

## PRODUCE BUILDING DRAWINGS

**UNIT CODE:** ENG/OS/QS/CR/02/6/A

### UNIT DESCRIPTION

This unit describes the competence in producing building drawings. It involves producing scaled building drawings and producing detailed building drawings.

### ELEMENTS AND PERFORMANCE CRITERIA

| ELEMENT                              | PERFORMANCE CRITERIA<br><i>(Bold and italicized terms are elaborated in the Range)</i>   |
|--------------------------------------|--|
| 1 Produce scaled building drawings   | 1.1 <b><i>Building details</i></b> are obtained from the client<br>1.2 Site dimensions are determined based on the site layout<br>1.3 Floor layout sketches are produced based on the client's specifications<br>1.4 Scaled building floor plan is produced based on floor layout sketches<br>1.5 Roof plan is produced based on floor plan.<br>1.6 Building elevations are prepared based on the floor plan<br>1.7 Building sections through critical points are produced |
| 2 Produce detailed building drawings | 2.1 <b><i>Details of major materials</i></b> are prepared based on the nature of the building<br>2.2 <b><i>Details of exploded views</i></b> are prepared based on nature of the building<br>2.3 <b><i>Finishes</i></b> are determined based on the room function<br>2.4 <b><i>Detailed specifications</i></b> are prepared based on client's requirements and SOPs  |

### RANGE

| Variable                      | Range<br><i>May include but is not limited to:</i>   |
|-------------------------------|--|
| 1. Building details           | 1.1 Type of building<br>1.2 Functional units<br>1.3 Building facilities<br>1.4 Coverage/plinth area<br>1.5 Room sizes<br>1.6 Shape of the building |
| 2. Details of major materials | 2.1 foundation materials<br>2.2 Walling materials<br>2.3 Roofing materials<br>2.4 Beams and column materials                                       |

|                              |  |
|------------------------------|--|
| 3. Details of exploded views | 3.1 Substructure works<br>3.2 Roofing works <ul style="list-style-type: none"> <li>• Roof construction</li> <li>• Roof cover</li> <li>• Eaves and verges</li> <li>• Ridges</li> <li>• Rain water goods</li> </ul> 3.3 Superstructure works<br>3.4 Finishes<br>3.5 Doors and windows<br>3.6 Staircases<br>3.7 Suspended slabs<br>3.8 Fixtures and fittings. |
| 4. Detailed specifications   | 4.1 Substructure works<br>4.2 Superstructure works<br>4.3 Staircases<br>4.4 Suspended slabs<br>4.5 Roofing works<br>4.6 Doors and windows<br>4.7 Finishes<br>4.8 Doors and windows<br>4.9 External works   |

#### REQUIRED KNOWLEDGE

- Technical drawing
- Building drawings
- Scaling
- Measurements
- Construction trends
- Construction materials
- Building design by-laws
- Topography
- Site planning
- Plan interpretation
- Specifications
- Locally available materials

#### SKILLS

- Technical drawing
- Site planning
- Plan interpretation
- Building drawing

➤ Research

**EVIDENCE GUIDE**

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

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|--|---|
| 1. Critical Aspects of Competency      | Assessment requires evidence that the candidate: <ul style="list-style-type: none"> <li>• Produced scaled building plans</li> <li>• Detailed specifications</li> </ul>  |
| 2. Resource Implications               | The following resources should be provided: <ul style="list-style-type: none"> <li>• Drawing instruments</li> <li>• Computers</li> <li>• Drawing instruments and equipment</li> <li>• Stationery</li> <li>• Studio</li> <li>• CAD software</li> <li>• Printers</li> <li>• scientific calculators</li> </ul> |
| 3. Methods of Assessment               | Competency may be assessed through: <ol style="list-style-type: none"> <li>3.1 Written text</li> <li>3.2 Interview</li> <li>3.3 Observation</li> </ol>  |
| 4. Context of Assessment               | Competency may be assessed on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment.   |
| 5. Guidance information for assessment | Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.  |