when reviewing the suitability of Park Homes for insulation measures to the required specification.	7.1 Demonstrate work skills to carry out external and internal pre-installation checks, to cover the following: •moisture content of frame at all corners •integrity of Park Home fabric and suspension system •any signs of board warping, bubbling, dry rot •the distance between Park Homes will meet fire regulations following installation •gas pipes, bottles and electrical cables are secure and safe •insect infestation, vermin, animals and protected species			
	7.2 Demonstrate work skills to carry out the following: •measuring •marking out •calibrating •completing remedial and preparatory work			

Assessor comments/feedback

	7.2 Use and maintain all work tools.			
	7.3 Carry out post installation checks.			
	7.4 Describe how the methods of work to meet the specification, are carried out and how problems are identified and reported by the application of knowledge for safe, healthy and environmental work practices, procedures and skills relating to the method and area of work relating to the following: •the suitability, compatibility and characteristics of the materials, components and finishes, and determine if they are moisture open or moisture closed, their impact on the building and their appropriateness to the design and physical application •how to record and report issues or defects with the materials, components and finishes •why it is important to carry out external and internal pre-installation checks •how to carry out external and internal pre-installation checks, assessing, recording and reporting issues to include but not limited to: -Park Home site approvals -suitable access -property suitability -structural integrity -dampness -decay -vents and ventilation -suitable minimum Park Home spacing following proposed installation -services (gas, electric, water, media cables, overhead cables, insect and vermin infestation, animals and protected species)			

Assessor comments/feedback

	•why it is important to ensure that all necessary repairs are completed prior to installation •how to recognise, record and report the key issues that may inhibit commencement of the work including but not limited to: -condition of building fabric -identification of any areas of potential water penetration -mould or evidence of condensation -moisture content of the timber frame and dry rot -condition of windows and doors -lack of permission from site owner -condition of roof -space between park homes would be less than 6m following installation -drainage and down pipes -poor condition of suspension system •how to identify when specialist skills and knowledge are required and report accordingly including but not limited to: -fire safety -electrical -asbestos -Radon -ecology -architectural features -ventilation -combustion ventilation -gas •how to identify, record, report and rectify unintended consequences not addressed in the design, including but not limited to the existence of: thermal bridges, thermal bypassing and water ingress, inadequate ventilation and condensation risk •why it is important to avoid unintended consequences •the different types of air and vapour control layers and breather membranes, where and how they should be used and why it is important to install them correctly •the importance of ensuring the integrity of air and vapour control layers and breather membranes following installation and the need to maintain continuity			

Assessor comments/feedback

	why it is important to explain installation procedure to building occupants to include but not limited to the following: -scope and work programme -safety requirements during the installation process -protection of property and personal items -specific benefits and implications to include homeowner information -agreed standards of making good •the implications of existing guarantees and warranties that may be compromised by the installation to include but not limited to: -the Park Home -windows and doors -renders -previous damp treatments •how to work with, around and in close proximity to plant and machinery •how to direct and guide the operations and movement of plant and machinery to ensure protection of a safe working environment •how to identify and follow the installation quality requirements •how and why it is important to check, record and report issues with combustion ventilation, flues, chimneys and combustion air ventilators pre, during and post installation •how to identify routing of internal services, using relevant detectors •why it is important to immediately record and report unforeseen events including but not limited to equipment malfunctions, situations and faults not identified in the original design •why it is important to complete post installation checks in accordance with the designs and operations manual and report issues to include, but not limited to, safeguarding the combustion ventilation, services and report defects •why it is important to provide post installation advice and guidance to building occupants including homeowner packs •how to handover and sign off to the customers satisfaction •how to use all work tools and equipment •how to work at height using access equipment •how and why maintenance of all work tools and equipment is carried out			
	7.5 Describe the needs of other occupations and the importance of team work and communication when reviewing the suitability of Park Homes for insulation measures.			

Assessor comments/feedback

L/618/7000 749v2	Installing insulation to suspended floors in the workplace	Level 2	19 Credits

The aim of this unit is to ensure the candidate has the skills and knowledge to confirm competency in installation to suspended floors in the workplace.

Candidates must demonstrate completion of the work within the estimated, allocated time and performance requirements of the system design, method statement and the required standard.
Specific details of the skills and knowledge are shown within the unit criteria.

Learning outcome. The learner will:	Assessment criteria. The learner can:	Evidence.ref.no		
1 Interpret the given design information relating to the work and resources to confirm its accuracy, completeness and relevance to the building type, fabric and condition when installing insulation to suspended floors.	1.1 Interpret and extract relevant information from: •drawings •specifications •schedules •method statements •risk assessments •manufacturers' information •data sheets			
	1.2Comply with information and/or instructions derived from risk assessments and method statements.			
	1.3Describe why the organisational procedures have been developed and how they are implemented.			
	1.4Explain the importance of organisational procedures to solve problems and why it is important to follow them.			
	1.5Describe different types of information, their source, accuracy, completeness and how they are interpreted in relation to: •drawings •specifications •schedules •method statements •risk assessments •design •standards •manufacturers' information •data sheets •official guidance •current legislation and regulations governing buildings			
2 Know how to comply with environmentally responsible work practices to meet current, legislation standards and official guidance when installing insulation to suspended floors.	2.1 Describe their responsibilities regarding potential accidents, health hazards and the environment in relation to: •the workplace •below ground level •confined spaces • at height •tools and equipment •materials and substances •movement and storage of materials by manual handling and mechanical lifting			
	2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to: •site •workplace •siting and location of vehicles •company •customer •access equipment •materials and waste storage •the general public			

	2.3 Explain the accident reporting procedures and who is responsible for making reports.			
	2.4 Describe the types of fire extinguishers available when applying surface finishes to installing insulation to suspended floors and describe how and when they are used in relation to: • water •CO2 •foam •powder			
3 Comply with current, relevant legislation, standards and official guidance to carry out your work and maintain safe and healthy work practices	3.1 Demonstrate compliance with, relevant legislation, standards and official guidance when installing insulation to suspended floors in relation to the following: •methods of work •safe use of health and safety control equipment •safe use of access equipment •safe use, storage and handling of materials, tools and equipment •specific risks to health including mental health •specific risks associated with ventilation (inside the property and under floor) and also including combustion appliances •specific risks associated with working in confined spaces			
	3.2 Explain why, when and how health and safety control equipment, identified by the principles of prevention, should be used when installing insulation to suspended floors, in relation to: •collective protective measures •personal protective equipment (PPE) •respiratory protective equipment (RPE) •local exhaust ventilation (LEV)			
	3.3 Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills in relation to: •fires •spillages •injuries •emergencies relating to occupational activities •identification of and reporting of asbestos containing materials			
	3.4 Describe how to report risks and hazards identified by the following: •risk assessment •personal assessment •methods of work •manufacturers' technical information •data sheets •statutory regulations •official guidance •Control of Substances Hazardous to Health (COSHH)			

Assessor comments/feedback

L/618/7000 749v2	Installing insulation to suspended floors in the workplace	Level 2	19 Credits

4 Select the required quantity and quality of resources for the methods of work to install insulation to suspended floors.	4.1 Select resources associated with own work in relation to materials, components, fixings, finishes, tools and equipment.			
	4.2 Check the suitability, compatibility and characteristics of the materials, components and finishes, determine if they are moisture open or moisture closed and their impact on the building.			
	4.3 Record and report issues.			
	4.4 Describe why the characteristics, compatibility, quality, uses, sustainability, limitations and defects associated with the resources are important and how defects should be rectified.			
	4.5 Describe how the resources should be used and how problems associated with the resources are reported in relation to: •protective sheeting •warning signs •temporary barriers •making good materials •filling materials •sealants •all work tools and equipment			
	4.6 Describe how to confirm that the resources and materials conform to the specification.			
	4.7 Explain why the organisational procedures have been developed and how they are used for the selection of required resources.			
	4.8 Describe how to identify the hazards associated with the resources and methods of work and how they are overcome.			
	4.9 Describe how to calculate the quantity of materials required and used to ensure, adequacy of fill as per system designer specification and wastage associated with the method and procedure to install insulation to suspended floors.			
5 Minimise the risk of damage to the work and surrounding area when installing insulation to suspended floors.	5.1 Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures.			
	5.2 Maintain a safe, clear and tidy work area.			
	5.3 Explain why it is important to maintain a safe, clear and tidy work area			
	5.4 Dispose of waste in accordance with current legislation.			
	5.5 Describe how to protect work and its surrounding area from damage by general workplace activities, other occupations and adverse weather conditions and how to minimise damage to existing building fabric.			
	5.6 Explain why and how the disposal of waste must be carried out safely in accordance with the following: •current legislation •environmental responsibilities •organisational procedures •suppliers and manufactures' information •data sheets •statutory regulations •official guidance			

L/618/7000 749v2	Installing insulation to suspended floors in the workplace	Level 2	19 Credits

6 Complete the work within the allocated time when installing insulation to suspended floors.	6.1 Demonstrate completion of your work within the estimated, allocated time and performance requirements of the system design, method statement and the required standard.			
	6.2 Describe the purpose of the work programme, including the estimated and allocated time and explain why deadlines should be kept in relation to: • types of progress charts, timetables and estimated times • organisational procedures for reporting circumstances which will affect the work programme			
7 Comply with the given contract information to carry out the work efficiently to install insulation to suspended floors to the required specification.	7.1 Demonstrate the following work skills when installing insulation to suspended floors: •measuring •marking out •cutting •fitting •positioning •securing •making good			
	7.2 Use and maintain all work tools and equipment.			
	7.3 Carry out external and internal pre-installation check, assessing, recording and reporting issues to include: •suitable access •property suitability •structural integrity •dampness •decay •vents and ventilation •services (gas, electric, water, media cables)			
	7.4 Recognise, record and report the key issues that may inhibit commencement of the work including but not limited to: •condition of building fabric •identification of any areas of potential water penetration •visibility and completeness of damp proof course •condition of window and door seals •height of internal floors in relation to finished ground level •drainage and down pipes •protection and existence of sub floor ventilation			
	7.5 Identify the potential risk of increased condensation following installation relating to suspended floors and how to prevent it.			
	7.6 Check, record and report issues with under floor (cross flow) ventilation, flues, chimneys and combustion air ventilators pre and post installation.			
	7.7 Prepare floor for insulation creating access points taking into consideration the following but not limited to: •safe systems of work •minimising damage •checking existing services •building construction and heritage significance •customer safety			

L/618/7000 749v2	Installing insulation to suspended floors in the workplace	Level 2	19 Credits

	7.8 Install placed, mechanically or adhesively fixed insulation to suspended floors.			
	7.9 Check for hidden utilities.			
	7.10 Maintain integrity of membranes.			
	7.11 Remove and minimise damage to floorcoverings.			
	7.12 Ensure the minimum void area air space is maintained by removing debris.			
	7.13 Clear and safeguard existing and install additional in accordance with the design and installation checks and report back issues which impact the ventilation assessment.			
	7.14 Protect the building occupants and their property.			
	7.15 Confirm pre-installation material checks are within specified parameters to include checking and reporting defects.			
	7.16 Rectify defects in preparation of insulation measures.			
	7.17 Maintain existing sound-proofing.			
	7.18 Install and maintain fire resistant barriers.			
	7.19 Carry out post installation checks in accordance with the design, method statement and installations operations manual and report issues to include but not limited to safeguarding the combustion ventilation and report defects.			
	7.20 Provide post installation advice and guidance to building occupants including homeowner packs.			
	7.21 Handover and sign off to the customers satisfaction.			
	7.22 Work at height using access equipment.			

Assessor comments/feedback

	7.23 Describe how the methods of work to meet the specification, are carried out and how problems are identified and reported by the application of knowledge for safe, healthy and environmental work practices, procedures and skills relating to the method and area of work relating to the following: •the suitability, compatibility and characteristics of the materials, components and finishes, and determine if they are moisture open or moisture closed, their impact on the building and their appropriateness to the design and physical application •how to record and report issues or defects with the materials, components and finishes •why it is important to carry out external and internal pre-installation checks •how to carry out external and internal pre-installation checks, assessing, recording and reporting issues to include: -suitable access -property suitability -structural integrity -dampness -decay -vents and ventilation -services (gas, electric, water, media cables) •how to recognise, record and report the key issues that may inhibit commencement of the work including but not limited to: -condition of building fabric -identification of any areas of potential water penetration -visibility and completeness of damp proof course -condition of window and door seals -height of internal floors in relation to external floor height -condition of roof -damaged and spalled brickwork -rain and waste water goods -protection and existence of sub floor ventilation -wall cavity width and identification of any debris			

Assessor comments/feedback

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

Assessor comments/feedback

	•how to identify and follow the installation quality requirements •how to work with, around and in close proximity to plant and machinery •how to direct and guide the operations and movement of plant and machinery to ensure protection of a safe working environment •why it is important to recognise the potential risk of increased condensation following installation relating to suspended floors and how to prevent it •how to prepare a floor for insulation, creating access points taking into consideration the following but not limited to: -safe systems of work -minimising damage -checking existing services -building construction and heritage significance -customer safety -archaeology •how to check for hidden utilities •the importance of ensuring all work to services (gas, electric, water) is carried out by suitably qualified people •how to maintain the integrity of membranes •how to remove and minimise damage to floorcoverings •why it is important to ensure the minimum void area air space is maintained by removing debris as required •why it is important to clear and safeguard existing and install additional ventilation if required in accordance with the design and installation checks and report back issues which impact the ventilation assessment •how to protect the building occupants and their property •how to install placed, mechanically or adhesively fixed insulation to suspended floors •the different types of air and vapour control layers and breather membranes, where and how they should be used and why it is important to install them correctly •the importance of ensuring the integrity of air and vapour control layers and breather membranes following installation and the need to maintain continuity			

Assessor comments/feedback

	•why it is important to immediately record and report unforeseen events including but not limited to equipment malfunctions, situations and faults not identified in the original design •how to ensure pre-installation material checks are within specified parameters and reporting defects •how to ensure existing cross flow ventilation is maintained within the floor void •how to maintain existing sound-proofing •how to install and maintain fire resistant barriers •why it is important to minimise thermal bridging through compliance with design detail ensuring a consistent level of insulation to the area being insulated •why it is important to complete post installation checks in accordance with the design, method statement and installations operations manual and report issues to include but not limited to safeguarding the combustion ventilation and report defects •why it is important to provide post installation advice and guidance to building occupants including homeowner packs •how to handover and sign off to the customers satisfaction •how to use all work tools and equipment •how to work at height using access equipment •how and why maintenance of all work tools and equipment is carried out			
	7.24Describe the needs of other occupations and the importance of team work and communication when installing insulation to suspended floors.			

Assessor comments/feedback

T/618/7007 818v1	Spraying insulation to suspended floors in the workplace	Level 3	20 Credits

The aim of this unit is to ensure the candidate has the skills and knowledge to confirm competency in spraying insulation to suspended floors in the workplace.

Candidates must demonstrate completion of the work within the estimated, allocated time and performance requirements of the system design, method statement and the required standard.
Specific details of the skills and knowledge are shown within the unit criteria.

Learning outcome. The learner will:	Assessment criteria. The learner can:	Evidence.ref.no		
1 Interpret the given design information relating to the work and resources to confirm its accuracy, completeness and relevance to the building type, fabric and condition when spraying insulation to suspended floors.	1.1 Interpret and extract relevant information from: •drawings •specifications •schedules •method statements •risk assessments •manufacturers' information •data sheets			
	1.2 Comply with information and/or instructions derived from risk assessments and method statements.			
	1.3 Describe why the organisational procedures have been developed and how they are implemented.			
	1.4 Explain the importance of organisational procedures to solve problems and why it is important to follow them.			
	1.5 Describe different types of information, their source, accuracy, completeness and how they are interpreted in relation to: •drawings •specifications •schedules •method statements •risk assessments •design •standards •manufacturers' information •data sheets •official guidance •current legislation and regulations governing buildings			
2 Know how to comply with environmentally responsible work practices to meet current, legislation standards and official guidance when spraying insulation to suspended floors.	2.1 Describe their responsibilities regarding potential accidents, health hazards and the environment in relation to: •the workplace •below ground level •in confined spaces •at height •tools and equipment •materials and substances •movement and storage of materials by manual handling and mechanical lifting			
	2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to: •site •workplace •siting and location of vehicles •company •customer •access equipment •material and waste storage •the general public			

	2.3 Explain the accident reporting procedures and who is responsible for making reports.			
	2.4 Describe the types of fire extinguishers available when spraying insulation to suspended floors and describe how and when they are used in relation to: • water •CO2 •foam •powder			
3 Comply with current, relevant legislation, standards and official guidance to carry out your work and maintain safe and healthy work practices.	3.1 Demonstrate compliance with relevant legislation, standards and official guidance when spraying insulation to suspended floors in relation to the following: •methods of work •safe use of health and safety control equipment •safe use of access equipment •safe use, storage and handling of materials, tools and equipment •operative maintenance of installation equipment •specific risks to health including mental health •specific risks associated with ventilation (inside the property and under floor) and also including combustion appliances •specific risks associated with working in confined spaces			
	3.2 Explain why, when and how health and safety control equipment, identified by the principles of prevention, should be used when spraying insulation to suspended floors in relation to: •collective protective measures •personal protective equipment (PPE) •respiratory protective equipment (RPE) •local exhaust ventilation (LEV)			
	3.3 Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills in relation to: •fires •spillages •injuries •emergencies relating to occupational activities •identification of and reporting of asbestos containing materials			
	3.4 Describe how to report risks and hazards identified by the following: •risk assessment •personal assessment •methods of work •manufacturers' technical information •data sheets •statutory regulations •official guidance •Control of Substances Hazardous to Health (COSHH)			
4 Select the required quantity and quality of resources for the methods of work to spray insulation to suspended floors.	4.1 Select resources associated with own work in relation to materials, components and finishes, tools and equipment.			
	4.2 Check the suitability, compatibility and characteristics of the materials, components and finishes, determine if they are moisture open or moisture closed and their impact on the building.			

	4.3 Record and report issues or defects.			
	4.4 Describe why the characteristics, compatibility, quality, uses, sustainability, limitations and defects associated with the resources are important and how defects should be rectified.			
	4.5 Describe how the resources should be used and how problems associated with the resources are reported in relation to: •protective sheeting •warning signs •temporary barriers •making good materials •filling materials •sealants •installation equipment •all work tools			
	4.6 Describe how to confirm that the resources and materials conform to the specification.			
	4.7 Explain why the organisational procedures have been developed and how they are used for the selection of required resources.			
	4.8 Describe how to identify the hazards associated with the resources and methods of work and how they are overcome.			
	4.9 Describe how to calculate the quantity of materials required and used to ensure adequacy of fill as per the system designer specification and wastage associated with the method and procedure to spray insulation to suspended floors.			
5 Minimise the risk of damage to the work and surrounding area when spraying insulation to suspended floors.	5.1 Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures.			
	5.2 Maintain a safe, clear and tidy work area.			
	5.3 Explain why it is important to maintain a safe, clear and tidy work area.			
	5.4 Dispose of waste in accordance with current legislation.			
	5.5 Describe how to protect work and its surrounding area from damage by general workplace activities, other occupations and adverse weather conditions and how to minimise damage to existing building fabric.			
	5.6 Explain the importance of protecting the work and its surrounding area against the risk of damage.			
	5.7 Explain why and how the disposal of waste must be carried out safely in accordance with the following: •current legislation •environmental responsibilities •organisational procedures •manufacturers' information •data sheets •statutory regulations •official guidance			

T/618/7007 818v1	Spraying insulation to suspended floors in the workplace	Level 3	20 Credits

6 Complete the work within the allocated time when spraying insulation to suspended floors.	6.1 Demonstrate completion of your work within the estimated, allocated time and performance requirements of the system design, method statement and the required standard.			
	6.2 Describe the purpose of the work programme, including the estimated and allocated time and explain why deadlines should be kept in relation to: •types of progress charts, timetables and estimated times •organisational procedures for reporting circumstances which will affect the work programme			
7 Comply with the given contract information to carry out the work efficiently to spray insulation to suspended floors to the required specification.	7.1 Demonstrate the following work skills when spraying insulation to suspended floors: •measuring •marking out •calculating •cutting •fitting •filling •positioning and securing •making good			
	7.2 Use and maintain all work tools and installation equipment.			
	7.3 Carry out external and internal pre installation checks assessing, recording and reporting issues to include: •suitable access •property suitability •structural integrity •dampness •decay •vents and ventilation •services (gas, electric, water, media cables)			
	7.4 Recognise, record and report the key issues that may inhibit commencement of the work including but not limited to: •condition of building fabric •identification of any areas of potential water penetration •visibility and completeness of damp proof course •condition of window and door seals •height of internal floors in relation to external floor height •drainage and down pipes •protection and existence of sub floor ventilation			
	7.5 Identify the potential risk of increased condensation following installation relating to suspended floors and how to prevent it.			
	7.6 Check, record and report issues with under floor (cross flow) ventilation, flues, chimneys and combustion air ventilators pre and post installation.			
	7.7 Prepare floor for insulation creating access points taking into consideration the following but not limited to: •safe systems of work •minimising damage •checking existing services •building construction and heritage significance •customer safety			
	7.8 Check for hidden utilities.			

T/618/7007 818v1	Spraying insulation to suspended floors in the workplace	Level 3	20 Credits

	7.9 Maintain integrity of membranes.			
	7.10 Remove and minimise damage to floorcoverings.			
	7.11 Ensure the minimum void area air space is maintained by removing debris.			
	7.12 Clear and safeguard existing and install additional ventilation in accordance with the design and installation checks and report back issues which impact the ventilation assessment.			
	7.13 Protect the building occupants and their property.			
	7.14 Confirm pre-installation material checks are within specified parameters to include checking and reporting defects.			
	7.15 Rectify defects in preparation of insulation measures.			
	7.16 Assemble, operate, clean and disassemble installation processing equipment.			
	7.17 Calibrate equipment to measure density, flow and quality tests.			
	7.18 Spray insulation to suspended floors.			
	7.19 Maintain existing sound-proofing.			
	7.20 Install and maintain fire resistant barriers.			
	7.21 Complete post installation checks in accordance with the design, method statement and installations operations manual and report issues to include but not limited to safeguarding the combustion ventilation and report defects.			
	7.22 Provide post installation advice and guidance to building occupants including homeowner packs.			
	7.23 Handover and sign off to the customers satisfaction.			
	7.24 Clean and disassemble installation processing equipment and pack away for transportation.			
	7.25 Work at height using access equipment			

Assessor comments/feedback

	7.26 Describe how the methods of work to meet the specification, are carried out and how problems are identified and reported by the application of knowledge for safe, healthy and environmental work practices, procedures and skills relating to the method and area of work relating to the following: •the suitability, compatibility and characteristics of the materials, components and finishes, and determine if they are moisture open or moisture closed, their impact on the building and their appropriateness to the design and physical application •how to record and report issues or defects with the materials, components and finishes •why it is important to carry out external and internal pre-installation checks •how to carry out external and internal pre-installation checks, assessing, recording and reporting issues to include: -suitable access -property suitability -structural integrity -dampness -decay -vents and ventilation -services (gas, electric, water, media cables) •why it is important to ensure that all necessary repairs are completed prior to installation •how to recognise, record and report the key issues that may inhibit commencement of the work including but not limited to: -condition of building fabric -identification of any areas of potential water penetration -visibility and completeness of damp proof course -condition of window and door seals -height of internal floors in relation to external floor height -condition of roof -damaged or spalled brickwork -rain and waste water goods -protection and existence of sub floor ventilation -cavity width and identification of any debris			

Assessor comments/feedback

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

Assessor comments/feedback

	•how to direct and guide the operations and movement of plant and machinery to ensure protection of a safe working environment •why it is important to recognise the potential risk of increased condensation following installation relating to suspended floors and how to prevent it •how to prepare a floor for insulation, creating access points taking into consideration the following but not limited to: -safe systems of work -minimising damage -checking existing services -building construction and heritage significance -customer safety -archaeology •how to check for hidden utilities •the importance of ensuring all work to services (gas, electric, water) is carried out by suitably qualified people •how to maintain integrity of membranes •how to remove and minimise damage to floorcoverings •why it is important to ensure the minimum void area air space is maintained by removing debris as required •why it is important to clear and safeguard existing and install additional ventilation if required in accordance with the design and installation checks and report back issues which impact the ventilation assessment •how to protect the building occupants and their property •how to assemble, operate, clean and disassemble installation processing equipment •how to calibrate equipment to measure density, flow and quality tests •how to spray insulation to suspended floors •how to ensure pre-installation material checks are within specified parameters to include checking and recording batch number and reporting defects •the different types of air and vapour control layers and breather membranes , where and how they should be used and why it is important to install them correctly •the importance of ensuring the integrity of air and vapour control layers and breather membranes following installation and the need to maintain continuity •why it is important to immediately record and report unforeseen events including but not limited to equipment malfunctions, situations and faults not identified in the original design			

Assessor comments/feedback

	•how to ensure existing cross flow ventilation is maintained within the floor void •how to maintain existing sound-proofing •how to install and maintain fire resistant barriers •why it is important to minimise thermal bridging through compliance with design detail ensuring a consistent level of insulation of the area being insulated •why it is important to complete post installation checks in accordance with the design, method statement and installations operations manual and report issues to include but not limited to safeguarding the combustion ventilation and report defects •why it is important to provide post installation advice and guidance to building occupants including homeowner packs •how to handover and sign off to the customers satisfaction •how to clean and disassemble installation processing equipment and pack away for transportation •how to use all work tools and installation equipment in line with manufacturers and system specifications •how to work at height using access equipment and harness systems •how and why maintenance of all work tools and installation equipment is carried out			
	7.27 Describe the needs of other occupations and the importance of team work and communication when spraying insulation to suspended floors.			

Assessor comments/feedback

H/618/7004 815v1	Injecting, blowing and spraying insulation to internal walls in the workplace	Level 3	22 Credits

The aim of this unit is to ensure the candidate has the skills and knowledge to confirm competency in injecting, blowing and spraying insulation to internal walls in the workplace.
More specifically candidates must be able to prepare and install Internal wall insulation system to given system designer specification, method statement and the required standard using at least two of the following methods to given working instructions:

- injected
- blown
- sprayed

Candidates must demonstrate completion of the work within the estimated, allocated time and performance requirements of the system design, method statement and the required standard.
Specific details of the skills and knowledge are shown within the unit criteria.

Learning outcome. The learner will:	Assessment criteria. The learner can:	Evidence.ref.no		
1 Interpret the given design information relating to the work and resources to confirm its accuracy, completeness and relevance to the building type, fabric and condition when injecting, blowing and spraying insulation to internal walls.	1.1 Interpret and extract relevant information from: •drawings •specifications •schedules •method statements •risk assessments •manufacturers' information •data sheets			
	1.2 Comply with information and/or instructions derived from risk assessments and method statements.			
	1.3 Describe why the organisational procedures have been developed and how they are implemented.			
	1.4 Explain the importance of organisational procedures to solve problems and why it is important to follow them.			
	1.5 Describe different types of information, their source, accuracy, completeness and how they are interpreted in relation to: •drawings •specifications •schedules •method statements •risk assessments •design •standards •suppliers and manufacturers' information •data sheets •official guidance •current legislation and regulations governing buildings			
2 Know how to comply with environmentally responsible work practices to meet current legislation standards and official guidance when injecting, blowing and spraying insulation to internal walls.	2.1 Describe their responsibilities regarding potential accidents, health hazards and the environment in relation to: •the workplace •below ground level •confined spaces •at height •tools and equipment •materials and substances •movement and storage of materials by manual handling and mechanical lifting.			

	2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to: •site •workplace •siting and location of vehicles •company •customer •access equipment •material and waste storage •the general public			
	2.3 Explain the accident reporting procedures and who is responsible for making reports.			
	2.4 Describe the types of fire extinguishers available when injecting, blowing and spraying insulation to internal walls and describe how and when they are used in relation to: • water •CO2 •foam •powder			
3 Comply with current, relevant legislation, standards and official guidance to carry out your work and maintain safe and healthy work practices.	3.1 Demonstrate compliance with relevant legislation, standards and official guidance when injecting, blowing and spraying insulation to internal walls in relation to the following: •methods of work •safe use of health and safety control equipment •safe use of access equipment and harness systems •safe use, storage and handling of materials, tools and equipment •operative maintenance of installation equipment •specific risks to health including mental health •specific risks associated with ventilation and combustion appliances			
	3.2 Explain why, when and how health and safety control equipment, identified by the principles of prevention, should be used when injecting, blowing and spraying insulation to internal walls in relation to: •collective protective measures •personal protective equipment (PPE) •respiratory protective equipment (RPE) •local exhaust ventilation (LEV)			
	3.3 Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills in relation to: •fires •spillages •injuries •emergencies relating to occupational activities •identification of and reporting of asbestos containing materials			

	3.4 Describe how to report risks and hazards identified by the following: •risk assessment •personal assessment •methods of work •suppliers and manufacturers' technical information •data sheets •statutory regulations •official guidance •Control of Substances Hazardous to Health (COSHH)			
4 Select the required quantity and quality of resources for the methods of work to inject, blow and spray insulation to internal walls.	4.1 Select resources associated with own work in relation to materials, components, fixings, finishes, tools and equipment.			
	4.2 Check the suitability, compatibility and characteristics of the materials, components, fixings and finishes, determine if they are moisture open or moisture closed and their impact on the building.			
	4.3 Record and report issues or defects.			
	4.4 Describe why the characteristics, compatibility, quality, uses, sustainability, limitations and defects associated with the resources are important and how defects should be rectified.			
	4.5 Describe how the resources should be used and how problems associated with the resources are reported in relation to: •protective sheeting •masking materials •warning signs •vent sleeves •insulation materials •fixings and adhesives •vapour control and breather membranes •finishing board and coat •combustion vents •all work tools •installation equipment			
	4.6 Describe how to confirm that the resources and materials conform to the specification.			
	4.7 Explain why the organisational procedures have been developed and how they are used for the selection of required resources.			
	4.8 Describe how to identify the hazards associated with the resources and methods of work and how they are overcome.			
	4.9 Describe how to calculate the quantity of materials, length, thickness, area and wastage associated with the method and procedure to inject, blow and spray insulation to internal walls.			

H/618/7004 815v1	Injecting, blowing and spraying insulation to internal walls in the workplace (Continued)	Level 3	22 Credits

5 Minimise the risk of damage to the work and surrounding area when injecting, blowing and spraying insulation to internal walls	5.1 Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures.			
	5.2 Maintain a safe, clear and tidy work area.			
	5.3 Explain why it is important to maintain a safe, clear and tidy work area.			
	5.4 Dispose of waste in accordance with current legislation.			
	5.5 Describe how to protect work and its surrounding area from damage by general workplace activities, other occupations and adverse weather conditions and how to minimise damage to existing building fabric.			
	5.6 Explain the importance of protecting the work and its surrounding area against the risk of damage.			
	5.7 Explain why and how the disposal of waste must be carried out safely in accordance with the following: •current legislation •environmental responsibilities •organisational procedures •manufacturers' information •data sheets •statutory regulations •official guidance			
6 Complete the work within the allocated time when injecting, blowing and spraying insulation to internal walls	6.1 Demonstrate completion of your work within the estimated, allocated time and performance requirements of the system design, method statement and the required standard.			
	6.2 Describe the purpose of the work programme, including the estimated and allocated time and explain why deadlines should be kept in relation to: • types of progress charts, timetables and estimated times • organisational procedures for reporting circumstances which will affect the work programme			
7 Comply with the given contract information to carry out the work efficiently to inject, blow and spray insulation to internal walls to the required specification.	7.1 Demonstrate the following work skills when injecting, blowing and spraying insulation to internal walls: •measuring •marking out •fixing •finishing •positioning •sealing and securing			
	7.2 Use and maintain all work tools and equipment.			
	7.3 Carry out external and internal pre installation checks assessing, recording and reporting issues to include: •suitable access •property suitability •structural integrity •dampness •decay •vents and ventilation •services (gas, electric, water, media cables)			
	7.4 Check, record and report issues with construction ventilation, flues, chimneys and combustion air ventilators pre and post installation.			
	7.5 Fit breather membrane and vapour control layers.			

	7.6 Prepare and install Internal wall insulation system to given system designer specification, method statement and the required standard using at least two of the following methods to given working instructions: •injected •blown •sprayed			
	7.7 Assemble and operate installation processing equipment in line with manufacturers and system manuals.			
	7.8 Calibrate equipment to measure density, flow and quality tests to ensure they are in line with manufacturers specifications and material requirements.			
	7.9 Protect and reinstate, access routes, existing fixtures and fittings (carpets).			
	7.10 Remove, replace and reinstate skirting, coving and cornices, radiators and electrical sockets.			
	7.11 Carry out repairs after installation.			
	7.12 Clean and disassemble installation processing equipment and pack away for transportation.			
	7.13 Handover and sign off to the customers satisfaction.			
	7.14 Carry out post installation checks.			
	7.15 Describe how the methods of work to meet the specification, are carried out and how problems are identified and reported by the application of knowledge for safe, healthy and environmental work practices, procedures and skills relating to the method and area of work relating to the following: •the suitability, compatibility and characteristics of the materials, components and finishes, and determine if they are moisture open or moisture closed, their impact on the building and their appropriateness to the design and physical application •how to record and report issues or defects with the materials, components and finishes •why it is important to carry out external and internal pre-installation checks •how to carry out external and internal pre-installation checks, assessing, recording and reporting issues to include but not limited to: - suitable access - property suitability - structural integrity - dampness - condensation - penetrating damp - rising damp - decay - vents and ventilation - services (gas, electric, water, media cables) - condition of down pipes, - roof overhangs and gutters - external and internal finish condition - wall moisture content - damp proof course height above floor level - condition of ground and suspended floor joists			

	•how to identify thermal bridges and understand solutions and limitations •why it is important to ensure that all necessary repairs are completed prior to installation •the implications for party wall thermal bridge •how and why it is important to check, record and report issues with construction ventilation, flues, chimneys and combustion air ventilators pre and post installation •how to check for hidden utilities •how to recognise, record and report the key issues that may inhibit commencement of the work including but not limited to: - condition of building fabric - identification of any areas of potential water penetration - visibility and completeness of damp proof course - condition of window and door seals - height of internal floors in relation to external floor height - condition of roof - damaged or spalled brickwork - drainage and down pipes - protection and existence of sub floor ventilation - cavity width and identification of any debris - flues, gas pipes, chimneys and combustion air ventilators - identification of protected wildlife (nesting birds, bees, bats) •how to identify when specialist skills and knowledge are required and report accordingly including but not limited to: -fire safety -electrical -media cables -signal receiving equipment -junction and meter boxes -asbestos -Radon -heritage -archaeological and architectural features -ecology -ventilation -rot •the relevance of an assessment of significance and how to recognise specific requirements for structures of special interest, traditional construction, hard-to-treat buildings and historical significance •how to identify, record, report and rectify unintended consequences not addressed in the design, including but not limited to the existence of: thermal bridges, thermal bypassing and water ingress, inadequate ventilation and condensation risk			

Assessor comments/feedback

	•why it is important to avoid unintended consequences •why it is important to explain installation procedure to building occupants to include but not limited to the following: - scope and work programme - safety requirements during the installation process - protection of property and personal items - specific benefits and implications to include homeowner information - agreed standards of making good •the implications of existing guarantees and warranties that may be compromised by the installation to include but not limited to: - wall ties - windows - damp proof course - renders - Tyrolean coatings - silicone weather proof coatings •how to work with, around and in close proximity to plant and machinery •how to direct and guide the operations and movement of plant and machinery to ensure protection of a safe working environment •how to identify and follow the installation quality requirements •which wall types are unsuitable for internal wall insulation •the implications of insulating a terrace or semi-detached house regarding party wall bridge •why it is important to ensure pre-installation material checks are within specified parameters to include checking and recording batch number and reporting defects •how to protect and reinstate, access routes, existing fixtures and fittings (carpets) •how to prepare internal walls for insulation •how to treat external walls in line with system holder specification •the importance of ensuring all work to services (gas, electric, water, media cables) is carried out by suitably qualified people •how to remove, replace and reinstate skirting, coving and cornices, radiators and electrical sockets •how to calibrate equipment to measure density, flow and quality tests to ensure they are in line with manufacturers specifications and material requirements			

Assessor comments/feedback

	•how to install injected, blown and sprayed insulation •how to fit breather membrane and vapour control layers •the different types of air and vapour control layers and breather membranes , where and how they should be used and why it is important to install them correctly •the importance of ensuring the integrity of air and vapour control layers and breather membranes following installation and the need to maintain continuity •why it is important to immediately record and report unforeseen events •why it is important to maintain or install fire resistant barriers •how to maintain sound proofing •how to seal joints, perimeters and penetrations •why it is important to minimise thermal bridging through compliance with design detail and ensuring a consistent level of insulation to the area being insulated •how to carry out any repair after installation •how to clean and disassemble installation processing equipment and pack away for transportation •why it is important record and report unforeseen events including but not limited to equipment malfunctions, situations and faults not identified in the original design •why it is important to complete post installation checks in accordance with the system designer installations operations manual and report issues •why it is important to provide post installation advice and guidance to building occupants and client including homeowner packs •how to handover and sign off to the customers satisfaction •how to use all work tools and installation equipment in line with manufacturers' and systems specifications •how to work at height using access equipment and harness systems •how and why maintenance of all work tools and installation equipment is carried out			
	7.16 Describe the needs of other occupations and the importance of team work and communication when injecting, blowing and spraying insulation to internal walls.			

Assessor comments/feedback

R/618/6995 449v4	Applying surface finishes to external wall insulation in the workplace	Level 3	21 Credits

The aim of this unit is to ensure the candidate has the skills and knowledge to confirm competency in applying surface finishes to external wall insulation in the workplace.
Candidates must be able to demonstrate competence and knowledge of at least 3 of the following:

- dash finishes
- synthetic or non-synthetic renders
- proprietary pre-cast finishes
- paint finishes
- brick slips
- brick effect render

Candidates must demonstrate completion of the work within the estimated, allocated time and performance requirements of the system design, method statement and the required standard.
Specific details of the skills and knowledge are shown within the unit criteria.

Learning outcome. The learner will:	Assessment criteria. The learner can:	Evidence.ref.no		
1 Interpret the given design information relating to the work and resources to confirm its accuracy, completeness and relevance to the building type, fabric and condition when applying surface finishes to external wall insulation.	1.1 Interpret and extract relevant information from: •drawings •specifications •schedules •method statements •risk assessments •suppliers and manufacturers' information •data sheets			
	1.2 Comply with information and/or instructions derived from risk assessments and method statements.			
	1.3 Describe why the organisational procedures have been developed and how they are implemented.			
	1.4 Explain the importance of organisational procedures to solve problems and why it is important to follow them.			
	1.5 Describe different types of information, their source, accuracy, completeness and how they are interpreted in relation to: •drawings •specifications •schedules •method statements •risk assessments •design •standards •suppliers and manufacturers' information •data sheets •official guidance •current legislation and regulations governing buildings			
2 Know how to comply with environmentally responsible work practices to meet current, legislation standards and official guidance when applying surface finishes to external wall insulation.	2.1 Describe their responsibilities regarding potential accidents, health hazards and the environment in relation to: •the workplace •below ground level •confined spaces •at height •tools and equipment •materials and substances •movement and storage of materials by manual handling and mechanical lifting			

	2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to: •site •workplace •siting and location of vehicles •company •customer •access equipment •materials and waste storage •the general public			
	2.3 Explain the accident reporting procedures and who is responsible for making reports.			
	2.4 Describe the types of fire extinguishers available when applying surface finishes to external wall insulation and describe how and when they are used in relation to: • water •CO2 •foam •powder			
3 Comply with current, relevant legislation, standards and official guidance to carry out your work and maintain safe and healthy work practices when applying surface finishes to external wall insulation.	3.1 Demonstrate compliance with, relevant legislation, standards and official guidance when applying surface finishes to external wall insulation in relation to the following: •methods of work •safe use of health and safety control equipment •safe use of access equipment and harness systems •safe use, storage and handling of materials, tools and equipment •operative maintenance of installation equipment •specific risks to health including mental health •specific risks associated with ventilation and combustion appliances			
	3.2 Explain why, when and how health and safety control equipment, identified by the principles of prevention, should be used when applying surface finishes to external wall insulation, in relation to: •collective protective measures •personal protective equipment (PPE) •respiratory protective equipment (RPE) •local exhaust ventilation (LEV)			
	3.3 Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills in relation to: •fires •spillages •injuries •emergencies relating to occupational activities •identification of and reporting of asbestos containing materials			
	3.4 Describe how to report risks and hazards identified by the following: •risk assessment •personal assessment •methods of work •suppliers and manufacturers' technical information •data sheets •statutory regulations •official guidance •Control of Substances Hazardous to Health (COSHH)			

R/618/6995 449v4	Applying surface finishes to external wall insulation in the workplace (Continued)	Level 3	21 Credits

4 Select the required quantity and quality of resources for the methods of work to apply surface finishes to external wall insulation.	4.1 Select resources associated with own work in relation to materials, components, fixings, finishes, tools and equipment.			
	4.2 Check the suitability, compatibility characteristics of the materials, components, fixing and finishes determine if they are moisture open or moisture closed and their impact on the building			
	4.3 Record and report issues or defects			
	4.4 Describe why the characteristics, compatibility, quality, uses, sustainability, limitations and defects associated with the resources are important and how defects should be rectified.			
	4.5 Describe how the resources should be used and how problems associated with the resources are reported in relation to: •primers •paints •beads and trims •reinforcement •stress patches •renders •mesh •sealants and sealant tapes and strips •fixing and fittings •all work tools •installation equipment			
	4.6 Describe how to confirm that the resources and materials conform to the specification.			
	4.7 Explain why the organisational procedures have been developed and how they are used for the selection of required resources.			
	4.8 Describe how to identify the hazards associated with the resources and methods of work and how they are overcome.			
	4.9 Describe how to calculate the quantity length, area and wastage associated with the method and procedure to apply surface finishes to external wall insulation.			
5 Minimise the risk of damage to the work and surrounding area when applying surface finishes to external wall insulation.	5.1 Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures.			
	5.2 Maintain a safe, clear and tidy work area.			
	5.3 Explain why it is important to maintain a safe, clear and tidy work area.			
	5.4 Dispose of waste in accordance with current legislation.			
	5.5 Explain the importance of protecting the work and its surrounding area against the risk of damage.			
	5.6 Explain the importance of protecting the work and its surrounding area against the risk of damage.			
	5.7 Explain why and how the disposal of waste must be carried out safely in accordance with the following: •current legislation •environmental responsibilities •organisational procedures •suppliers and manufactures' information •data sheets •statutory regulations •official guidance			

R/618/6995 449v4	Applying surface finishes to external wall insulation in the workplace (Continued)	Level 3	21 Credits

6 Complete the work within the allocated time when applying surface finishes to external wall insulation	6.1 Demonstrate completion of your work within the estimated, allocated time and performance requirements of the system design, method statement and the required standard.			
	6.2 Describe the purpose of the work programme, including the estimated and allocated time and explain why deadlines should be kept in relation to: • types of progress charts, timetables and estimated times • organisational procedures for reporting circumstances which will affect the work programme.			
7 Comply with the given contract information to carry out the work efficiently when applying surface finishes to external wall insulation to the required specification	7.1 Demonstrate the following work skills when applying surface finishes to external wall insulation: •measuring •marking out •mixing •applying •making good including any defects			
	7.2 Use and maintain all work tools and equipment.			
	7.3 Carry out external and internal pre-installation check, assessing, recording and reporting issues to include: •suitable access •property suitability •structural integrity •architectural features •vegetation •rainwater goods •cracking •position of damp proof course •dampness •decay •vents and ventilation •services (gas, electric, water, media cables)			
	7.4 Apply base coats, reinforcing mesh and stress patches in accordance with the design.			
	7.5 Apply corner and surface beads and trims.			
	7.5 Apply sealant tapes, strips and mastics.			
	7.7 Prepare and apply external wall insulation (EWI) surface finishes to given system designer specification, method statement and the required standard for at least three of the following: •dash finishes •synthetic or non-synthetic renders • proprietary pre-cast finishes •paint finishes •brick slips •brick effect render			
	7.8 Fit weather seals.			
	7.9 Carry out post installation repairs.			
	7.10 Handover and sign off to the customers satisfaction.			
	7.11 Carry out post installation checks.			

	7.12 Describe how the methods of work to meet the specification, are carried out and how problems are identified and reported by the application of knowledge for safe, healthy and environmental work practices, procedures and skills relating to the method and area of work relating to the following: and materials used to •the suitability, compatibility and characteristics of the materials, components and finishes, and determine if they are moisture open or moisture closed, their impact on the building and their appropriateness to the design and physical application •how to record and report issues or defects with the materials, components and finishes •why it is important to carry out external and internal pre-installation checks •how to carry out external and internal pre-installation checks, assessing, recording and reporting issues to include: -suitable access -property suitability -structural integrity -dampness -decay -vents and ventilation -vegetation -services (gas, electric, water, media cables) -architectural features -rainwater goods -cracking -position of damp proof course •why it is important to ensure that all necessary repairs are completed prior to installation •the weather restrictions for each external wall system finish •how and why it is important to check, record and report issues with construction ventilation, flues, chimneys and combustion air ventilators pre and post installation •why it is important to Identify and report potential thermal bridging			

Assessor comments/feedback

	• how to recognise, record and report the key issues that may inhibit commencement of the work including but not limited to: -condition of building fabric -identification of any areas of potential water penetration -visibility and completeness of damp proof course -condition of window and door seals -damaged or spalled brickwork -drainage and down pipes -protection and existence of sub floor ventilation -electrical cables, media cables, junction and meter boxes -signal receiving equipment -flues, gas pipes, chimneys and combustion air ventilators -identification of protected wildlife (nesting birds, bees, bats) •how to identify when specialist skills and knowledge are required and report accordingly including but not limited to: -fire safety -electrical -media cables -signal receiving equipment -junction boxes -asbestos -Radon -heritage -ecology -ventilation -flues •the relevance of an assessment of significance and how to recognise specific requirements for structures of special interest, traditional construction, hard-to-treat buildings and historical significance •how to identify, record, report and rectify unintended consequences not addressed in the design, including but not limited to the existence of: thermal bridges, thermal bypassing and water ingress, inadequate ventilation and condensation risk •why it is important to avoid unintended consequences •why it is important to explain installation procedure to building occupants to include but not limited to the following: -scope and work programme -safety requirements during the installation process -protection of property and personal items -specific benefits and implications to include homeowner information -agreed standards of making good			

Assessor comments/feedback

	•the implications of existing guarantees and warranties that may be compromised by the installation to include but not limited to: -windows & doors -damp proof course -renders -Tyrolean coatings -silicone weather proof coatings •how to work with, around and in close proximity to plant and machinery •how to direct and guide the operations and movement of plant and machinery to ensure protection of a safe working environment •how to identify and follow the installation quality requirements •how to ensure pre-installation material checks are within specified parameters and reporting defects •how to fix corner surface beads and trims •how to apply base and primer coats, reinforcing mesh and stress patches •how to fit weather seals at interfaces, window and door reveals and at system penetrations in accordance with design details •how to apply dash finishes, synthetic and non-synthetic renders, proprietary pre-cast finishes, paint finishes, brick slips and brick effect render to external wall insulation system including door and window reveals •how to reinstate fixtures and fittings and seal •the different types of air and vapour control layers and breather membranes, where and how they should be used and why it is important to install them correctly •the importance of ensuring the integrity of air and vapour control layers and breather membranes following installation and the need to maintain continuity •why it is important to complete post installation checks: compliance with specifications, resistance to water penetration, anchorage, and fixing, vents, services (gas, electric, water, media cables) •how to carry out any repairs after installation •why it is important to immediately record and report unforeseen events including but not limited to equipment malfunctions, situations and faults not identified in the original design •why it is important to complete post installation checks in accordance with system designer installations operations manual and report issues •why it is important to provide post installation advice and guidance to building occupants and client including homeowner packs			

Assessor comments/feedback

	•how to handover and sign off to the customers satisfaction •how to use all work tools and installation equipment •how to work at height using access equipment and harness systems •how and why maintenance of all work tools and installation equipment is carried out			
	7.13 Describe the needs of other occupations and the importance of team work and communication when applying surface finishes to external wall insulation.			

Assessor comments/feedback

Notes

Notes

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