



ASSESSMENT WORKBOOK



CPCCBBC4012

Read and interpret plans and specifications

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Version Control & Document History

Date	Summary of Modifications	Version
9 February 2021	Version 1.0 released for publishing	1.0

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Introduction

The assessments in this workbook are divided into three categories: Knowledge Assessment and Practical Assessment.

The **Knowledge Assessment** is a set of general and workplace questions testing your knowledge and understanding of the general theory behind the unit.

You must answer all Knowledge Assessment Questions using your own words. However, you may refer to your Learner Guide and other relevant resources and learning materials to complete this assessment.

Some questions cover processes you would likely encounter in a workplace. Ideally, you should be able to answer these questions based on the processes that are currently in place in your workplace. However, if you do not currently have access to a workplace, then answer the questions based on processes that should be implemented in a typical workplace setting.

The **Practical Assessment** is made up of the **Practical Assignment, Workplace Assessment, and Practical Oral Assessment**. This assessment tests your practical skills with respect to the requirements of the unit of competency relevant in this workbook.

The Practical Assessment requires you to complete and submit workplace documents and other documentation relevant to the unit of competency.

The evidence you submit must be your own work except where due reference is made and where you are required to submit supplementary workplace documents such as policies and procedures.

When completing the assessments included in this workbook:

1. Read the instructions provided in each task carefully before attempting to complete the task. The instructions will guide you on how to answer the question or complete the task satisfactorily.
2. Follow the steps provided in each task.
 - If the question instructs you to describe, provide a description as your response. If the question instructs you to list, provide a list as your response.
 - Where there is a number of required responses, provide the required number of responses. For example, if you are asked to list three responses, provide three responses.
3. Ensure that all your submissions for this assessment indicate your first and last name and that these submissions have been named according to the file naming convention prescribed in each task.

Competency-Based Assessments

Definition of Competency

Assessment in this context can be defined as the fair, valid, reliable, and flexible gathering and recording of evidence to support the judgement on whether competency has been achieved. Skills and knowledge (developed in a structured learning situation, at work, or in some other context) are assessed against national standards of competence required by industry, rather than compared with the skills and knowledge of other candidates.

The features of a competency-based assessment system are:

- It is focused on what candidates can do and whether it meets the criteria specified by the industry as competency standards.
- Assessment should mirror the environment the candidate will encounter in the workplace.
- Assessment criteria should be clearly stated to the candidate at the beginning of the learning process.
- Assessment should be holistic. That is, it aims to assess as many elements and/or units of competency as is feasible at one time.
- In competency assessment, a candidate receives one of only two outcomes – ‘competent’ or ‘not yet competent.’
- The basis of assessment is in applying knowledge for some purpose. In a competency system, knowledge for the sake of knowledge is seen to be ineffectual unless it assists a person in performing a task to the level required in the workplace.
- The emphasis in assessment is on assessable outcomes that are clearly stated for the trainer and candidate. Assessable outcomes are tied to the relevant industry competency standards where these exist. Where such competencies do not exist, the outcomes are based upon those identified in a training needs analysis.

Assessing Nationally-Recognised Training

Developing and conducting assessment, in an Australian Vocational Education and Training (VET) context, is founded on the Principles of Assessment and the Rules of Evidence:

Principles of Assessment

1. Assessment must be valid

- Assessment must include the full range of skills and knowledge needed to demonstrate competency.
- Assessment must include the combination of knowledge and skills with their practical application.
- Assessment, where possible, must include judgements based on evidence drawn from a number of occasions and across a number of contexts.

2. Assessment must be reliable

- Assessment must be reliable and must be regularly reviewed to ensure that assessors are making decisions in a consistent manner.
- Assessors must be trained in national competency standards for assessors to ensure reliability.

3. Assessment must be flexible

- Assessment, where possible, must cover both the on- and off-the-job components of training within a course.
- Assessment must provide for the recognition of knowledge, skills, and attitudes regardless of how they have been acquired.
- Assessment must be made accessible to candidates through a variety of delivery modes, so they can proceed through modularised training packages to gain competencies.
- Assessment must be mutually developed and agreed upon between assessor and the assessed.
- Assessment must be able to be challenged. Appropriate mechanisms must be made for reassessment as a result of challenge.

4. Assessment must be fair

- Assessment process must consider the individual needs of the candidate.
- Assessment must provide for reasonable adjustments, where appropriate, to consider the individual candidate's needs.

(Source: Standards for RTOs 2015, Clauses 1.8 – 1.12)

Rules of Evidence

When collecting evidence, certain rules apply to that evidence. All evidence must be valid, sufficient, authentic, and current:

1. Valid

Evidence gathered should meet the requirements of the unit of competency. This evidence should match, or at least reflect, the type of performance that is to be assessed, whether it covers knowledge, skills, or attitudes.

2. Sufficient

This rule relates to the amount of evidence gathered. Enough evidence must be gathered to satisfy the requirements that the candidate be competent in all aspects of the unit of competency.

3. Authentic

When evidence is gathered, the assessor must be satisfied that evidence is the candidate's own work.

4. Current

This relates to the recency of the evidence and whether the evidence relates to current abilities.

(Source: Training in Australia by M Tovey, D Lawlor)

Dimensions of Competency

The national concept of competency includes all aspects of work performance and not only narrow task skills. The four dimensions of competency are:

1. Task skills
2. Task management skills
3. Contingency management skills
4. Job or role environment skills

Reasonable Adjustment

'Reasonable adjustment' in VET is the term applied to modifying the learning environment or making changes to the training delivered to assist a candidate with a disability. A reasonable adjustment can be as simple as changing classrooms to be closer to amenities or installing a particular type of software on a computer for a person with vision impairment.

Why make a reasonable adjustment?

We make reasonable adjustments in VET to make sure that candidates with a disability have:

- The same learning opportunities as candidates without a disability, and
- The same opportunity to perform and complete assessments as those without a disability.

Reasonable adjustment applied to participation in teaching, learning, and assessment activities can include:

- Customising resources and assessment activities within the training package or accredited course
- Modifying the presentation medium
- Learner support
- Use of assistive/adaptive technologies
- Making information accessible both before enrolment and during the course
- Monitoring the adjustments to ensure candidate needs continue to be met

Assistive/Adaptive Technologies

Assistive/Adaptive technology means 'software or hardware that has been specifically designed to assist people with disabilities in carrying out daily activities' (World Wide Web Consortium - W3C). It includes screen readers, magnifiers, voice recognition software, alternative keyboards, devices for grasping, visual alert systems, digital note-takers.

(Adapted Reasonable Adjustment in teaching, learning and assessment for learners with a disability - November 2010 - Prepared by - Queensland VET Development Centre)

IMPORTANT:

Reasonable adjustment made for collecting candidate assessment evidence must not impact on the standard expected by the workplace, as expressed by the relevant unit(s) of competency. For example, if the assessment were gathering evidence of the candidate's competency in writing, allowing the candidate to complete the assessment verbally would not be a valid assessment method. The method of assessment used by any reasonable adjustment must still meet the competency requirements.

The Unit of Competency

The units of competency specify the standards of performance required in the workplace.

This assessment addresses the following unit of competency:

CPCCBC4012 – Read and interpret plans and specifications (Release 1.0)

1. Identify types of plans
2. Read and interpret the plan
3. Identify structural details
4. Identify non-structural details

A complete copy of the above unit of competency can be downloaded from the TGA website:

<https://training.gov.au/Training/Details/CPCCBC4012>

The Context of Assessment

To complete the assessments in this workbook, students need to have access to their learning materials and the Internet. The Knowledge Assessment may be completed wholly at the candidate's home or chosen place of study. The Practical Assessment must be completed in a workplace or a simulated environment.

Assessment Methods

This workbook uses the following assessment method/s:

1. Knowledge Assessment

A set of general and workplace questions testing the candidate's general knowledge and understanding of the general theory behind the unit.

2. Practical Assignment

A series of written practical tests assessing the candidate's practical knowledge and understanding of the unit of competency.

3. Workplace Assessment

A set of tasks or activities completed according to set instructions and guidelines to meet the requirements of the relevant unit. These tasks and activities require you to have access to a workplace or a similar environment.

4. Practical Oral Assessment

A series of oral assessment tasks testing the candidate's practical knowledge and understanding of the unit of competency. The candidate needs to provide their responses to these assessment tasks orally while being observed by the assessor. The assessor will then record important details from the candidate's oral response.

Resources Required for Assessment

The Training Organisation to provide/organise candidate with access to:

- Assessor to supervise and observe candidate as they complete assessments, where required.
- Workplace, or a similar environment, where the candidate can complete the assessments, and that will allow them access to:
 - Building and construction project
 - Relevant construction personnel whom the candidate will be meeting with in the planning phase of the building and construction project.
 - Relevant construction personnel whom the candidate will be confirming the currency of plans, specifications and amendments with.
 - Relevant construction personnel whom the candidate will be verifying details on the construction plans and specifications with.
 - Construction plans
 - Construction specifications
 - Detail drawings
 - Organisational policies and procedures relevant to the supervising of construction works
 - Workplace safety requirements relevant to safe design in planning building and construction
 - Workplace's processes for preparing building construction plans
 - Documentation templates, including:
 - Meeting minutes template
 - Construction Plan Details Verification Checklist
 - Material Quantity Takeoff Form
 - Means to record any comments or issues found while supervising construction works (e.g. pen and paper)
 - Relevant government building and construction and contract legislation
 - Current building and construction codes and standards
 - The National Construction Code (NCC)
 - Computers, applications and software to access CAD.

The candidate will need access to:

- Computer with Internet, email access, and a working web browser
- Installed software: MS Word, Adobe Acrobat Reader

Assessment Workbook Cover Sheet

To the candidate: Print this cover sheet and complete it by filling in all the required information and signing in the space provided. Your signature must be handwritten. Scan the completed cover sheet and submit it along with your evidence submissions. Use the filename: **CPCCBC4012 Cover Sheet**

Workbook	CPCCBC4012
Title	Read and interpret plans and specifications (Release 1.0)
First and Last Name	Anya English
Phone	0478 944 719
Email	anya@cogentscaffolding.com.au

Please read the Candidate Declaration below and if you agree to the terms of the declaration, sign and indicate the date in the spaces provided.

By submitting this work, I declare that:

- I have been advised of the assessment requirements, have been made aware of my rights and responsibilities as an assessment candidate, and choose to be assessed at this time.
- I am aware that there is a limit to the number of submissions that I can make for each assessment, and I am submitting all documents required to complete this Assessment Workbook.
- I have organised and named the files I am submitting according to the instructions provided. I am aware that my assessor will not assess work that cannot be identified and may request the work be resubmitted according to the correct process.
- This work is my own and contains no material written by another person except where due reference is made. I am aware that a false declaration may lead to the withdrawal of qualification or statement of attainment.
- I am aware that there is a policy of checking the validity of qualifications that I submit as evidence as well as the qualifications/evidence of parties who verify my performance or observable skills. I give my consent to contact these parties for verification purposes.

Name: Anya English

Signature:

Date signed:

Knowledge Assessment

1. Answer the following questions about concept drawing/sketches.

i. What is the significance of concept drawing/sketches?

The Significance of concept drawing/sketches is that they highlight the main building principles and features, to present initial ideas regarding the project quickly and to further explore more ideas and efficiently put into drawings.

ii. What are sketch plans?

Sketch plans are a more detailed but not as detailed as the final drawing to represent a realistic picture of how the building is going to look and the true proportions of the building.

iii. How do you create presentation drawings?

Presentation drawings are created by using computer aided design which may include realistic rendering and animation displays.

2. Answer the following questions about architectural plans.

i. What is an architectural plan?

An Architectural plan is a drawing that is used to demonstrate details about the architectural part of a building or project and how the architectural elements are integrated into the building. The details generally include; Architectural floor plan, site plan, elevations, section, perspective, detail views, schedule of windows and doors etc.

ii. List down four details contained in an architectural plan.

- a. Architectural floor plan
- b. Site plan
- c. Detail views
- d. Schedule of windows and doors

3. Answer the following questions about structural plans.

i. What is a structural plan?

A Structural plan is a drawing that is used to demonstrate information about the structural side of a building or project and includes elements that will hold a building against external forces.

ii. How is a structural plan different from an architectural plan?

Architectural plans differ from the structural plans because where structural plans demonstrate the elements that make a building stable against external forces, architectural demonstrate the general function, aesthetic and feeling of the building.

iii. List four details that can be found in a structural plan.

- a. Foundation Plan
- b. Structural Floor plan
- c. Schedule of materials
- d. Connection Details

4. Answer the following questions about civil plans.

- i. What is a civil plan?

A civil plan is typically provided to civil engineers to demonstrate the general outline of the construction elements used and how they intergrate with eachother throught the construction phase.

- ii. List two details contained in a civil plan that can be found in an architectural plan.

- a. Section Views
- b. Elevations

- iii. List two details contained in a civil plan that can be found in a structural plan.

- a. Sections
- b. Detail Views

5. Answer the following questions about mechanical plans.

- i. What is a mechanical plan?

Mechanical plans are drawims that contain equipment and processes that relate to mechanics, this includes heating cooling, ventilation and transportation.

- ii. List down two types of equipment included in a mechanical plan.

- a. Air conditioning unit
- b. Lifts

- iii. List down three details that are included in a mechanical plan.

- a. HVAC Layout
- b. Heat-loss and heat-gain calculations
- c. Size, type and layout of ducting

6. Answer the following questions about electrical plans.

i. What is an electrical plan?

Electrical plans are drawings that include information building elements that are related to electrical circuit e.g. power, lighting and communication.

ii. List down three details contained in an electrical plan.

- a. Wiring layout for power
- b. Location of panels and switches
- c. Schedule of loads

7. Answer the following questions about plumbing and drainage plans.

- i. What is a plumbing and drainage plan?

A plumbing and drainage plans are drawings that demonstrate a visual representation of all elements that are related to the plumbing systems and guides the installation of the water supply and drainage elements. This includes pipes, fixtures, valves, sanitaryware etc.

- ii. What is the purpose of a plumbing and drainage plan?

The purpose of plumbing and draining plans are to guide the installation of water supply and drainage elements including pipes, fixtures, valves and sanitaryware.

- iii. What are the two primary concerns addressed by a plumbing and drainage plan?

- a. Water supply system
- b. Drainage components

- iv. List down two details contained in a plumbing and drainage plan that are related to water supply system.

- a. Size of water supply pipes
- b. Pump capacity

- v. List down two details contained in a plumbing and drainage plan that are related to drainage system.

- a. Pipes
- b. Fixtures

8. Answer the following questions about parts of a plan.

i. What is a site plan?

A site plan is a drawing which demonstrates a complete overview of the property being built on and all elements to be considered in the construction process.

ii. List five key features of a site plan.

- a. Contour lines
- b. Contour level
- c. Block identifications
- d. Proposed building
- e. Finished floor level

iii. What is a floor plan?

A floor plan is a view of the buildings top section and defines the limits of the buildings different spaces. It demonstrates an arrangement of elements including walls, columns, doors and windows.

iv. What information can be acquired from a floor plan? List five.

- a. Location of appliances
- b. Layout of walls
- c. Width of doors and windows
- d. Width of stairs
- e. Arrangement of furniture

v. What are two key differences between elevation view and section view?

- a. Elevation views shows a view of the outside of the building however, section views shows how the building would look on the inside if it were to be cut in half with a imaginary line.
- b. In Section views you are able to determine and analyse the integration of building elements, where the elevation views one can analyse the exterior components.

vi.	List three types of information that can be found in an elevation view. - Floor-to-ceiling height - Roof height - Wall finish
vii.	List three types of information that can be found in a section view. - Floor-to-ceiling height - Dimensions of doors, windows and other openings - Dimensions of fixtures, furniture and equipment
viii.	What is the purpose of detail views? The purpose of a detail view is so one can examine certain parts/components of of a building through the larger scale views of parts of the building, as well as understanding and visually seeing how a job is to be correctly done.

9. Answer the following questions about datum and reduced levels (RL).

i.	What is the purpose of a datum in construction? The purpose of datum in construction is to reference all the vertical measurement made in the construction project.
ii.	List two ways of how datum can be established in construction drawings. - By setting the datum on the ground floor of the building, which will be considered 0.0m elevation meaning that ant elements found above the datum will have a positive elevation and any elements below ill have a negative elevation.. - By setting the datum at the lowest part of the building like the basement which will mean that any other elements will have a positive elevation.
iii.	What are reduced levels (RL)? A reduced level is the vertical measurements that are established based on the datum.

- iv. List two ways of establishing reduced levels in construction drawings.
 - a. By using positive and negative symbols to demonstrate whether the reduced level is above or below the reference point
 - b. By stating whether a reduced level is above or below the reference point

10. Answer the following questions about title blocks.

- i. What is a title block?

A title block is a section on the drawing sheets which gives general information about the drawing which could include who, what, when and where as well as specific information about that specific drawing sheet.

- ii. Where is a title block usually located?

The title block is usually located at the bottom or the sides of the drawing sheet.

- iii. List five types of information that can be obtained from the title block.

- a. Project title
- b. Project site address
- c. Name of draftsman/draftmen
- d. Sheet name
- e. Client name

11. Answer the following questions about scale and dimension drawing conventions.

- i. What are scale drawings used for?

Scale drawings are used for accurately illustrating real-life building components or items at fixed, reduced and enlarged sizes by measuring with a scale rule to determine their actual size, or see their actual size when using a computer-aided design.

- ii. Describe each ratio of standard scale ranges below.

Ratio	Description
i. 1:100	Of one unit of drawing object is 100 times bigger in real size or if the object is the real size, 100 times smaller.
ii. 1:2	Of one unit of drawing object is two times bigger in real size or if the object is the real size, two times smaller
iii. 1:1000	Of one unit of drawing object is 1000 times bigger in real size or if the object is the real size, 1000 times smaller
iv. 1:50	Of one unit of drawing object is 50 times bigger in real size or if the object is the real size, 50 times smaller

- iii. What is the importance of dimensions in construction drawings?

The importance of dimensions in construction drawings is to define the size and other measurements of an object which includes length, width, height and thickness.

- iv. What system of measurement is used for dimensions in Australian construction drawings?

Metric system is typically used for dimensions in Australian construction drawings.

- v. List three ways of how dimensions can be displayed in construction drawings.

- Using decimal points which may be rounded off to either two or three decimal places .
- Using comma or a space when separating thousands e.g. 1 000 or 1,000
- Using dimension terminators such as dots, arrowheads or slash to demonstrate which section the measurements start and end.

12. Listed below are the different types of plans. Identify the corresponding terminologies used and the equivalent abbreviation for the type of plan indicated.

Type of Plan	Building and construction terminology	Abbreviation
a. Architectural	Plasterboard	PB
	Kiln dried hardwood	KDHW
b. Structural	Wall Tie	WT
	Universal Beam	UB
a. Mechanical	Air Conditioning Unit	ACU
	Fan Coil Unit	FCU
b. Electrical	Main Switch Board	MSB
	General Power outlet	GPO
c. Plumbing and drainage	Water Closet	WC
	Urinal	U

13. Answer the following questions about utilities and services plans and specifications.

- i. What is the difference between a utilities plan and a services plan in the context of building construction?

The difference between a utilities and a services plan is utility plans are concerned with supply for electricity water, lifts, gas supply, sewage, however service plans include information about systems necessary for smooth flow of construction operations which includes fire safety detection and protection, lighting and security and alarm.

- ii. What is the importance of utilities specifications?

The importance of utilities specifications is that it contains information utilities that cannot be fully demonstrated in the utility drawings.

- iii. What is the importance of services specifications?

The importance of services specifications is that it provides information that cannot fully be demonstrated in the services drawings.

14. Describe the aspects of drawings provided below.

Aspects of Drawings	Description
i. Isometric drawings	Isometric drawings are 3D drawings on a 2D surface with all the scale is the same for all the axes, they are set out using 30 degree angles and the purpose of them is to view a 3D image with the corresponding scaled dimensions.
ii. Oblique drawings	Oblique drawings are a 2D projection of 3D drawings that demonstrate an accurate shape and form of the object. These are used for the purpose of looking directly at definite features of the object.
iii. Perspective drawings	Perspective drawings are 3D drawings which demonstrate an approximate representation of a certain object as it is perceived by the human eye making the purpose of it to be a realistic look of a building.
iv. Orthographic drawings	Orthographic drawings are 3D images represented in 2D and three views are produced – top view, front view and side view – which is used for the purpose of examining how building spaces or elements look in these three views.

15. Answer the following questions about CAD drawings.

i. What does CAD stands for?

CAD stands for Computer Aided Design.

ii. What are CAD drawings?

CAD drawings are created or modified by using computer software used in the construction industry and they can be 2D or 3D illustrations or models which creates a precise drawing of the building and its components.

iii. How is CAD used in building and construction?

CAD is used in building and construction for the purpose of producing illustrates or models precisely as well as the creation and management of construction drawings.

16. Provide a brief description of the given classes of buildings according to the National Construction Code.

Building Class	Description
i. Class 1a building	A class 1a building is one or more buildings forming a single dwelling like a detached house or two or more attached buildings separated by a fire-resisting wall.
ii. Class 1b building	A class 1b building is one or more buildings which together form a guest house, boarding house, a hostel. The building must not accommodate more than 12 people and more than 300m ² floor area or four or more dwellings in one allotment which is used for holidays – short term accommodation.
iii. Class 2 building	A class 2 building contains two or more sole occupancy units with each being a separate dwelling.
iv. Class 3 building	Class 3 buildings are residential buildings that do not fall under class 1 or 2 buildings. These are rather long -term or transient living accommodations or unrelated building; boarding house; guest house; a hostel or backpackers that are larger than the class 1b buildings. It also includes dormitory-style facilities, healthcare facilities (which are not classed under class 9) and the residential parts of motels, hotes, school, hospitals and jails.
v. Class 4 building	A class 4 building is the only residence within any Class 5,6,7,8 or 9 buildings.
vi. Class 5 building	Class 5 buildings are an office building for professional or commercial purposes which are not included in Class 6,7,8 or 9. These include; law firms or office for general medical practitioners

vii. Class 6 building	Class 6 buildings directly sell goods by retail or supply public services such as restaurants/cafes, markets/shopping centres, public laundry and barbers/hairdressers
Building Class	Description
viii. Class 7a building	Class 7a are buildings which are car parks.
ix. Class 7b building	Class 7b buildings include warehouses, storage buildings, buildings used to display or produce wholesale goods.
x. Class 8 building	Class 8 buildings are process-type buildings i.e. buildings used for production, assembling, altering, repairing, finishing, packing or cleaning of goods or produce. This also includes laboratories because of their high potential for fire hazard.
xi. Class 9a building	Class 9a buildings are healthcare buildings where the occupants are either undergoing/undergone medical treatment or in need of physical assistance in the evacuation of an emergency.
xii. Class 9b building	Class 9b buildings are assembly buildings used for social, theatrical, political, religious or civil purposes which include schools, universities, childcare centres, pre-schools, sporting facilities, night clubs and public transport buildings.
xiii. Class 9c building	Class 9c buildings are aged care buildings which are defined as a residential accommodation for elderly people who are provided with personal care services and need 24 hour staff assistance to evacuate the building in an emergency.

xiv. Class 10a building	Class 10a buildings are private garages, carport, shed or the like.
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Building Class	Description
xv. Class 10b building	Class 10b buildings are structures like fences, mast, antenna, retaining wall, swimming pool or other similar structures.
xvi. Class 10c building	Class 10c building is a private bushfire shelter.

17. The Building Code of Australia is divided into three volumes. Briefly describe the scope of each volume.

Volume	Description
i. Volume One	Volume one of The National Construction Code contains design and construction requirements for buildings under Class 2 to 9 and their associated structures.
ii. Volume Two	Volume two of The National Construction Code contains the requirements for design and construction for certain residential and non-habitable buildings and structures which are under Class 1 and Class 10 buildings.

iii. Volume Three	Volume three of The National Construction Code contains the requirements for the technical design and construction for plumbing and drainage system in new and existing buildings
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18. Explain how the Building Code of Australia is relevant to construction drawings.

The Building Code of Australia is relevant to the construction drawings because they must show that the design, materials or construction meets the relevant Performance Requirements or Deemed-to-Satisfy (DTS) Provision.

19. Answer the following questions about NCC requirements.

i. Explain what the General Requirements of buildings are.

General requirements of a building contains the rules and instructions for using and complying with The National Construction Code and provide as a guide in understanding how the technical requirements should be applied to any particular situation.

ii. Explain what the Performance Requirements of buildings are.

The Performance Requirements of a building are the minimum level of performance for buildings including plumbing and drainage installation which can be achieved via compliance options which includes performance solutions, deemed to satisfy solutions or both.

- iii. Explain the relationship between a building's Performance Requirements and compliance options (e.g. performance solutions, deemed-to-satisfy solutions).

The relationship between a building's Performance Requirements and compliance options is that compliance options are there to ensure that the Performance Requirements are being met. Performance solution and deemed-to-satisfy solutions are both there to show compliance with the Performance Requirements and if they do not comply with these options, then they have not met the Performance Requirements.

- 20. Answer the following questions about standards applicable to building and construction projects.

- i. Explain the importance of complying with standards during a building and construction project.

It is important to comply with the standards during a building and construction project because it demonstrates an example of the best practices that can be used in the construction and completion of a building and construction project. The standards serve the purpose of meeting the safety requirements and to achieve sustainability and proper functionality which will later assess the completion of the building meaning greater chance of passing the assessments.

- ii. List two current standards relevant to the specification and interpretation of engineering drawings.
 - a. Dimensions AS 1100.101.1992 – Technical drawing, Part 101: General Principles.
 - b. AS ISO 128.20-2005 – Technical drawings – General principles of presentation, Part 20: Basic conventions for lines

- 21. Specify your state/territory, and:

- i. Identify three building and construction regulations that apply in your state/territory.

- ii. Summarise the regulatory requirements relevant to building drawings and sketches under each regulation you identified.
- iii. Provide a URL where you sourced your responses.

State/territory	Queensland
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Regulations	Regulatory requirements	URL/Source
i. Building Regulation 2021 - Information to be given by the State-Act, s 255	It is required that the 1:100 scale drawing is given to the state which includes the building or structure floor plans and elevations and that a site plan is given to the local government to provide water supply, sewerage and storm water on the block of where the construction work is to be completed.	https://www.legislation.qld.gov.au/view/pdf/inforce/current/sl-2021-0126
ii. Building Regulation 2021 - Competent person must not give false or misleading documents	When giving a design-specification help it is required that you do not give the builder certifier the document that contains any information that is misleading or false.	https://www.legislation.qld.gov.au/view/pdf/inforce/current/sl-2021-0126
iii. Building Regulation 2021 - Other work for class 10 building or structures	It is required for buildings or structures under class 10 – a non-habitable building or structure - meets the requirements that are in Wind Region C (tropical cyclone area) ‘Structural design actions Wind actions’	https://www.legislation.qld.gov.au/view/pdf/inforce/current/sl-2021-0126

22. Answer the following questions about building information modelling (BIM).

i. What is building information and modelling (BIM)?

Building information and modelling is a 3D technology used to aid the creation and management of digital representation of physical and functional characteristics of a building or structure.

ii. What is BIM used for?

Building information and modelling is used to design and document building and infrastructure designs and to then analyse and review design options which generates more visualisations of what the building will look like after construction.

23. Listed in the table below are common building and construction methods you usually encounter when reading and interpreting plans. Briefly describe each method.

Building and construction methods	Description
a. Paintworks	Paintworks is referred to as the application of paint or coating to materials.
b. Tilework	Tileworks is referred to the application of tiles, bricks and other masonry units.
c. Steelworks	Steelworks is the methods relating to the construction of steel building elements including welding, tie-down installation, rebar, cutting etc.
d. Concrete works	Concrete works refers to the methods relating to the construction of concrete building elements which could include post-tensioning, concrete pouring, installation of forms etc.

Practical Assessment

Candidate Instructions

The Practical Assessment is a set of tasks that must be completed in a workplace, or in an environment with conditions similar to that of a real workplace.

This assessment will help you demonstrate skill requirements relevant to reading and interpreting plans and specifications.

The Practical Assessment includes the following:

1. Practical Assignment

A series of written practical tests assessing the candidate's practical knowledge and understanding of the unit of competency.

2. Workplace Assessment

A set of tasks or activities completed according to set instructions and guidelines to meet the requirements of the relevant unit. These tasks and activities require you to have access to a workplace or a similar environment.

3. Practical Oral Assessment

A series of oral assessment tasks testing the candidate's practical knowledge and understanding of the unit of competency. The candidate needs to provide their responses to these assessment tasks orally while being observed by the assessor. The assessor will then record important details from the candidate's oral response.

Preliminary Assessment Information

The tasks in this practical assessment must be completed in a workplace (or a similar environment) and in the context of a building and construction project which you are currently a part of.

E.g. You are a builder, a site manager in training, foreperson, or an apprentice in this project, etc.

Please approach your Training Provider for further assistance on accessing the resources required for this assessment.

Before starting the practical assessment, record the following information for your assessor's reference.

When completing the tasks in this practical assessment ensure that your responses and performance must align with the information you have provided below.

For example (but not limited to):

- If the task asks you to refer to building and construction legislation and regulatory requirements, refer to the requirements that apply to the state/territory where your nominated building and construction project is undertaken.
- If the task requires you to follow organisational policies and procedures, refer to the policies and procedures in your nominated organisation/workplace.

Work role/title	Contract Administration in Training.
Organisation/workplace	Cogent Scaffolding
Building and construction project	Eve Residences
Project overview	Eve Residences is a 25 storey apartment building in Labrador consisting of 155 units. The completion of Eve Residences is esitmates in 2023.
Building classification	Class 2
Project site address	180 Marine Parade Labrador
State/territory where this project is being undertaken	Queensland

Practical Assignment

Overview

The goal of this assessment is to assess your practical knowledge of:

- Workplace safety requirements
- Workplace processes
- Environmental requirements

This assessment has three tasks:

- Task 1 – Workplace Safety Requirements
- Task 2 – Workplace Processes
- Task 3 – Environmental Requirements

This task must be completed in the context of the workplace you have nominated in the “Preliminary Assessment Information” section.

You are required to:

- Access and review your workplace’s safety requirements relevant to safe design in planning building and construction
- Access and review your workplace’s processes for preparing building construction plans
- Review the task instructions included in this Practical Assignment.
- Record your response as required in the instructions.

Resources required for assessment

- Workplace documents:
 - Workplace safety requirements relevant to safe design in planning building and construction
 - Workplace processes for preparing building construction plan

1. Access and review your workplace's safety requirements relevant to safe design in planning building and construction and answer the following questions.

- i. Explain how your workplace meets safe design at the concept development phase of a structure or building.

My workplace meet safe designs at the concept development phase of a structural building by ensuring the drawing is always signed off and approved by the applicable Engineer before any works begin. We ensure that we check our Typical Designs which are all signed off and updated regularly accordingly, which cover regular occurring scaffold configurations. We ensure we follow the Australian Standard for Scaffolding, Scaffolding Code of Practice for QLD and Manufacture Specifications for Scaffold Arrangement everytime a new design is to be developed.

- ii. Explain your workplace's processes for achieving a safe design.

1. Follow appropriate documents – Australian Standard for Scaffolding, Scaffolding Code of Practice for QLD and Manufacture Specifications for Scaffold Arrangement – to determine what the scaffold is needed for and who needs it.
2. Discuss the requirements needed for design to ensure all requirements are met.
3. Scaffold designer creates the design using computer aided design
4. Drawings are signed off and approved by engineer
5. Drawing is then sent to the appropriate person on site to instruct and complete the drawing accordingly.

- iii. What performance requirements must the building design meet in relation to movement to and within a building?

The performance criteria that the building design must meet in relation to movement to and within a building, as stated in the National Construction Code, P2.5.1 Movement to and within a building, walking surfaces must have safe gradients and any stairway must have suitable handrail where necessary and be suitable for safe passage in relation to the nature, volume and frequency of likely usage (<https://ncc.abcb.gov.au/editions/2019-a1/ncc-2019-volume-two-amendment-1/part-39-safe-movement-and-access/part-392-barriers>)

- iv. What performance requirements must the building design meet in relation to fall prevention barriers?

The performance requirements that the building design must meet in relation to fall prevention barriers, as stated in National Construction Code, P2.5.2 fall prevention barriers, where people could fall, a barrier must be provided which must be continuous and extend for the full extent of the hazard, of a height to protect people from accidentally falling from the floor or roof, constructed to prevent people from falling through the barrier, capable of restricting the passage of children and of substantial strength and rigidity.

(<https://ncc.abcb.gov.au/editions/2019-a1/ncc-2019-volume-two-amendment-1/part-39-safe-movement-and-access/part-392-barriers>)

2. Access and review your workplace's processes for preparing building construction plans and answer the following questions.

- i. What types of building construction documents does your workplace produce?

Our workplace produces structural and falsework scaffolding designs as well as temporary work designs.

- ii. Summarise below your workplace's processes for creating building construction plans, including drawings and sketches.

1. Work is requested by client
2. Discuss the requirement for design
3. Scaffold designer does up design using Computer aided design
4. Drawing is sent off to appropriate engineer to be approved and signed off
5. Drawing is sent off to leading hand to instruct and build as per design.

- iii. What types of software does your workplace use to create building construction plans?

My workplace uses Auto CAD, Revit (a 3D CAD/BIM Software), Sketch up (a 3D modelling software)

3. List all the local and or state/territory environmental requirements that your workplace must meet to conduct building and construction work.

- i. Noise & Vibration standards meaning we work a standard 6.30am – 2.30pm work day to ensure we meet the correct requirements for noise offences stated in the Environmental Protection Act 1994, Division 3 Default noise standards. Which is that a person must not carry out building work in a way that makes audible noise on a business day or Saturday before 6.30am or after 6.30pm.
(<https://www.legislation.qld.gov.au/view/pdf/inforce/current/act-1994-062>)
- ii. Waste Management which is a way to develop effective environmental strategies which is a phase in the object to protect Queensland's environment, as stated in Environmental Protection Act 1994 Part 2 Object and achievement of Act. This is done through waste prevention and waste minimisation.
(<https://www.legislation.qld.gov.au/view/pdf/inforce/current/act-1994-062>)
- iii. Our Workplace must oblige by the requirements for CSG activities as per the Environmental Protection Act 1994 section 126 which is state the quality of water, including changes in the water quality the applicant reasonably experts will happen while each relevant CSG activity is carries out (Page 118 Section 126 (1) (c))
(<https://www.legislation.qld.gov.au/view/pdf/inforce/current/act-1994-062>)
- iv. We require to oblige by the Brisbane City Council by minimising pollution at its source by ensuring we use maining battery powered operating tools on all our sites.
(<https://www.brisbane.qld.gov.au/about-council/governance-and-strategy/vision-and-strategy/environmental-policy>)
- v. Under the Heritage act, our Workplace is required to not alter, remove or conceal significant features of a place if features and values of a heritage place contributes to cultural heritage significance (Queensland Heritage Regulation 2015, Page 12, S.3 AND p.s) (<https://www.legislation.qld.gov.au/view/pdf/2017-07-03/sl-2015-0107>)

Workplace Assessment

Overview

The goal of this assessment is to assess your practical knowledge and skills in:

- Identifying types of plans
- Reading and interpreting the plan

This workplace assessment is made up of five workplace tasks:

Task 1 – Confirm Currency of Plans, Specifications, and Amendments

Task 2 – Confirm Details on Plans Comply with the Specifications

Task 3 – Examine Detail Drawings to Determine Sizes and Thickness

Task 4 – Discuss Details During the Planning Phase

Task 5 – Supervise Construction Works

Each task comes with a set of instructions. You are to follow and perform these instructions while being observed by the assessor and submit any required documentation.

Before starting this assessment, your assessor will also discuss with you these tasks as well as instructions and guidance for satisfactorily completing them. They will also organise the resources required for this assessment (listed below).

You are required to:

- Complete the tasks within the time allowed, as scheduled in-class roll.
- Review the instructions in each task.
- Identify types of plans.
- Read and interpret the plan.
- Perform the workplace task according to the instructions provided
- Complete and submit any required documentation.

Resources required for assessment:

To complete this assessment, you will need access to the following:

- A workplace or a similar environment that will allow you access to:
 - Building and construction project
 - Relevant construction personnel whom the candidate will be meeting with in the planning phase of the building and construction project.

- Relevant construction personnel whom the candidate will be confirming the currency of plans, specifications and amendments with.
- Relevant construction personnel whom the candidate will be verifying details on the construction plans and specifications with.
- Construction plans
- Construction specifications
- Detail drawings
- Organisational policies and procedures relevant to the supervising of construction works
- Documentation templates, including:
 - Meeting minutes template
 - Construction Plan Details Verification Checklist
 - Material Quantity Takeoff Form
- Means to record any comments or issues found while supervising construction works (e.g. pen and paper)
- Relevant government building and construction and contract legislation
- Current building and construction codes and standards
- The National Construction Code (NCC)
- Computers, applications and software to access CAD.

Task 1 Confirm Currency of Plans, Specifications, and Amendments

Meet with relevant construction personnel to confirm the currency of plans, specifications and amendments, while being observed by the assessor. The construction personnel to be consulted with must be:

- Architects for architectural plan
- Structural Designers for structural plan
- Mechanical Engineer for mechanical plan
- Electrical Engineer for electrical plans
- Plumbing Engineer for plumbing and drainage plans
- The developer of the specifications for the verifying of specifications

Use your organisation's template for documenting meeting minutes, or you may use the **Generic Meeting Minutes** template provided along with this workbook.

You will be assessed on:

- Practical knowledge of building and construction plans
- Practical skills in confirming the currency of plans, specifications and amendments with relevant construction personnel

Before starting this task, review the **Workplace Assessment Task 1 – Observation Form** provided along with this workbook. This form lists all the practical skills you need to demonstrate while completing this task.

Your assessor will also:

- Provide you with a copy of policies and procedures relevant to contacting and consulting relevant construction personnel and discuss these policies and procedures with you.
- Provide you with copies of the construction plans and specifications.
- Organise workplace resources required for you to complete this assessment.
- Discuss with you the requirements listed in the Observation Form prior to the assessment.
- Address your queries and concerns regarding this task.

After completing this task, submit the following to your assessor:

- Meeting minutes of your discussion with relevant construction personnel
- Construction plans and specifications you used in the meeting

Task 2 Confirm Details on Plans Comply with the Specifications

Obtain a copy of the **Construction Plan Details Verification Checklist** from your assessor. Use this checklist to verify whether details on the construction plans comply with the specifications.

You will be assessed on:

- Practical knowledge of building and construction plans and specifications
- Practical skills in confirming the compliance of the details specified in construction plans with the construction specifications

Before starting this task, review the **Workplace Assessment Task 2 – Assessor’s Checklist** provided along with this workbook. This form lists the criteria your Construction Plan Details Verification Checklist submission must address to complete this task satisfactorily.

Your assessor will also:

- Provide you with copies of the construction plans and specifications.
- Organise workplace resources required for you to complete this assessment.
- Discuss with you the requirements listed in the Assessor’s Checklist prior to the assessment.
- Address your queries and concerns regarding this task.

After completing this task, submit the following to your assessor:

- Completed Construction Plan Details Verification Checklist
- Construction plans you reviewed
- Project specifications used as reference for this assessment task

Task 3 Examine Detail Drawings to Determine Sizes and Thickness

Obtain a copy of the **Material Quantity Takeoff Form** from your assessor. Use this form to record the sizes, thickness, and quantity of the materials from the detail drawings used on the building and construction project.

You will be assessed on:

- Practical knowledge of the sizes, thickness and quantity of construction items
- Practical skills in examining detail drawings to determine sizes and thickness
- Practical skills in interpreting two-dimensional and three-dimensional drawings and applying to estimation

Before starting this task, review the **Workplace Assessment Task 3 – Assessor’s Checklist** provided along with this workbook. This form lists the criteria your Material Quantity Takeoff Form submission must address to complete this task satisfactorily.

Your assessor will also:

- Provide you with copies of the detail drawings.
- Organise workplace resources required for you to complete this assessment.
- Discuss with you the requirements listed in the Assessor’s Checklist prior to the assessment.
- Address your queries and concerns regarding this task.

After completing this task, submit the following to your assessor:

- Completed Material Quantity Takeoff Form
- Detail drawings you used as basis in determining the sizes, thickness and quantity of materials

Task 4 Discuss Details During the Planning Phase

While being observed by your assessor, discuss the details of your Material Quantity Takeoff Form submission with relevant construction personnel during the planning phase of the construction project.

You will be assessed on:

- Practical knowledge of two-dimensional and three-dimensional drawings
- Practical skills in interpreting two-dimensional and three-dimensional drawings and applying to planning

Before starting this task, review the **Workplace Assessment Task 4 – Observation Form** provided along with this workbook. This form lists all the practical skills you need to demonstrate while completing this task.

Your assessor will also:

- Provide you with copies of the construction plans and detail drawings, for your reference.
- Organise workplace resources required for you to complete this assessment.
- Discuss with you the practical skills listed in the Observation Form prior to the assessment.
- Address your queries and concerns regarding this task.

After completing this task, submit the following to your assessor:

- Material Quantity Takeoff Form you used during the discussion
- Construction plans and detail drawings you used as reference during the discussion

Task 5 Supervise Construction Works

While being observed by your assessor, supervise the construction of the items specified in your Material Quantity Takeoff Form submission.

Activities you supervise may include but are not limited to:

- Installation of cabinetry and appliances (e.g. oven, refrigeration, dishwashing)
- Installation of walls (e.g. bricks, panels, framing)
- Installation of tiles (e.g. wall tiles, floor tiles)

You will be assessed on:

- Practical knowledge of the sizes, thickness and quantity of construction items
- Practical skills in interpreting two-dimensional and three-dimensional drawings and applying to supervisory tasks

Before starting this task, review the **Workplace Assessment Task 5 – Observation Form** provided along with this workbook. This form lists all the practical skills you need to demonstrate while completing this task.

Your assessor will also:

- Provide you with a copy of policies and procedures relevant to the supervising of construction works, for your reference; and discuss these policies and procedures with you.
- Provide you with copies of the construction plans and detail drawings, for your reference.
- Organise workplace resources required for you to complete this assessment.
- Discuss with you the practical skills listed in the Observation Form prior to the assessment.
- Address your queries and concerns regarding this task.

After completing this task, submit the following to your assessor:

- A record of your comments or any issues found while supervising the construction works
- Material Quantity Takeoff Form you used during the supervising of construction works
- Construction plans and detail drawings you used during the supervising of construction works

Practical Oral Assignment

Overview

The goal of this assessment is to assess your practical knowledge and skills in:

- Identifying types of plans
- Reading and interpreting plans
- Identifying structural details
- Identifying non-structural details

This assessment is divided into 12 oral assessment tasks.

Task 1 – Types of Plans and Aspects

Task 2 – Construction Plans

Task 3 – Materials from Specifications

Task 4 – Concrete Footing and Slab

Task 5 – Load Bearing Points

Task 6 – Load Bearing Information

Task 7 – Wind Bracing and Tie-Down Requirements

Task 8 – Wind Bracing Materials and Tie-Down Methods

Task 9 – Provisional Sum and Prime Cost Items

Task 10 – Installation and Connection Points of Services

Task 11 – Location of Fixtures

Task 12 – Details of Finishes

The assessment items included in this assessment will require you to demonstrate your knowledge and skills relevant to reading and interpreting plans.

This assessment will be conducted by your assessor. You will not record anything in this workbook when completing the assessments here. However, you will be required to provide your responses to the assessments orally while being observed by your assessor. Your assessor will then record important details from your response which will then be assessed.

You are required to:

- Complete the tasks within the time allowed, as scheduled in class roll.
- Listen carefully to your assessor's instructions for each assessment task.

- Provide the responses as required in the instructions for each assessment task.

Resources required for assessment:

To complete this assessment, you will need access to the following:

- Construction plans, including:
 - Site plan
 - Floor plan
 - Detail drawings
 - Structural drawings
- Construction specifications
- Wind bracing table
- Construction contract

Task 1 Types of Plans and Aspects

Review the construction plans for the project you are undertaking for this assessment.

Your assessor will be asking you a series of questions about these construction plans. Answer each question carefully and as instructed by your assessor.

Your assessor will record your responses in the spaces provided in each item.

You will be assessed on:

- Practical knowledge of the types of plans and aspects of drawings
- Practical skills in identifying the types of plans and aspects of drawings specific for the intended purpose

1. While being observed by your assessor:
 - i. Identify what type of plan each one is.
 - ii. Explain the purpose of each plan.

Your assessor will record your responses below.

Type of Plan		Did the candidate identify this plan correctly?	Purpose
1	Concept drawing/sketches	☒ YES ☐ NO	To Present initial ideas. Explore options.
2	Architectural plans	☒ YES ☐ NO	Details architectural aspects & elements such as doors, gates etc.
3	Structural plans	☒ YES ☐ NO	Information about structural aspects - concrete - framework.
4	Civil plans	☒ YES ☐ NO	Overview of site elements combined architectural & structural. eg. reduced level of footing element.

2. While being observed by your assessor:
 - i. Identify what aspect of drawing each one is.
 - ii. Explain the purpose of each aspect.

Aspects of Drawings		Did the candidate identify this aspect of drawings correctly?	Purpose
5	Details	☒ YES ☐ NO	Scale of a section of a drawing. Purpose is to look deeper at that section with more detail.
6	Isometric drawings	☒ YES ☐ NO	3D drawings on a 2D surface. Same scale for all axis. Different perspective.
7	Oblique drawings	☒ YES ☐ NO	2D projection of 3D drawing. Shows true shape & form. Directly looks at certain features.
8	Perspective drawings	☒ YES ☐ NO	3D drawing. demonstrates a realistic representation of an object.

Task 2 Construction Plans

Review the construction plans for the project you are undertaking for this assessment.

Your assessor will be asking you a series of questions about these construction plans. Answer each question carefully and as instructed by your assessor.

Your assessor will record your responses in the spaces provided in each item.

You will be assessed on:

- Practical knowledge of the construction plans
- Practical skills in reading and interpreting the plans

1. While being observed by your assessor, identify one key feature for each of the following plans:

- i. Concept drawing/sketches
- ii. Architectural plans
- iii. Structural plans
- iv. Civil plans
- v. Mechanical plans
- vi. Electrical plans
- vii. Plumbing and draining plans
- viii. Utilities and services plans

Explain how each indicated key feature distinguishes the plan from other types of plans.

Type of Plan	Key Feature	How does this key feature distinguish the plan from the other types of plans?
i. Concept Drawing/Sketches	original design concepts.	hand drawn. Contains base ideas and concepts.

2. While being observed by your assessor, answer the following questions about site plans. ✓

Questions	Candidate Responses
What is the address of the building project?	57 Skyring Tce Newstead. QLD.
What is the block number of the land where the building is to be constructed?	57
What is the name of the road adjacent to the block of land?	Skyring Terrace,
Based on the north point, describe the orientation of:	
a. The proposed building	Angled long side E/W short side N/S
b. The road used to access the entrance of the property	South side of block
What is the elevation of the datum?	Sea level as is next to Brisbane River. Sea level = .0
What are the elevations (reduced levels) of the site contours?	Natural ground 3.840 has slight undulation.
Describe the contour of the land based on the site contour.	Fairly level with slight undulation

4. While being observed by your assessor, answer the following questions about internal linings, external cladding and roof materials.

Questions	Candidate Responses
What materials are used for the internal linings of the building?	PLASTERBOARD, PLYWOOD, TIMBER VENEER FIBRE CEMENT SHEET, THERMAL INSULATION.
What materials are used for the external cladding of the building?	PAINTED PRECAST, PAINTED CONCRETE, GLAZING, ALUMINIUM LOUVRES
What are the different roof materials used in the building project?	METAL ROOF SHEETING MR (MRS) METAL PARAPET CAPPING (MPC1) " " " (MPC2) METAL PRESSURE FLASHING. PURLINS FOR ROOF SHEETS TO FIX TO

5. Based on the detail drawings, what are the methods of construction applied for the building project? ✓

TILT UP PANEL CONSTRUCTION.
SLAB ON GROUND CONSTRUCTION (SOG). 125mm THICK.
PRECAST PANELS AT ENDS AND CENTRE OF BUILDING.
STEEL FRAMING FOR ROOF SUPPORT.

Task 4 Concrete Footing and Slab

Review the construction plans for the project you are undertaking for this assessment, and while being observed by your assessor:

1. Identify the position of each footing and slab-on-ground in the plans by pointing to each of them.
2. For each one located, identify the following:
 - Size of footing
 - Size of slab-on-ground
 - The type of reinforcing applied

Your assessor will record your responses in the spaces provided below.

You will be assessed on:

- Practical knowledge of concrete footing and slab sizes and position and type of reinforcing
- Practical skills in identifying the concrete footing and slab sizes and position and type of reinforcing

Footing			
Position	Candidate was able to identify the footing in this position	Size	Type of reinforcing
1-SF1 FB1	☒ YES ☐ NO	400w x 400D	N12 REO 11mm TRENCH MESH
2-PF1 FB2	☒ YES ☐ NO	400 x 400	N12 REO L11-Tm
3-PF3 IB2	☒ YES ☐ NO	500 x 500	L11 Tm
4-SF2 P1	☒ YES ☐ NO	450Ø x 1600 w/ 500x500x 400 PILE CAP.	4 N12 REO.

Task 5 Load Bearing Points

Review the construction plans for the project you are undertaking for this assessment, and while being observed by your assessor, locate the load bearing points (or columns) in the plans by pointing to each of them in the plan.

Your assessor will record your responses in the spaces provided below.

You will be assessed on:

- Practical knowledge of the load bearing points of the building
- Practical skills in identifying the load bearing points of the building

Load bearing points (or columns)	The candidate correctly locates this load bearing point in the plan.
1	☒ YES ☐ NO
2	☒ YES ☐ NO
3	☒ YES ☐ NO
4	☒ YES ☐ NO
5	☒ YES ☐ NO
6	☒ YES ☐ NO
7	☒ YES ☐ NO
8	☒ YES ☐ NO
9	☒ YES ☐ NO

C1 + C3 STRUCTURAL STEEL COLUMNS.

Task 7 Wind Bracing and Tie-Down Requirements

Review the construction plans and specifications for the project you are undertaking for this assessment.

While being observed by the assessor, identify the wind bracing requirements and tie-down requirements for the building project. Your assessor will record your responses in the spaces provided below.

You will be assessed on:

- Practical knowledge of wind bracing and tie-down requirements
- Practical skills in identifying wind bracing and tie-down requirements

What are the wind bracing requirements?

Raher ties with Hilti anchor to

containment have to be removed if wind speeds exceed 100km/h

AS PER RPEQ cert. Rahers must be installed on every third standard.

What are the tie-down requirements?

Raher ties with Hilti anchor to resist wind loads

AS per RPEQ certification: Rahers must be installed on every third standard

Task 9 Provisional Sum and Prime Cost Items

Review the construction plans and specifications, as well as the construction contract, for the project you are undertaking for this assessment.

Identify the following based on the documents you reviewed:

- Provisional sum (PS) items
- Prime cost (PC) items

Your assessor will record your responses in the spaces provided below.

You will be assessed on:

- Practical knowledge of provisional sum and prime cost items
- Practical skills in identifying provisional sum and prime cost items

What are the prime cost items?

Appliances - 90cm gas cooktop, 5 burner S/S steel
- 65cm gas cooktop, 4 burner S/S
Fisher & Paykel clothes dryer 8kg condensing
Laundry - Fisher & Paykel clothes dryer
Bedroom - vita wall mounted basin mixer with spout 25mm
vita wall mounted bath mixer with spout 35mm

What are the provisional sums items?

N/A.

Task 11 Location of Fixtures

Review the construction plans for the project you are undertaking for this assessment, and while being observed by your assessor, locate fixtures in the plans by pointing each one in the plan

Your assessor will record your responses in the spaces provided below.

You will be assessed on:

- Practical knowledge of fixtures
- Practical skills in identifying the location of fixtures from plans

Fixtures (Assessor to list all fixtures)	The candidate correctly locates this fixture in the plan.
e.g. water closet bowl	☒ YES ☐ NO
e.g. ceiling fan AIRCON unit	☒ YES ☐ NO
e.g. sprinkler system lights	☒ YES ☐ NO

Assessment Workbook Checklist

TO THE CANDIDATE

When you have completed this assessment workbook, review your work, and ensure that:

- ☐ **You have completed all the Knowledge Assessments Questions.**
- ☐ **You have completed the Practical Assessments in this workbook**
 - ☐ Practical Assignment
 - ☐ Workplace Safety Requirements
 - ☐ Workplace Processes
 - ☐ Environmental Requirements
 - ☐ Workplace Assessment
 - ☐ Confirm Currency of Plans, Specifications, and Amendments
 - ☐ Confirm Details on Plans Comply with the Specifications
 - ☐ Examine Detail Drawings to Determine Sizes and Thickness
 - ☐ Discuss Details During the Planning Phase
 - ☐ Supervise Construction Works
 - ☐ Practical Oral Assignment
 - ☐ Types of Plans and Aspects
 - ☐ Construction Plans
 - ☐ Materials from Specifications
 - ☐ Concrete Footing and Slab
 - ☐ Load Bearing Points
 - ☐ Load Bearing Information
 - ☐ Wind Bracing and Tie-Down Requirements
 - ☐ Wind Bracing Materials and Tie-Down Methods
 - ☐ Provisional Sum and Prime Cost Items
 - ☐ Installation and Connection Points of Services
 - ☐ Location of Fixtures
 - ☐ Details of Finishes

☐ **You have saved and submitted the following evidence:**

- ☐ This completed workbook
- ☐ Assessment Workbook Cover Sheet signed and scanned

☐ **You have saved and submitted the following evidence:**

- ☐ Workplace Assessment Task 1
 - ☐ Meeting minutes of your discussion with relevant construction personnel
 - ☐ Construction plans and specifications you used in the meeting
- ☐ Workplace Assessment Task 2
 - ☐ Completed Construction Plan Details Verification Checklist
 - ☐ Construction plans you reviewed
 - ☐ Project specifications used as reference for this assessment task
- ☐ Workplace Assessment Task 3
 - ☐ Completed Material Quantity Takeoff Form
 - ☐ Detail drawings you used as basis in determining the sizes, thickness and quantity of materials
- ☐ Workplace Assessment Task 4
 - ☐ Material Quantity Takeoff Form you used during the discussion
 - ☐ Construction plans and detail drawings you used as reference during the discussion
- ☐ Workplace Assessment Task 5
 - ☐ A record of your comments or any issues found while supervising the construction works
 - ☐ Material Quantity Takeoff Form you used during the supervising of construction works
 - ☐ Construction plans and detail drawings you used during the supervising of construction works

IMPORTANT:

**You must achieve a satisfactory result in ALL assessment tasks to be deemed
COMPETENT for the unit/s relevant to this workbook.**

TO THE ASSESSOR

When you have completed assessing the assessment workbook, review the candidate's submission against the checklist below:

- ☐ **The candidate has completed all the Knowledge Assessments Questions.**
- ☐ **The candidate has completed the Practical Assessments in this workbook**
 - ☐ Practical Assignment
 - ☐ Workplace Safety Requirements
 - ☐ Workplace Processes
 - ☐ Environmental Requirements
 - ☐ Workplace Assessment
 - ☐ Confirm Currency of Plans, Specifications, and Amendments
 - ☐ Confirm Details on Plans Comply with the Specifications
 - ☐ Examine Detail Drawings to Determine Sizes and Thickness
 - ☐ Discuss Details During the Planning Phase
 - ☐ Supervise Construction Works
 - ☐ Practical Oral Assignment
 - ☐ Types of Plans and Aspects
 - ☐ Construction Plans
 - ☐ Materials from Specifications
 - ☐ Concrete Footing and Slab
 - ☐ Load Bearing Points
 - ☐ Load Bearing Information
 - ☐ Wind Bracing and Tie-Down Requirements
 - ☐ Wind Bracing Materials and Tie-Down Methods
 - ☐ Provisional Sum and Prime Cost Items
 - ☐ Installation and Connection Points of Services
 - ☐ Location of Fixtures
 - ☐ Details of Finishes
- ☐ **The candidate has saved and submitted the following evidence:**
 - ☐ This completed workbook

To be deemed competent in the unit/s of competency relevant to this workbook, you must successfully complete all the requirements listed above according to the prescribed benchmarks provided to the assessor.

- ☐ Assessment Workbook Cover Sheet signed and scanned
- ☐ **The candidate has saved and submitted the following evidence:**
 - ☐ Workplace Assessment Task 1
 - ☐ Meeting minutes of their discussion with relevant construction personnel
 - ☐ Construction plans and specifications they used in the meeting
 - ☐ Workplace Assessment Task 2
 - ☐ Completed Construction Plan Details Verification Checklist
 - ☐ Construction plans they reviewed
 - ☐ Project specifications used as reference for this assessment task
 - ☐ Workplace Assessment Task 3
 - ☐ Completed Material Quantity Takeoff Form
 - ☐ Detail drawings they used as basis in determining the sizes, thickness and quantity of materials
 - ☐ Workplace Assessment Task 4
 - ☐ Material Quantity Takeoff Form they used during the discussion
 - ☐ Construction plans and detail drawings they used as reference during the discussion
 - ☐ Workplace Assessment Task 5
 - ☐ A record of their comments or any issues found while supervising the construction works
 - ☐ Material Quantity Takeoff Form they used during the supervising of construction works
 - ☐ Construction plans and detail drawings they used during the supervising of construction works

IMPORTANT:

The candidate must achieve a satisfactory result in ALL assessment tasks to be deemed COMPETENT for the unit/s relevant to this workbook.

To be deemed competent in the unit/s of competency relevant to this workbook, the candidate must successfully complete all the requirements listed above according to the prescribed benchmarks.

Record of Assessment (Assessor's Use Only)

RECORD OF ASSESSMENT	
Candidate's Name	
RTO Name	
RTO Contact Number	
RTO Email Address	
Assessor's Name	
Unit of Competency	CPCBC4012 - Read and interpret plans and specifications (Release 1.0)

Knowledge Assessment	S	NYS
Question 1	☐	☐
Question 2	☐	☐
Question 3	☐	☐
Question 4	☐	☐
Question 5	☐	☐
Question 6	☐	☐
Question 7	☐	☐
Question 8	☐	☐
Question 9	☐	☐
Question 10	☐	☐
Question 11	☐	☐
Question 12	☐	☐
Question 13	☐	☐
Question 14	☐	☐
Question 15	☐	☐
Question 16	☐	☐

Question 17	☐	☐
Question 18	☐	☐
Question 19	☐	☐
Question 20	☐	☐
Question 21	☐	☐
Question 22	☐	☐
Question 23	☐	☐

Practical Assessment		
Practical Assignment	S	NYS
Task 1	☐	☐
Task 2	☐	☐
Task 3	☐	☐
Workplace Assessment	S	NYS
Task 1	☐	☐
Task 2	☐	☐
Task 3	☐	☐
Task 4	☐	☐
Task 5	☐	☐
Practical Oral Assignment	S	NYS
Task 1	☐	☐
Task 2	☐	☐
Task 3	☐	☐
Task 4	☐	☐
Task 5	☐	☐
Task 6	☐	☐
Task 7	☐	☐

Task 8	☐	☐
Task 9	☐	☐
Task 10	☐	☐
Task 11	☐	☐
Task 12	☐	☐

Rules of Evidence	S	NYS
All knowledge and skills evidence submissions are valid	☐	☐
All knowledge and skills evidence submissions are authentic	☐	☐
All knowledge and skills evidence submissions are sufficient	☐	☐
All knowledge and skills evidence submissions are current	☐	☐

Signature Authentication Checklist	
This checklist will guide you in authenticating the signatures provided by the candidate in their assessment workbook and evidence submissions. Read each checklist item and tick the box only if you confirm that the item is a true and accurate reflection of the signature authentication you have conducted.	
Checklist	Completed
I have checked the signature provided by the candidate in the Assessment Workbook Cover Sheet against the signature they provided to the Training Provider.	☐
I confirm the signature provided by the candidate in the Assessment Workbook Cover Sheet matches the signature they provided to the Training Provider.	☐
I confirm ALL signatures provided by the candidate in their evidence submissions match with the signature they provided to the Training Provider.	☐

Third-Party Verification Log

Instructions for the Assessor:

You are required to contact all third-party personnel involved in the candidate's assessment to verify the candidate's performance and evidence submissions and to confirm with them whether the candidate's evidence submissions are true and accurate.

Complete this Third-Party Verification Log to document your completion of this process. When completing this log, provide all of the following required information for each third-party personnel:

- Name of third-party personnel contacted
- Role in the candidate's assessment (e.g. workplace supervisor, observer, or candidate)
- Contact details (phone number or email address)
- Date contacted

You must also confirm that third-party personnel have verified the candidate's evidence submissions are true and accurate.

Name of Third-party Contacted	Role in the Candidate's Assessment	Contact Details (Phone number or email address)	Date contacted	Third-Party verifies evidence submissions of the candidate are true and accurate?
				Yes ☐ No ☐ Assessor's Notes
				Yes ☐ No ☐ Assessor's Notes
				Yes ☐ No ☐ Assessor's Notes
				Yes ☐ No ☐ Assessor's Notes

Overall Result for this Workbook	S	NYS
Overall Result	☐	☐

Assessor's comments/feedback**Assessor Declaration**

I declare that the results recorded in this *Record of Assessment* are true and accurate.

Assessor's name

Assessor's signature

Date signed

End of Record of Assessment (For the Assessor's Use Only)

End of Document