COSVR815

Inject, blow and spray insulation to internal walls

Overview

This standard is about installing injected, blown and sprayed insulation to walls, interpreting information, adopting safe, healthy and environmentally responsible work practices, selecting and using materials, components, tools and equipment

This standard is for people working in the occupational area of insulation and building treatments and can be used by installers, supervisors and managers

Performance criteria

You must be able to:

P1 * 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 for the following:

1.1 drawings
1.2 specifications
1.3 schedules
1.4 method statements
1.5 risk assessments
1.6 suppliers and manufacturers' information
1.7 data sheets

P2 comply with the given, relevant legislation, standards and official guidance to carry out your work and maintain safe and healthy work practices relating to the following:

2.1 methods of work
2.2 safe use of health and safety control equipment
2.3 safe use of access equipment and harness systems
2.4 safe use, storage and handling of materials,

tools and equipment
2.5 operative maintenance of installation equipment

2.6 specific risks to health including mental health
2.7 specific risks associated with ventilation and

combustion appliances

P3 select the required quantity and quality of resources for

the methods of work
3.1 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
3.2 record and report issues or defects
3.3 select tools and equipment

P4 comply with organisational procedures to minimise the risk

of damage to the work and surrounding area by:

4.1 protecting the work and its surrounding area from damage

4.2 maintaining a safe, clear and tidy work area

4.3 disposing of waste in accordance with current legislation

P5 comply with the given contract information to carry out the work efficiently to the required specification by the following:

5.1 demonstrate work skills to measure, mark out, fix and finish, position, seal and secure

5.2 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)

5.3 use and maintain all work tools and equipment

5.4 check, record and report issues with construction ventilation, flues, chimneys and combustion air ventilators pre and post installation

5.5 fit breather membrane and vapour control layers

5.6 assemble and operate installation processing equipment in line with manufacturers and system manuals

5.7 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

5.8 calibrate equipment to measure density, flow and quality tests to ensure they are in line with manufacturers specifications and material requirements

5.9 protect and reinstate, access routes, existing fixtures and fittings (carpets)

5.10 remove, replace and reinstate skirting, coving and cornices, radiators and electrical sockets

5.11 carry out repairs after installation

5.12 clean and disassemble installation processing equipment and pack away for transportation

5.13 handover and sign off to the customers satisfaction

5.14 carry out post installation checks

*P6 *complete your work within the estimated, allocated time and performance requirements of the system design, method statement and the required standard

Knowledge and understanding

You need to know and understand:

Performance Criteria 1
Interpretation of information

K1. why organisational procedures have been developed and how

they are implemented

K2. types of information, their source, accuracy, completeness

and how they are interpreted in relation to:

2.1 drawings
2.2 specifications
2.3 schedules
2.4 method statements
2.5 risk assessments
2.6 design
2.7 standards
2.8 suppliers and manufacturers' information
2.9 data sheets
2.10 official guidance
2.11 current legislation and regulations governing buildings

K3. the importance of organisational procedures to solve problems

and why it is important to follow them

Performance Criteria 2
Safe work practices

K4. relevant, current legislation, standards and official guidance and

how they are applied

K5. the types of fire extinguishers and how and when they are used

in relation to water, CO2,foam, powder

K6. how emergencies should be responded to in accordance with

organisational authorisation and personal skills in relation to:

6.1 fires, spillages, injuries

6.2 emergencies relating to occupational activities
6.3 identification of and reporting of asbestos containing materials

K7. the organisational security procedures for tools, equipment and personal belongings in relation to:
7.1 site
7.2 workplace
7.3 siting and location of vehicles
7.4 company
7.5 customer
7.6 access equipment
7.7 material and waste storage
7.8 the general public

K8. how to report risks and hazards identified by the following:
8.1 risk assessment
8.2 personal assessment
8.3 methods of work
8.4 suppliers and manufacturers' technical information
8.5 data sheets
8.6 statutory regulations
8.7 official guidance
8.8 Control of Substances Hazardous to Health (COSHH)

K9. the accident reporting procedures and who is responsible for making the report

K10. why, when and how health and safety control equipment identified by the principles of prevention should be used in relation to:
10.1 collective protective measures
10.2 personal protective equipment (PPE)
10.3 respiratory protective equipment (RPE)
10.4 local exhaust ventilation (LEV)

K11. environmentally responsible work practices to meet current legislation, standards and official guidance when dealing with potential accidents, health hazards and the environment in

relation to:
11.1 below ground level
11.2 confined spaces
11.3 at height
11.4 tools and equipment
11.5 materials and substances
11.6 movement and storage of materials by manual handling and mechanical lifting

Performance Criteria 3

Selection of resources

K12. why the characteristics, compatibility, quality, uses, sustainability, limitations and defects associated with the resources are important and how defects should be rectified

K13. the organisational procedures to select resources, why they have been developed and how they are used

K14. how to confirm the resources and materials conform with the specification

K15. how the resources should be used and how any problems associated with the resources are reported in relation to:
15.1 protective sheeting
15.2 masking materials
15.3 warning signs
15.4 vent sleeves
15.5 insulation materials
15.6 fixings and adhesives
15.7 vapour control and breather membranes
15.8 finishing board and coat
15.9 combustion vents
15.10 all work tools and installation equipment

K16. how to identify the hazards associated with the resources and methods of work and how they are overcome

K17. 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

Performance Criteria 4
Minimise the risk of damage

K18. the importance of protecting the work and its surrounding area against the risk of damage

K19. 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

K20. why and how the disposal of waste must be carried out safely in accordance with the following

20.1 current legislation
20.2 environmental responsibilities
20.3 organisational procedures
20.4 suppliers and manufacturers' information
20.5 data sheets
20.6 statutory regulations
20.7 official guidance

K21. why it is important to maintain a safe, clear and tidy work area

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Performance Criteria 5**
Meet the contract specification

K22. 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

22.1 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

22.2 how to record and report issues or defects with the materials, components and finishes

22.3 why it is important to carry out external and internal pre-installation checks

22.4 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

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

22.6 how to identify thermal bridges and understand solutions and limitations

22.7 the implications for party wall thermal bridge

22.8 how and why it is important to recognise the procedures check, record and report issues with construction ventilation, flues, chimneys and combustion air ventilators pre and post installation

22.9 how to check for hidden utilities

22.10 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)

22.11 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

22.12 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

22.13 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

22.14 why it is important to avoid unintended consequences

22.15 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

22.16 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

22.17 how to work with, around and in close proximity to plant and

machinery

22.18 how to direct and guide the operations and movement of

plant and machinery to ensure protection of a safe working

environment

22.19 how to identify and follow the installation quality

requirements

22.20 which wall types are unsuitable for internal wall insulation

22.21 the implications of insulating a terrace or semi-detached house regarding party wall bridge

22.22 why it is important to ensure pre-installation material checks are within specified parameters to include checking and recording batch number and reporting defects

22.23 how to protect and reinstate, access routes, existing fixtures and fittings (carpets)

22.24 how to prepare internal walls for insulation

22.25 how to treat external walls in line with system holder specification

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

22.27 how to remove, replace and reinstate skirting, coving and cornices, radiators and electrical sockets

22.28 how to calibrate equipment to measure density, flow and quality tests to ensure they are in line with manufacturers specifications and material requirements

22.29 how to install injected, blown and sprayed insulation

22.30 how to fit breather membrane and vapour control layers

22.31 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

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

22.33 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

22.34 why it is important to maintain or install fire resistant barriers

22.35 how to maintain sound-proofing

22.36 how to seal joints, perimeters and penetrations

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

22.38 how to carry out any repair after installation

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

22.40 why it is important to complete post installation checks in accordance with the system designer installations operations manual and report isues

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

22.42 how to handover and sign off to the customers satisfaction

22.43 how to use all work tools and installation equipment in line with manufacturers' and system specifications

22.44 how to work at height using access equipment and harness systems

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

K23. the importance of team work and communication

K24. the needs of other occupations associated with injecting, blowing and spraying insulation to internal walls

Performance Criteria 6
Allocated time

K25. the programme of work to be carried out including the estimated, allocated time and why deadlines should be kept

K26. the types of progress charts, timetables and estimated times and the organisational procedures for reporting circumstances which will affect the work programme

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