

COSVR547 - SQA Unit Code HM4X 04

Conserve or restore stonemasonry, brickwork or earthen structures



Overview

This standard is about

- 1 interpreting information
- 2 adopting safe and healthy working practices
- 3 selecting materials, components and equipment
- 4 erecting and dismantling temporary propping, in preparation for conserving, repairing or refurbishing stonemasonry, brickwork or earthen structures on conservation or restoration projects

COSVR547 - SQA Unit Code HM4X 04

Conserve or restore stonemasonry, brickwork or earthen structures

Performance criteria

- You must be able to:*
- P1 interpret the given information relating to the work and resources to confirm its relevance
 - P2 comply with the given, relevant legislation and official guidance to carry out your work and maintain safe work practices
 - P3 select the required quantity and quality of resources for the methods of work
 - P4 comply with organisational procedures to minimise the risk of damage to the work and surrounding area
 - P5 comply with the given contract information to carry out the work efficiently to the required specification
 - P6 complete the work within the allocated time, in accordance with the programme of work

COSVR547 - SQA Unit Code HM4X 04

Conserve or restore stonemasonry, brickwork or earthen structures

Knowledge and understanding

You need to know and understand:

Performance Criteria 1

Interpretation of information

- K1 the organisational procedures developed to report and rectify inappropriate **information** and unsuitable **resources**, and how they are implemented
- K2 the types of **information**, their source and how they are interpreted
- K3 the organisational procedures to solve **problems** with the **information** and why it is important they are followed

Performance Criteria 2

Safe work practices

You need to know and understand:

- K4 the level of understanding operatives must have of **information** for relevant, current **legislation and official guidance** and how it is applied
- K5 how **emergencies** should be responded to and who should respond
- K6 the organisational **security procedures** for tools, equipment and personal belongings
- K7 what the accident reporting procedures are and who is responsible for making the report
- K8 why and when **personal protective equipment (PPE)** should be used

Performance Criteria 3

Selection of resources

You need to know and understand:

- K9 the characteristics, quality, uses, sustainability, limitations and defects associated with the **resources** and how defects should be rectified
- K10 how the **resources** should be used and how any **problems** associated with the **resources** are reported
- K11 the organisational procedures to select **resources**, why they have been developed and how they are used
- K12 the **hazards** associated with the **resources** and **methods of work** and how they are overcome

Performance Criteria 4

Minimise the risk of damage

You need to know and understand:

- K13 how to **protect work** from damage and the purpose of protection
- K14 why **disposal of waste** should be carried out safely and how it is achieved

COSVR547 - SQA Unit Code HM4X 04

Conserve or restore stonemasonry, brickwork or earthen structures

Performance Criteria 5

Meet the contract specification

You need to know and understand:

K15 how **methods of work**, to meet the specification, are carried out and **problems** reported

K16 how **maintenance** of tools and equipment is carried out

Performance Criteria 6

Allocated time

You need to know and understand:

K17 what the **programme** is for the work to be carried out in the estimated, allocated time and why deadlines should be kept

COSVR547 - SQA Unit Code HM4X 04

Conserve or restore stonemasonry, brickwork or earthen structures

Additional Information

Scope/range related to performance criteria

Performance Criteria 1

- 1 interpretation of drawings, specifications, schedules, method statements, and manufacturers' information related to the work to be carried out

Performance Criteria 2

- 2 avoidance of risk by following the given information relating to at least three of the following
 - 2.1 methods of work
 - 2.2 safe use of personal protective equipment (PPE)
 - 2.3 safe use of access equipment
 - 2.4 safe use and storage of materials, tools and equipment

Performance Criteria 3

- 3 selection of resources associated with own work
 - 3.1 materials, components and fixings
 - 3.2 tools and equipment

Performance Criteria 4

- 4 protection that is sympathetic to the work and its surrounding area from damage
- 5 minimise damage and maintain a clean work space
- 6 disposal of waste in accordance with legislation

Performance Criteria 5

- 7 demonstration of work skills to measure, mark out, remove, rake out, renew, shape, shore, prop, strut, plumb, level, fit, finish, position and secure
- 8 use and maintain hand tools, portable power tools and ancillary equipment
- 9 prepare, conserve, repair or refurbish existing stonemasonry, brickwork or earthen structures to given working instructions, relating to the following
 - 9.1 replication of existing structures
 - 9.2 stabilisation of existing structures
 - 9.3 preparation of mortars appropriate to the existing
 - 9.4 joint finishing
 - 9.5 surface finishes

Performance Criteria 6

- 10 completion of own work within the estimated, allocated time to meet the needs of other occupations and/or client

COSVR547 - SQA Unit Code HM4X 04

Conserve or restore stonemasonry, brickwork or earthen structures

Scope/range related to knowledge and understanding

Disposal of waste

- 1 environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance

Emergencies

- 2 operative's response to situations in accordance with organisational authorisation and personal skills when involved with
 - 2.1 fires, spillages, injuries
 - 2.2 emergencies relating to occupational activities

Hazards

- 3 those identified by risk assessment, method of work, manufacturers' technical information, statutory regulations and official guidance

Information

- 4 drawings, specifications, schedules, method statements, manufacturers' information, archaeological watching brief, historical conservation plans and charters, legislation and regulations governing buildings

Legislation and official guidance

- 5 this relates to the operative's responsibilities regarding potential accidents and health hazards whilst working in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting

Maintenance

- 6 operative care of hand tools and/or portable power tools and ancillary equipment

COSVR547 - SQA Unit Code HM4X 04

Conserve or restore stonemasonry, brickwork or earthen structures

Methods of work

- 7 applicatige for safe work practices, procedures and skills, relating to the method/area of work and materials used, to
 - 7.1 erect and dismantle temporary support to structures on of knowled
 - 7.2 replicate existing structures to agreed specification (honest repair)
 - 7.3 stabilise structures
 - 7.4 joint finish structures to agreed specification
 - 7.5 prepare mortars to agreed specification
 - 7.6 render surfaces
 - 7.7 validate appropriate ways in which the work should be carried out
 - 7.8 recognise sensitive areas
 - 7.9 maintain heritage and archaeological integrity
 - 7.10 maintain the principles of minimum intervention and reversible alterations
 - 7.11 stop work at the point when conjecture begins and report findings
 - 7.12 record work carried out (written, photographic or digital)
 - 7.13 recognise and/or report endangered/protected flora and fauna
 - 7.14 remove deteriorated and/or inappropriate materials
 - 7.15 maintain existing structures
 - 7.16 integrate existing and new constructional components or finishes
 - 7.17 store salvageable materials and structural components
 - 7.18 use hand tools, power tools and equipment
 - 7.19 work at height
 - 7.20 use access equipment
- 8 team work and communication
- 9 needs of other occupations associated with conserving or restoring stonemasonry, brickwork or earthen structures

Personal protective equipment (PPE)

- 10 occupational use, types, purpose of each type and work situations

Problems

- 11 those arising from information, resources and methods of work
 - 11.1 own authority to rectify
 - 11.2 organisational reporting procedures

Programme

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

Protect work

- 14 protect work against damage from general workplace activities, other occupations and adverse weather conditions

COSVR547 - SQA Unit Code HM4X 04

Conserve or restore stonemasonry, brickwork or earthen structures

Resources

- 15 materials, components and equipment relating to types, quantity, quality, sizes and sustainability of standard and/or specialist
 - 15.1 timber, props, bricks, stone, aggregates, cements, lime, mortar (lime and cements), earth, damp-proof barriers (slate), insulation, fixings, aftercare equipment and associated ancillary items
 - 15.2 hand and/or powered tools and equipment
- 16 methods of calculating quantity, length, area and wastage associated with the method/procedure to conserve or restore stonemasonry, brickwork or earthen structures

Security procedures

- 17 site, workplace, company and operative

COSVR547 - SQA Unit Code HM4X 04

Conserve or restore stonemasonry, brickwork or earthen structures

Developed by	ConstructionSkills
Version number	1
Date approved	March 2009
Indicative review date	July 2015
Validity	Current
Status	Original
Originating organisation	ConstructionSkills
Original URN	VR547
Relevant occupations	Bricklayers and Masons
Suite	Heritage Skills (Construction)
Key words	Conservation; Restoration; Repairing; Replication; Stabilisation; Brickwork; Stonemasonry; Earthen; Mortars