
Overview

This unit is concerned with producing drawings and schedules. You must be able to choose and use the standard drawing conventions, assemble the design information that you need, produce your drawings, have them checked and approved, and keep your registers and records up to date.

It is also about producing schedules. You must be able to collect the information that you need, to check its accuracy, to prepare schedules, have them approved, and keep records up to date

Performance criteria

You must be able to:

Prepare drawings

- P1 produce **drawings** which are complete, accurate, and comply with the design requirements and are suitable for the **purpose**
- P2 select **methods and media** which are suitable for the **drawings** required, and which can be produced with the resources and time available
- P3 use standard **drawing conventions** and identify and justify any deviations from them
- P4 clarify any information to be included which is incomplete and inconsistent and make accurate amendments
- P5 keep **registers and records** of **drawings** which are complete, accurate and up-to-date
- P6 obtain necessary **checks and approvals** for the content and presentation of **drawings**
- P7 use methods for producing **drawings** and record keeping consistent with quality assurance procedures

Prepare schedules

You must be able to:

- P8 select a format for the **schedules** which meets the requirements of the production process, the method of measurement used and the way in which the **schedules will be used**
- P9 measure the dimensions accurately from the source documents and the site according to standard requirements
- P10 check and confirm that the data is complete and reference the data, correctly, to the specification, drawings, manufacturer's references and other appropriate standards
- P11 clarify any information to be included which is incomplete and inconsistent and make accurate amendments
- P12 prepare **schedules** which include descriptions and quantities
- P13 select **methods and media** which are suitable for the **schedules** required, and which can be produced with the resources and time available
- P14 keep **registers and records** which are complete, accurate and up-to-date
- P15 obtain necessary **checks and approvals** for the content and presentation of **schedules**
- P16 use **methods** for production and **record** keeping which are consistent with quality assurance procedures

Knowledge and understanding

You need to know and understand:

Prepare drawings

- K1 how to produce **drawings** which are suitable for **purpose** (application)
- K2 how and why to select **methods and media** which are suitable for the **drawings** required (evaluation)
- K3 how to use standard **drawing conventions** (application)
- K4 how and why to justify any deviations from standard **drawing conventions** (evaluation)
- K5 how to clarify any information to be included which is incomplete and inconsistent, and make accurate amendments (application)
- K6 how to keep **registers and records** of drawings (application)
- K7 how to obtain necessary **checks and approvals** for the content and presentation of **drawings** (application)
- K8 how to use **methods** for production and record keeping which are consistent with quality assurance procedures (application)

Prepare schedules

You need to know and understand:

- K9 how and why to select a format for the **schedules** which meets the requirements of the production process, the method of measurement used and the way in which the **schedules will be used** (evaluation)
- K10 how to measure the dimensions from source documents and the site (application)
- K11 how to check and confirm that the data is complete (application)
- K12 how to reference the data to the specification, drawings, manufacturer's references and other appropriate standards (application)
- K13 how to clarify and make accurate amendments to any information to be included which is incomplete and inconsistent (application)
- K14 how to prepare **schedules** which include descriptions and quantities (application)
- K15 how and why to select **methods and media** which are suitable for the **schedules** required (evaluation)
- K16 how to keep complete, accurate and up-to-date **registers and records** (application)
- K17 how to obtain **checks and approvals** (application)
- K18 how to use **methods** for production and **record** keeping which are consistent with quality assurance procedures (application)

Scope/range

Prepare drawings

- 1 Drawings:
 - 1.1 location, assembly, component
 - 1.2 sketches
 - 1.3 working drawings
 - 1.4 presentation drawings
 - 1.5 co-ordination drawings
- 2 Purpose (of drawing):
 - 2.1 convey the design intent
 - 2.2 co-ordination
 - 2.3 discipline specific
 - 2.4 interdisciplinary coordination
 - 2.5 obtain consents
 - 2.6 procurement
 - 2.7 contract
 - 2.8 production
 - 2.9 as built/final issue
 - 2.10 presentation
 - 2.11 analysis
 - 2.12 factory manufacture
 - 2.13 site installation
 - 2.14 sub-contract and specialist details
- 3 Methods and media:
 - 3.1 manual
 - 3.2 electronic
- 4 Drawing conventions:
 - 4.1 detailing standards
 - 4.2 codes of practice
 - 4.3 current industry practice
 - 4.4 methods of coordination (e.g. Common Arrangement)
- 5 Registers and records:
 - 5.1 incoming and outgoing drawing and document registers
 - 5.2 records of document approval and revision

Scope/range

- 5.3 quality assurance documentation
- 6 Checks and approvals cover:
 - 6.1 format
 - 6.2 presentation
 - 6.3 accuracy
 - 6.4 technical content
 - 6.5 completeness
 - 6.6 referencing
 - 6.7 cross-referencing and correlation with associated documents
 - 6.8 status
 - 6.9 company standards
 - 6.10 positioning
 - 6.11 dimensions
 - 6.12 tolerances
 - 6.13 composition
 - 6.14 fixing
 - 6.15 annotation
 - 6.16 symbols and conventions
 - 6.17 interoperability
 - 6.18 co-ordination
 - 6.19 revision control

Prepare schedules

- 7 Schedules:
 - 7.1 materials
 - 7.2 construction elements
 - 7.3 components
 - 7.4 finishes
 - 7.5 fixtures and furnishings
- 8 Schedules will be used for:
 - 8.1 obtaining consents
 - 8.2 procurement
 - 8.3 contract

Scope/range

- 8.4 production
- 8.5 record payments
- 8.6 presentation
- 8.7 as built/final issue
- 8.8 factory manufacture
- 8.9 site installation
- 8.10 sub-contract and specialist details
- 8.11 room data
- 9 Methods and media:
 - 9.1 manual
 - 9.2 electronic
- 10 Register and records:
 - 10.1 incoming and outgoing drawing and document registers
 - 10.2 records of document approval and revision
- 11 Checks and approvals cover:
 - 11.1 format
 - 11.2 presentation
 - 11.3 accuracy
 - 11.4 technical content
 - 11.5 completeness
 - 11.6 referencing
 - 11.7 cross-referencing and correlation with associated documents and information
 - 11.8 status
 - 11.9 company standards
 - 11.10 interoperability
 - 11.11 co-ordination
 - 11.12 non-duplication
 - 11.13 revision control

COSBEDO08 - SQA Unit Code H6AB 04
Prepare drawings and schedules in built environment
design



Developed by ConstructionSkills

Version number 2

Date Approved November 2012

Indicative review date July 2019

Validity Current

Status Original

Originating organisation ConstructionSkills

Original URN COSBEDO08

Relevant occupations Civil engineers; graphic designers; architectural technologists; town planning technicians; draughtspersons; building surveyors

Suite Built Environment Design

Keywords prepare; drawings; schedules
