# COSVR16 - SQA Unit Code DY45 04

Manufacture routine products



### **Overview**

### This standard is about

- 1 interpreting information
- 2 adopting safe and healthy working practices
- 3 selecting materials, components and equipment
- 4 fitting and assembling products for one or more of the following: bench/architectural joinery; wheelwrighting (carriage construction); shopfitting products (timber and/or non-ferrous metal)

| Performance<br>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                                     |

| Knowledge and understanding      | Performance Criteria 1  |  |  |
|----------------------------------|---|--|--|
| <b>J</b>                         | Interpretation of information   |  |  |
| You need to know and understand: | K1 the organisational procedures developed to report and rectify<br>inappropriate <b>information</b> and unsuitable <b>resources</b> , and how they<br>are implemented  |  |  |
|                                  | <ul> <li>K2 the types of information, their source and how they are interpreted</li> <li>K3 the organisational procedures to solve problems with the information and why it is important they are followed</li> </ul>   |  |  |
|                                  | Performance Criteria 2  |  |  |
|                                  | Safe work practices   |  |  |
| You need to know and understand: | K4 the level of understanding operatives must have of <b>information</b> for relevant, current <b>legislation and official guidance</b> and how it is applied   |  |  |
|                                  | K5 the types of <b>fire extinguishers</b> and how and when they are used  |  |  |
|                                  | K6 how emergencies should be responded to and who should respond  |  |  |
|                                  | K7 the organisational security procedures for tools, equipment and personal belongings  |  |  |
|                                  | K8 what the accident reporting procedures are and who is responsible for making the report  |  |  |
|                                  | K9 why, when and how health and safety control equipment should be used   |  |  |
|                                  | Performance Criteria 3  |  |  |
|                                  | Selection of resources  |  |  |
| You need to know and understand: | <ul> <li>K10 the characteristics, quality, uses, sustainability, limitations and defects associated with the <b>resources</b> and how defects should be rectified</li> <li>K11 how the <b>resources</b> should be used and how any <b>problems</b> associated with the <b>resources</b> are reported</li> </ul> |  |  |
|                                  | K12 the organisational procedures to select <b>resources</b> , why they have  |  |  |
|                                  | been developed and how they are used  |  |  |
|                                  | K13 the hazards associated with the resources and methods of work   |  |  |
|                                  | and how they are overcome   |  |  |
|                                  | Performance Criteria 4  |  |  |
| Mary paral to los and a          | Minimise the risk of damage   |  |  |
| You need to know and understand: | K14 how to <b>protect work</b> from damage and the purpose of protection  |  |  |
| understand.                      | K15 why disposal of waste should be carried out safely and how it is achieved   |  |  |

|                                  | Performance Criteria 5<br>Meet the contract specification   |  |  |
|----------------------------------|---|--|--|
| You need to know and understand: | K16 how <b>methods of work</b> , to meet the specification, are carried out and   |  |  |
|                                  | problems reported   |  |  |
|                                  | K17 how maintenance of tools and equipment is carried out   |  |  |
|                                  | Performance Criteria 6  |  |  |
|                                  | Allocated time  |  |  |
| You need to know and understand: | K18 what the <b>programme</b> is for the work to be carried out in the estimated, allocated time and why deadlines should be kept |  |  |

### **Additional Information**

| Scope/range | Perfo                  | rmance Criteria 1   |  |  |
|-------------|------------------------|---|--|--|
| related to  | 1 ir                   | terpretation of drawings, specifications, schedules, method statements,   |  |  |
| performance | ri                     | sk assessments, cutting lists and manufacturers' information related to   |  |  |
| criteria    | th                     | ne work to be carried out   |  |  |
|             | Performance Criteria 2 |   |  |  |
|             | 2 a                    | voidance of risk by following the given information relating to the   |  |  |
|             | fc                     | ollowing  |  |  |
|             | 2                      | .1 methods of work  |  |  |
|             | 2                      | .2 safe use of health and safety control equipment  |  |  |
|             | 2                      | .3 safe use, storage and handling of materials  |  |  |
|             | 2                      | .4 safe use and storage of tools and equipment  |  |  |
|             | Perfo                  | rmance Criteria 3   |  |  |
|             | 3 s                    | election of resources associated with own work  |  |  |
|             | 3                      | .1 materials, components and fixings  |  |  |
|             | 3                      | .2 tools and equipment  |  |  |
|             | Perfo                  | rmance Criteria 4   |  |  |
|             | 4 p                    | rotection of the work and its surrounding area from damage  |  |  |
|             | 5 m                    | ninimise damage and maintain a clean work space   |  |  |
|             | 6 d                    | isposal of waste in accordance with legislation   |  |  |
|             | Perfo                  | rmance Criteria 5   |  |  |
|             |                        | emonstration of work skills to measure, mark out, fit, finish, position and ecure   |  |  |
|             | -                      | se and maintain hand tools, portable power tools and ancillary  |  |  |
|             |                        | quipment  |  |  |
|             |                        | t and assemble to form routine manufactured products to given working   |  |  |
|             |                        | structions from one of the following groups   |  |  |
|             |                        | .1 bench/architectural joinery group; at least two items from the following: doors; windows with opening lights; units and/or fitments (panelling/cladding); staircases   |  |  |
|             | g                      | <ul> <li>wheelwrighting group (carriage construction): wheels (including but<br/>welding rim) plus at least one item from the following – doors;<br/>frames; wooden framed vehicles; shafts</li> </ul>                                    |  |  |
|             | g                      | .3 shopfitting products group (timber and/or non-ferrous metal based)<br>at least two items from the following: doors; frames and linings;<br>shopfront sashes including associated elements;<br>panelling/cladding; wall and floor units |  |  |
|             | Perfo                  | rmance Criteria 6   |  |  |
|             | 10 c                   | ompletion of own work within the estimated, allocated time to meet the  |  |  |
|             | n                      | eeds of other occupations and/or client   |  |  |

| Scope/range                 | Disposal of waste   |  |  |
|-----------------------------|---|--|--|
| related to<br>knowledge and | <ol> <li>environmental responsibilities, organisational procedures, manufacturers<br/>information, statutory regulations and official guidance</li> </ol> |  |  |
| understanding               | 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   |  |  |
|                             | Fire extinguishers  |  |  |
|                             | 3 water, CO <sub>2</sub> , foam, powder and their uses  |  |  |
|                             | Hazards   |  |  |
|                             | 4 those identified by risk assessment, method of work, manufacturers'   |  |  |
|                             | technical information, statutory regulations and official guidance  |  |  |
|                             | Health and safety control equipment   |  |  |
|                             | 5 identified by the principles of protection for occupational use, types and  |  |  |
|                             | purpose of each type, work situations and general work environment  |  |  |
|                             | 5.1 collective protective measures  |  |  |
|                             | 5.2 personal protective equipment (PPE)   |  |  |
|                             | 5.3 respiratory protective equipment (RPE)  |  |  |
|                             | 5.4 local exhaust ventilation (LEV)   |  |  |
|                             | Information   |  |  |
|                             | 6 drawings, specifications, schedules, method statements, risk  |  |  |
|                             | assessments, cutting lists, manufacturers' information, component   |  |  |
|                             | standards and regulations governing buildings (animal welfare)  |  |  |
|                             | Legislation and official guidance   |  |  |
|                             | 7 this relates to the operative's responsibilities regarding potential  |  |  |
|                             | accidents and health hazards whilst working in the workplace, at height,  |  |  |
|                             | with tools and equipment, with materials and substances, with   |  |  |
|                             | movement/storage of materials and by manual handling and mechanical   |  |  |
|                             | lifting   |  |  |
|                             | Maintonanco   |  |  |

#### Maintenance

8 sharpening of hand tools and operative care of portable power tools and ancillary equipment

### Methods of work

- 9 application of knowledge for safe work practices, procedures and skills, relating to the method/area of work and materials used, to
  - 9.1 fit and assemble routine products
  - 9.2 produce straight in plan and elevation: doors, windows with opening lights, units, fitments and panelling/cladding, staircases
  - 9.3 produce wooden framed vehicles, shafts and wheels (wheelwrighting only)
  - 9.4 produce welded carriage components (wheelwrighting only)
  - 9.5 take site and workplace dimensions
  - 9.6 form joints associated with the product and construction method
  - 9.7 use hand tools, power tools and equipment
  - 9.8 requisition material
- 10 team work and communication
- 11 needs of other occupations associated with manufacturing routine products

#### Problems

- 12 those arising from information, resources and methods of work 12.1 own authority to rectify
  - 12.2 organisational reporting procedures

#### Programme

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

#### Protect work

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

#### Resources

- 16 materials, components and equipment relating to types, quantity, quality, sizes and sustainability of standard and/or specialist
  - 16.1 timber, manufactured sheet material, pre-machined components, setting out rods, non-ferrous metal, fabric, metal and rubber rims, glass, plastic, ironmongery, adhesives, fixings and associated ancillary items
  - 16.2 hand and/or powered tools and equipment
- 17 methods of calculating quantity, length, area and wastage associated with the method/procedure to manufacture routine products

### Security procedures

18 site, workplace, company and operative

| Developed by             | ConstructionSkills  |
|--------------------------|---|
| Version number           | 3   |
| Date approved            | January 2011  |
| Indicative review date   | February 2016   |
| Validity                 | Current   |
| Status                   | Original  |
| Originating organisation | ConstructionSkills  |
| Original URN             | VR16  |
| Relevant occupations     | Carpenter and Joiner  |
| Suite                    | Wood Occupations (Construction); Wood Machining (Construction/Sawmilling Extrusion/Furniture) |
| Key words                | Assemble; Joint; Bench joinery; Frames; Units; Fitments; Stairs; Wheelwrighting; Shopfitting  |