

CPCCBC4014

PREPARE SIMPLE BUILDING SKETCHES AND DRAWINGS

ASSESSMENT SUMMARY

The assessment activities for *CPCCBC4014 Prepare simple building sketches and drawings* cover all aspects of the unit of competency. For Apprentices/Trainees, this includes supervisor completion of the Apprentice/Trainee Record (ATR).

Participants must read all the information given before starting any assessment task. The assessment tasks are intended to be fair, flexible, valid and reliable. If a Participant has any questions or requires alternative arrangements to be made such requests should be directed to their Trainer/Assessor, who should note such arrangements in the 'Assessor Comments' on the affected assessment. If a Participant feels they are not yet ready to be assessed, they should discuss their options with their Trainer/Assessor.

To satisfactorily complete the assessment, the Participant is required to answer all questions correctly and demonstrate their skills to industry standards. If a Participant does not answer all questions or perform all tasks, they will be deemed 'Not Satisfactory' for the task and 'Not Yet Competent' for the unit of competency.

The Trainer/Assessor can provide the Participant with additional information on interpreting the assessment outcomes and guide the Participant's options. If a Participant is still deemed 'Not Satisfactory' they will have the opportunity to undertake a supplementary assessment or appeal the result as per the process in the Student Handbook.

By signing below, the Participant acknowledges:

- They understand the assessment instructions and requirements, and consent to being assessed.
- The work submitted is to be their own work – with the work of/with others needing to be clearly acknowledged and documented.
- They consent to any photo/video recording of their work that occurs during assessment.

Participant name	<i>Kandy-Lee Ashby</i>
Participant signature	

Pre-requisite unit(s) to be achieved and authenticated prior to undertaking assessment
☒ Not applicable

Task	Date completed	Assessment Results	
Theory Exam	<i>11-04-24</i>	Select Date.	☐ Satisfactory ☐ Not Satisfactory
Practical Assessment	<i>18-04-20</i>	Select Date.	☐ Satisfactory ☐ Not Satisfactory
Outcome for CPCCBC4014	Select Date.	☐ Competent	☐ Not Yet Competent

Evidence requirements checklist (ticked by assessor and evidence supplied to RTO)	
☐ Theory Exam	☐ Planning sheet
☐ Practical Assessment	☐ Sketch/drawing of 1 structural component
☐ Compliance review	☐ Sketch/drawing of 1 non-structural component

Assessor name	
Assessor signature	

CPCCBC4014

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THEORY EXAM

Participant name	Kandy-Lee Ashby
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FOR THE PARTICIPANT
Instructions
- You will complete written questions as outlined on the following pages. You must attempt all questions and provide enough detail in your responses to demonstrate your knowledge. - It is anticipated that you should complete this assessment within two (2) hours, but additional time may be allowed upon negotiation with the Assessor. - You must complete all questions unassisted by the Assessor or other personnel but may refer to reference material as needed. All questions must be answered correctly for a 'Satisfactory' assessment outcome to be awarded. - An oral examination may be allowed under certain circumstances, whereby your answers will be documented by another party. - Any written questions that are incomplete, or not answered satisfactorily will need to be completed again after further training support. - If you answer a question incorrectly but modify your response, put your initials next to the written change (or the Assessor must initial a verbal change).
Resources required
Pen

FOR THE ASSESSOR
Instructions
- Where oral examination has occurred, ensure that this is acknowledged in writing (e.g. FT001 and Assessor Comments) - All questions must be satisfactorily demonstrated by the Participant for a Satisfactory determination (indicated by an Assessor tick to the right of the question). - Assessors are to complete marking in pen of a different colour to the Participant. - If the Participant verbally modifies their response, write in the modified response verbatim and put your initials next to the written change.

ASSESSOR COMMENTS

As necessary, outline:

- Details on reattempts, alternative arrangements or reasonable adjustments made.
- Where a Participant is deemed 'Not Satisfactory', provide recommendations for future training.

Q1. Describe each of the following types of plans and explain what they are used for.

Answer

Type of plan	Description	Use
Presentation drawings	These drawings provide a basic simple visual of the building concept. It includes tones and hatches to show different materials.	These drawings show the design and key features. They describe the project and used for the client to provide an idea of the final visual of building.
Isometric drawings	Isometric drawings are a 3D image shown on a 2D surface. These are drawn at a 30 degree angle.	These drawings show the 3D view of the project.
Orthographic drawings	Orthographic drawings are 2D images. These drawings show the item at different angles.	These drawings provide a view of the structure at all angles.
Perspective drawings	Perspective drawings are a realistic representation of the project.	These are used to give a detailed view of the project. It provides depth and perspective.

- Q2. A client doesn't understand where or how two (2) wall inserts would look beside a window in the designated living room. What type of drawing could you draw to assist in their understanding?

Answer

Floor plan.



- Q3. What type of drawing would you need to present to builders or contractors to give a visual aid of all angles of the building?

Answer

Elevations and sections



- Q4. What type of drawings are used to demonstrate landscape features such as trees, rocks and shrubs?

Answer

Site plan.



- Q5. What type of information can you interpret from a site plan?

Answer

- Proposed building
- Existing trees and structures.
- Contour lines
- Datum
- Block Identification
- Road Identification
- Project boundary
- North point



Q6. What is building information modelling (BIM)?

Answer

BIM is a software program that can be used by consultants, engineers, Architects and builders. We are able to collaborate as a team to review design options.



Q7. Explain how the NCC is relevant to construction drawings.

Answer

When creating construction drawings we must make sure that the comply with NCC. The NCC sets the minimum safety, health and sustainability requirements for buildings and works in Australia.



Q8. Discuss the importance of complying with standards during a building and construction project.

Answer

The NCC provides the government minimum standards, we must comply with these throughout the project process. Complying with these is the best way to achieve the safest, sustainable and most functional project.



Q9. Why is it important to confirm that construction plan information complies with building and construction regulations.

Answer

As the construction plan is the base that future drawings will be built off. It is important to make sure every aspect conform with all regulations.



Q10. When selecting information from plans to present to others, what will determine the format of the information you wish to present?

Answer

When presenting information to others, you need to consider the person viewing. Site staff prefer to have hard copies. Consultants, subcontractors and clients will prefer a soft copy. We also need to confirm if they have requested a preferred format.



Q11. What is involved when inspecting drawing equipment for serviceability?

Answer

- Check for faults with manual tools (pencils etc.)
- Check that printers and computers are serviced and working.
- confirm your software is the latest version.
- Test all items prior to starting.



Q12. Listed below are common drawing conventions. Provide a brief explanation of each.

Answer

Drawing convention	Explanation
Sheet layout	Sheet layout refers to the arrangement of all drawings.
Title Block	The Title block provides important administrative information of the project (location, scale, client etc.)
Line types	The Line types show the different components on a drawing.
Symbols	Symbols refer to icons used to convey common items.
Dimensions	Dimensions are numerical values shown on a drawing to express units of measurements.
Dimension lines	Dimension lines indicate the main objects measurements. These are usually fine solid lines.
Abbreviations	Abbreviations are shortened common construction terms.



Q13. Explain what is learned and confirmed by reading AS 1100.101.

Answer

AS 1100.101 sets out the basic principles of technical drawing practices. This document provides the basis on abbreviations, materials, sizes and layout. As well as letters and symbols to be used.



Q14. Provide a brief explanation for the following building and construction methods.

Answer

Methods	Explanation
Solid brick construction	This refers to masonry construction that utilises layers of brick with header bricks to hold them together.
Brick veneer construction	This refers to a single layer of brick covering the building frame.
Framing	This refers to separate structural pieces that come together to create the structure of the building.
Post and beam construction	This refers to heavy timbers that are connected by plates or bolts.



Q15. Define the following construction terminology.

Answer

Term	Definition
Nogging	This is a horizontal piece of timber fixed between studs in a framed wall.
Pilot hole	This is a hole that is drilled to receive a screw or nail.
Masonry	This means brick, concrete or stone laid in mortar.
Admixture	These are materials added to mortar / concrete to achieve particular modifications to the normal properties of the basic material.



Q16. Discuss what different types of information you must gather to create effective sectional drawings and sketches from building plans.

Answer

- Variations in the elevations
- floor to ceiling height.
- Building and roof height.
- Dimensions of doors, windows and other openings
- Dimensions of fixtures, furniture and equipment.



Q17. What type of information might you need to effectively draw bracing details for a wall adjacent to ceiling joists?

Answer

information needed
- measurement
- material
- method of construction.



Q18. Discuss the importance of adding labels to the drawing discussed in Q17.

Answer

It is important to add labels to the drawing as this will assist the site team to build correctly and avoid errors.



Q19. Why should the drawing be created 'to scale'?

Answer

it is important to create drawings to scale as this means all features of the building are able to fit on one page. This provides an overview of the project.



Q20. When using symbols and abbreviations, how can you ensure that each reader of the plans understand what they mean?

Answer

To help the reader understand the plans we can provide them with a legend to refer to. As well as following AS 1100.101-1992.



Q21. Discuss the sheet layout and information included to present elevation drawings to the local council for approval.

Answer

Elevation drawings must illustrate all sides of the building structure. All information needs to be labelled clearly and will include accurate measurements. The drawing must include dimensions; Scale, Title Block, Notes, section number and type of view.



Q22. What format would you produce construction plans to present to each of the following recipients?

Answer

Recipients	Format (hard copy/ digital)
Client	Digital
Builder/ Contractor	Hard copy
Local Council	Digital and Hard copies.

