
Overview

This unit is concerned with the drafting of specification for designs.

It covers methods of specifications, derived from standard sources and modified as necessary. These describe how the finished products should be constructed. You must be able to decide what sources are suitable, modify them where necessary, check the coherence and consistency of the finished drafts, and have them verified.

It covers performance specifications, which describe how the finished product should perform in use. You must know what you want, be able to draft a suitable document, and ensure that it is checked and verified.

Performance criteria

Prepare prescriptive design specifications

- You must be able to:*
- P1 select a specification format document which is suitable for the project requirements and the project stage
 - P2 structure the specification to suit the circumstances and requirements of the project
 - P3 produce a specification which is based on identified, valid source information which has been verified
 - P4 select, and where necessary amend, technical clauses from relevant sources, which define the quality, type and standard of the materials, components and finished work
 - P5 format the specification so that it is concise, referenced and cross-referenced accurately
 - P6 check that the specification is consistent with the current design and other design documentation, and update it promptly and accurately when the design changes
 - P7 obtain necessary verification for the content and presentation of specifications

Prepare performance specifications

- You must be able to:*
- P8 select a performance specification document which is suitable for the purpose and the project stage
 - P9 check that the specification is consistent with design and related documents, where separate, and that it does not include duplicate and contradictory information
 - P10 produce a specification which conforms with identified, applicable, current source information
 - P11 identify where the current source information is valid and obtain accurate and supplementary information
 - P12 identify, analyse and detail the design objectives and appropriate functional performance requirements
 - P13 define appropriate performance criteria, methods of assessment and verification

COSBEDMO14 - SQA Unit Code FM7L 04

Prepare specifications in built environment design management

- P14 include with the specification the data used to calculate the performance requirements
- P15 structure the specification so that it is concise referenced and cross-referenced accurately
- P16 check that the specification is consistent with the current design and other design documentation, and update it promptly and accurately when the design changes
- P17 obtain necessary checks and approvals for the content and presentation of specifications

Knowledge and understanding

You need to know and understand:

Prepare prescriptive design specifications

- K1 how and why to select a specification format document which is suitable for the project requirements and the project stage (evaluation)
- K2 how to structure the specification to suit the circumstances and requirements of the project (application)
- K3 how to produce a specification based on identified, valid verified source information (application)
- K4 how and why to select technical clauses from standard sources, which define the quality, type and standard of the materials, components and finished work (evaluation)
- K5 how to amend technical clauses from standard sources, which define the quality, type and standard of the materials, components and finished work (application)
- K6 how to format the specification (application)
- K7 how to check that the specification is consistent with the current design and other design documentation (application)
- K8 how to update the specification promptly and accurately when the design changes (application)
- K9 how to obtain necessary verification for the content and presentation of specifications (application)

Prepare performance specifications

You need to know and understand:

- K10 how to select a performance specification format document which is suitable for the purpose and the project stage
- K11 how to check that the specification is consistent with design and related documents, where separate, and that it does not include duplicate and contradictory information (application)
- K12 how to produce a specification which conforms with identified, applicable, current source information (application)
- K13 what to identify as valid current source information (understanding)
- K14 how to obtain accurate and supplementary source information (application)

COSBEDMO14 - SQA Unit Code FM7L 04

Prepare specifications in built environment design management

- K15 what to identify as the design objectives and appropriate functional performance requirements (understanding)
- K16 how and why to analyse and detail the design objectives and appropriate functional performance requirements (analysis)
- K17 how and why to detail the design objectives and appropriate functional performance requirements (evaluation)
- K18 how and why to define appropriate performance criteria, methods of assessment and verification (evaluation)
- K19 how to include with the specification the data used to calculate the performance requirements (application)
- K20 how to structure the specification so that it is concise, referenced and cross-referenced accurately (application)
- K21 how to check that the specification is consistent with the current design and other design documentation (application)
- K22 how to update the specification promptly and accurately when the design changes (application)
- K23 how to obtain necessary checks and approvals for the content and presentation of specifications (application)

Additional Information

Scope/range

Prepare prescriptive design specifications

1. Specification format:

- 1.1. original document
- 1.2. outline specification
- 1.3. National Specification systems
- 1.4. industry/practice standards
- 1.5. elemental and trade
- 1.6. phase
- 1.7. to obtain consents and permissions

2. Project requirements:

- 2.1. procurement
- 2.2. contract
- 2.3. production and installation

3. Project stage:

- 3.1. Stage 3 (Definition)
- 3.2. Stage 4 (Design)
- 3.3. Stage 5 (Build and Commission)

4. Source information:

- 4.1. design information (digital models, documents, drawings, graphical and non-graphical electronic data files)
- 4.2. statutory regulations
- 4.3. EU and British Standards
- 4.4. codes of practice
- 4.5. technical literature
- 4.6. industry product certification

5. Referenced against:

- 5.1. standard method of measurement/new rule of measurement
- 5.2. Common Arrangement
- 5.3. Verification:
- 5.4. CI/SfB
- 5.5. format
- 5.6. presentation
- 5.7. accuracy
- 5.8. technical content

- 5.9. completeness
- 5.10. referencing
- 5.11. cross-referencing and correlation with associated documents
- 5.12. spelling, grammar and punctuation
- 5.13. status
- 5.14. current

Prepare performance specifications

6. Type of performance specification:

- 6.1. original document
- 6.2. outline document
- 6.3. National Building Specification
- 6.4. elemental and trade
- 6.5. Purpose of documents:
- 6.6. phase
- 6.7. to obtain consents and permissions
- 6.8. procurement
- 6.9. contract
- 6.10. production and installation

7. Project stage:

- 7.1. Stage 3 (Definition)
- 7.2. Stage 4 (Design)
- 7.3. Stage 5 (Build and Commission)

8. Source information:

- 8.1. design information design information (digital models, documents, drawings, graphical and non-graphical electronic data files)
- 8.2. statutory regulations
- 8.3. EU and British Standards
- 8.4. codes of practice
- 8.5. technical literature
- 8.6. industry product certification

9. Referenced against:

- 9.1. standard method of measurement/new rule of measurement
- 9.2. Common Arrangement

10. Checks and approvals:

10.1. format

10.2. presentation

10.3. accuracy

10.4. technical content

10.5. completeness

10.6. referencing

10.7. cross-referencing and correlation with associated documents

10.8. spelling, grammar and punctuation

COSBEDMO14 - SQA Unit Code FM7L 04

Prepare specifications in built environment design management

Developed by ConstructionSkills

Version number 2

Date approved December 2012

Indicative review date January 2018

Validity Current

Status Original

Originating organisation ConstructionSkills (CIC)

Original URN COSBEDMO14

Relevant occupations Architects; Civil Engineers; Graphic Designers; Architectural Technologists; Town Planning Technicians; Building Surveyors

Suite Built Environment Design Management

Key words design; specification; prescriptive