



CPCBC4007

Plan building and construction work

Assessment 2 of 3

Short Answer Questions

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EDUCATION

Assessment Instructions

Task overview

This assessment task is divided into **thirteen (13)** short answer questions. Read each question carefully before typing your response in the space provided.



Assessment Information

Submission

You are entitled to three (3) attempts to complete this assessment satisfactorily. Incomplete assessments will not be marked and will count as one of your three attempts.

All questions must be responded to correctly to be assessed as satisfactory for this assessment.

Answers must be typed into the space provided and submitted electronically via the LMS. Hand-written assessments will not be accepted unless previously arranged with your assessor.

Reasonable adjustment

Students may request a reasonable adjustment for assessment tasks.

Reasonable adjustment usually involves varying:

- the processes for conducting the assessment (e.g. allowing additional time)
- the evidence gathering techniques (e.g. oral rather than written questioning, use of a scribe, modifications to equipment)

However, the evidence collected must allow the student to demonstrate all requirements of the unit.

Refer to the Student Handbook or contact your Trainer for further information.



Please consider the environment before printing this assessment.

Question 1

Identify a building and construction legislation specific to your state/territory. Briefly summarise the purpose of the legislation and how it relates to construction and planning.

Instruction to the assessor:

Student must identify own state/territory and all answers should be related to that.

Your State/Territory	Building and construction legislation from state/territory	Summary of its purpose (10-15 words)	How it is related to construction planning (10-15 words)
[Student to identify state/territory. For example: NSW, VIC, TAS, QLD, WA, SA]	Home Building Act 1989 (NSW)	Below sample answer applies to all legislation: This is the law that regulates the residential building industry. It provides the statutory rights of builders, contractors and homeowners. <i>[Source]</i>	Below sample answer applies to all legislation: This legislation needs to be considered when planning construction related to a residential building.

Additional sample answers:

State	Legislation
New South Wales	Building and Construction Industry Security of Payment Act 1999 and the Contractors Debts Act 1997
Victoria	Building and Construction Industry Security of Payment Act 2002
Queensland	Building and Construction Industry Security of Payment Act 2004, Queensland Building and Construction Commission Act 1991 and the Subcontractors' Charges Act 1974
Australian Capital Territory	Building and Construction Industry (Security of Payment) Act 2009
Western Australia	Construction Contracts Act 2004
South Australia	Building and Construction Industry Security of Payment Act 2009 and the Worker's Liens Act 1893
Northern Territory	Construction Contracts (Security of Payments) Act 2004
Tasmania	Building and Construction Industry Security of Payment Act 2009

Question 2

Identify **two** [2] building and construction standards, briefly summarise their purpose and explain how they relate to construction and planning.

Building and construction standard	Summary of its purpose (20-25 words)	How is it related to construction planning (15-20 words)
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Guide to Concrete Repair and Protection [SA HB 84:2018]	This aims to provide guidance and information for a diverse range of persons, including professionals, engaged in specifying or undertaking repairs to concrete structures, to those involved in the management of structures and buildings. <i>[Source]</i>	This handbook should be considered for those engaged in the planning of maintenance, repair and production of concrete structures, and provides an overview of the typical methods and practices in the industry.
Structural design actions Part 1: Permanent, imposed and other actions [AS 1170.1:2002]	This aims to provide structure designers with values representing the permanent actions, likely actions imposed due to use and occupancy, and other actions appropriate to the type of structure for use in structural design. <i>[Source]</i>	This standard should be considered for those planning construction work that involves the design of a structure, as it is crucial that the 'actions' specified in this standard are evaluated and reviewed in structural design.

Additional sample building and construction standards that students can choose from is listed below, the purpose of the standard will match standard's title.

No.	Date	Title
AS/NZS ISO 717	2004	Acoustics — Rating of sound insulation in buildings and of building elements — Airborne sound insulation
AS ISO 717 Part 2	2004	Acoustics — Rating of sound insulation in buildings and of building elements — Impact sound insulation
AS 1056 Part 1	1991	Storage water heaters — General requirements [incorporating amendments 1, 2, 3, 4 and 5]
AS/NZS 1170	2002	Structural design actions — General principles [incorporating amendments 1, 3 and 4]
AS/NZS 1170	2011	Structural design actions — Wind actions [incorporating amendments 1, 2, 3, 4 and 5]
AS 1191	2002	Acoustics — Method for laboratory measurement of airborne sound transmission insulation of building elements
AS 1273	1991	Unplasticized PVC (UPVC) downpipe and fittings for rainwater
AS 1288	2006	Glass in buildings — Selection and
AS 1289.6.3.3	1997	Methods of testing soils for engineering purposes — Method 6.3.3: Soil strength and consolidation tests — Determination of the penetration resistance of a soil — Perth sand penetrometer test [incorporating amendment 1]
AS 1397	2011	Continuous hot-dip metallic coated steel sheet and strip — Coatings of zinc and zinc alloyed with aluminium and magnesium [incorporating amendment 1]
AS 1428	2009	Design for access and mobility — General requirements for access
AS 1530	1994	Methods for fire tests on building materials, components and structures — Combustibility test for materials
AS 1562 Part 1	2018	Design and installation of sheet roof and wall cladding — Metal

AS 1657	2018	Fixed platforms, walkways, stairways and ladders — Design, construction and installation
AS/NZS 1664	1997	Aluminium structures — Limit state design (incorporating amendment 1)
AS 1668	2015	The use of ventilation and air conditioning in buildings — Fire and smoke control in buildings (incorporating amendment 1)
AS 1670	2018	Fire detection, warning, control and intercom systems
AS/NZS 1680 Part 0	2009	Interior lighting — Safe movement
AS 1684	2010	Residential timber- framed construction
AS 1720	2010	Timber structures
AS 1735	1986	Lifts, escalators and moving walks
AS/NZS 1859 Part 4	2018	Reconstituted wood- based panels
AS 1860 Part 2	2006	Particleboard flooring — Installation (incorporating amendment 1)
AS 1905 Part 1	2015	Components for the protection of openings in fire-resistant walls
AS 1926 Part 1	2012	Swimming pool safety
AS 2047	2014	Windows and external glazed doors in buildings
AS 2049	2002	Roof tiles (incorporating amendment 1)
AS 2050	2018	Installation of roof tiles
AS 2118	2017	Automatic fire sprinkler systems
AS 2159	2009	Piling — Design and installation (incorporating amendment 1)
AS/NZS 2179 Part 1	2014	Specifications for rainwater goods, accessories and fasteners
AS/NZS 2269 Part	2012	Plywood
AS/NZS 2293 Part 1	2018	Emergency lighting and exit signs for buildings
AS/NZS 2327	2017	Composite structures
AS 2419 Part 1	2005	Fire hydrant installations
AS 2441	2005	Installation of fire hose reels (incorporating amendment 1)
AS 2444	2001	Portable fire extinguishers and fire blankets — Selection and location
AS 2665	2001	Smoke/heat venting systems — Design, installation and commissioning
AS/NZS 2699 Part 1	2000	Built-in components for masonry construction
AS 2870	2011	Residential slabs and footings
AS/NZS 2890 Part 6	2009	Parking facilities
AS/NZS 2904	1995	Damp-proof courses and flashings
AS/NZS 2908 Part 1	2000	Cellulose-cement products
AS/NZS 2918	2018	Domestic solid fuel burning appliances
AS/NZS 3013	2005	Electrical installations — Classification of the fire and mechanical performance of wiring system elements
AS/NZS 3500 Part 0	2003	Plumbing and drainage
AS/NZS 3500	2018	Plumbing and drainage
AS 3600	2018	Concrete structures
AS/NZS 3666	2011	Air-handling and water systems of buildings
AS 3700	2018	Masonry structures
AS 3740	2010	Waterproofing of domestic wet areas
AS 3786	2014	Smoke alarms using scattered light, transmitted light or ionization (incorporating amendment 1 and 2)

AS 3959	2018	Construction of buildings in bushfire-prone areas
AS/NZS 4020	2018	Testing of products for use in contact with drinking water
AS 4055	2012	Wind loads for housing (incorporating amendment 1)
AS 4072	2005	Components for the protection of openings in fire-resistant separating elements
AS 4100	1998	Steel structures
AS/NZS 4200	2017	Pliable building membranes and underlays — Materials
AS 4200 Part 2	2017	Pliable building membranes and underlays — Installation requirements (incorporating amendment 1)
AS/NZS 4234	2008	Heated water systems
AS 4254 Part 1	2012	Ductwork for air- handling systems in buildings — Flexible duct
AS 4254 Part 2	2012	Ductwork for air- handling systems in buildings — Rigid duct
AS/NZS 4256	1994	Plastic roof and wall cladding materials — General requirements
AS/NZS 4284	2008	Testing of building facades
AS/NZS 4505	2012	Garage doors and other large access doors (incorporating amendment 1)
AS 4552	2005	Gas fired water heaters for hot water supply and/or central heating
AS 4586	2013	Slip resistance classification of new pedestrian surface materials (incorporating amendment 1)
AS 4597	1999	Installation of roof slates and shingles (Non- interlocking type)
AS/NZS 4600	2018	Cold-formed steel structures
AS 4654 Part 1	2012	Waterproofing membranes for external above-ground use — Materials
AS 4654 Part 2	2012	Waterproofing membranes for external above-ground use — Design and installation
AS 4678	2002	Earth-retaining structures
AS 4773 Part 1	2015	Masonry in small buildings — Design (incorporating amendment 1)
AS/NZS 4859	2018	Thermal insulation materials for buildings
AS 5113	2016	Classification of external walls of buildings based on reaction-to-fire performance (incorporating amendment 1)
AS 5146 Part 1	2015	Reinforced autoclaved aerated concrete — Structures (incorporating amendment 1)
AS 5216	2018	Design of post-installed and cast-in fastenings in concrete
AS 5637 Part 1	2015	Determination of fire hazard properties — Wall and ceiling linings
AS ISO 9239 Part 1	2003	Reaction to fire tests for floorings — Determination of the burning behaviour using a radiant heat source

Question 3

List the **five (5)** policy priorities of the [Green Building Council of Australia](#) (GBCA) for creating a sustainable environment.

[Type your answer here]

Students must list the following 5 policy priorities, as per GBCA's website:

1. carbon positive buildings
2. strong government leadership
3. realising our vision for cities and communities
4. smarter infrastructure investments
5. affordable, sustainable housing.

Question 4

Select **two (2)** requirements of the Environment Protection and Biodiversity Conservation Act 1999 that a construction company must abide by.

Two (2) requirements of the legislation specify the construction company must abide by	1. Ensure that the project would not affect any migratory animals.
	2. Ensure that the project would not affect any nationally threatened plants, animals, or ecological communities. <i>[Source]</i>

Additional requirements that students could choose from:

- Ensure that the project would not have a significant impact on a declared World Heritage property
- Ensure that the project would not have a significant impact on the Great Barrier Reef Marine Park or surrounding environment
- Ensure that the project would not have a significant impact on Commonwealth Heritage places

Question 5

Based on your state/territory, identify **one (1)** applicable work health and safety Act, provide a brief summary and explain how it relates to construction planning.

State/Territory	WHS Act	A brief summary and explanation (15-20 words)
NSW	Work Health and Safety Act 2011 (NSW)	Below sample answer applies to all legislation: This describes the laws of the state regarding health and safety in the workplace. The requirements covered in this act also apply to building and construction work and should be considered in construction planning.

Instruction to the assessor:

Answers must be related to the state/territory identified. Below is a list of all relevant state/territory legislation:

- QLD: Work Health and Safety Act 2011
- VIC: Occupational Health and Safety Act 2004
- ACT: Work Health and Safety Act 2011
- SA: Work Health and Safety Act 2012 [SA]
- NT: Work Health and Safety (National Uniform Legislation) Act 2011
- WA: Occupational Safety and Health Act 1984
- TAS: Work Health and Safety Act 2012

Question 6

Identify **one (1)** work health and safety regulation for the WHS/OHS Act relevant for your state, provide a brief summary and explain how it relates to construction planning.

Instruction to the assessor:

Student must identify own state/territory and all answers should be related to that.

State/Territory	WHS regulation	A brief summary and explanation (40-45 words)
<p>[Student to identify state/territory. For example: NSW, VIC, TAS, QLD, WA, SA]</p>	<p>1. Regulation 316 Duty to provide general construction induction training [NSW]</p>	<p>This is an example of a competent response:</p> <p>This regulation describes the duty of one conducting a business or undertaking to ensure that general construction induction training is provided.</p> <p>This would relate to construction planning should there be any workers who still need to undergo the construction induction training. The plan would need to include cost for the training as well as a schedule and time frames for these workers to complete the training.</p>
	<p>Additional sample answer:</p> <p>Regulation 299 Safe work method statement required for high-risk construction work [NSW]</p>	<p>This regulation describes the duty of one conducting a business or undertaking to ensure that a safe work method statement is prepared before conducting high risk construction work.</p> <p>This would relate to construction planning as the safe work method statement must be prepared before undergoing any high-risk construction work. Thus, appropriate resources and scheduling should be allocated for preparing the safe work method statement beforehand.</p>

Instructions to assessor:

Students must select regulations related to their state/territory. Below is a list of all WHS regulations per state/territory. Internet links are provided for each regulation for assessors to access regulations to ensure answers given by students are correct.

- QLD: [Work Health and Safety Regulation 2011](#) [Regulation 316 Duty to provide general construction induction training, Regulation 299 Safe work method statement required for high-risk construction work]
- VIC: [Occupational Health and Safety Regulations 2017](#) [Regulation 299 Notice in an unexpected situation, Regulation 316 Disposal of asbestos waste]
- ACT: [Work Health and Safety Regulation 2011](#) [Regulation 299 Safe work method statement required for high-risk construction work, Regulation 316 Duty to provide general construction induction training]
- SA: [Work Health and Safety Regulations 2012 \[SA\]](#) [Regulation 299 Safe work method statement required for high risk construction work, Regulation 316 Duty to provide general construction induction training]
- NT: [Work Health and Safety \[National Uniform Legislation\] Regulations 2011](#) [Regulation 299 Safe work method statement required for high risk construction work, Regulation 316 Duty to provide general construction induction training]
- WA: [Occupational Safety and Health Regulations 1996](#) [Regulation 3.59B Work in roof spaces, Regulation 3.136 Construction induction training certificate, when required]

- TAS: [Work Health and Safety Regulations 2012](#) [(Regulation 299 Safe work method statement required for high risk construction work, Regulation 316 Duty to provide general construction induction training)]

Question 7

In the building and construction industry you have to work with subcontractors. In about 15-20 words, provide a brief description of subcontractors' role in the construction industry.

[Type your answer here]

The learner must provide a brief description of subcontractors' role in the construction industry. For a satisfactory response, although wording may slightly vary, their response must be consistent with the benchmark answer below:

Subcontractors are hired by contractors to work on a particular trade or trades. Subcontractors usually perform specialised trades, such as masonry or electrical aspects of the construction design.

Question 8

In about 15-20 words, describe briefly the difference between contractors and subcontractors.

[Type your answer here]

The learner must briefly describe the difference between contractors and subcontractors. For a satisfactory performance, although wording may slightly vary, their response must be consistent with the benchmark answer below:

Contractors are hired by clients and supply the necessary equipment, material, labour and services to complete the project while subcontractors are hired by contractors to perform either a portion or all of the work.

Question 9

Identify the organisation that provides support, information and ethical standards to the subcontracting business in all areas of Australia.

List **three [3]** stakeholders that the organisation collaborates with.

[Type your answer here]

Correct answer: Australian Subcontractors Association

The learner must list **3 stakeholders** that the organisation collaborates with.

For a satisfactory performance, their response must be any 3 of the following:

- Small Business Commissioner
- South Australian Office of The Industry Advocate
- Specialist Contractors SA
- Other Industry Associations, i.e. the Master Builders Association and CCF
- ACIF – Australian Construction Industry Forum

Question 10

List **three (3)** issues that the organisation identified in Question 9 helps resolve for their members.

[Type your answer here]

The student must list 3 issues that the organisation identified in Question 9 helps resolve for their members.

For a satisfactory performance, their response must be any 3 of the following:

- Security of payments, to increase cash flow of smaller businesses
- Project Bank Accounts and Trust Accounts
- Upfront payments for goods purchased
- Variations and QS adjustments
- Unfair contractual terms and conditions
- Payment terms

Question 11

Before commencing any project, every company must organise a variety of permits relevant to construction planning. For each of the following permit types briefly summarise the purpose of the document in relation to construction planning.

Instructions to assessor:

This is an example of a competent response. Students must cover bolded key points.

Internal document type	Purpose (50-60 words)
Planning permits	Planning permits give permission to develop or use land in a particular way . You may require a planning permit for a new home, extension, renovation or an additional dwelling on the land . The local council is responsible for issuing a planning permit . If you need a planning permit, it must be issued from your local council before you can obtain a building permit. You may need to engage a town planner to determine if you require a planning permit for your building project. Planning permit applications submitted to council may need to include the proposed design, planning report, shadow diagrams and other relevant documentation. Contact your local council for more information.
Building permits	Building permits are documents certifying that a proposed building complies with the relevant building regulations . A building permit is a written approval by a private or municipal building surveyor . It allows the building work to be undertaken according to the approved plans, specifications and other relevant documentation. A building permit will specify that either an occupancy permit or a certificate of final inspection is required on completion of the building work. Not all building projects require a building permit . Possible exemptions may include: <ul style="list-style-type: none">• some minor alterations or demolitions

	<ul style="list-style-type: none"> • pergolas associated with houses • some garden sheds with a floor area less than 10m² • repair work for maintenance purposes.
Applications for service connections	This is to arrange connection to the necessary services, including electricity, water, telephone/broadband, sewerage and gas (if they are available).
Environmental application document (or Environmental Management Plan)	<p>This is to ensure that the necessary preparation has been done to commence the construction in an environmental-friendly way, with the least impact on the environment.</p> <p>This includes the following considerations:</p> <ul style="list-style-type: none"> • soil and water management plan • noise mitigation measures • mapping and protecting environmentally sensitive areas, including flora and fauna/ indigenous and non-indigenous mitigation measures • planning for reducing energy use, water use and waste • using recycled construction materials where appropriate, etc.
Parking restriction applications	<p>This is to apply for a work zone parking restriction when undertaking building works and require parking next to the building site.</p> <p>The application needs to meet the following conditions:</p> <ul style="list-style-type: none"> • There is sufficient width abutting the property to fit the work zone, so that the zone will not be in front of another resident's property. • There are not any 'No stopping' restrictions in the proposed location. • There are no Clearway operating times in the proposed location. <p>The application gets approved if council receives no more than 2 written objections to the introduction of the work zone restrictions from residents in the street. Council will send a letter to neighbouring residents advising them of the proposed restrictions. Only vehicles necessary for works at the site (such as trucks and trade vehicles carrying essential equipment) can park in the work zone. The restrictions are not to be used for commuter employee parking. A work zone parking restriction will only be issued along one side of the property, even where the work zone has multiple boundaries.</p>

Question 12

For the success of a project, it is important to think through organisational strategies and relevant processes before commencing the project. For the following processes provide a brief summary of its purpose and why they are important in construction planning.

Instructions to assessor:

This is an example of a competent response.

Process	Explanation (25-30 words)
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Brief internal personnel, external agencies and clients	This is important to ensure both internal (personnel) and external stakeholders (agencies, contractors, clients) are familiar with the project and its components, they are aware of the requirements and expectations, steps to be followed, responsibilities, etc. This is important to establish trust amongst stakeholders and clarify roles, responsibilities.
Calling for tenders for subcontractor operations	An invitation to tender is a really important document in construction. It is the main instrument which companies use to garner interest amongst and eventually choose the vendors who will work on their projects. This is to ensure the suitability of the contractors, encourage competition and to avoid nepotism.
Appointing project managers and construction supervisors	This is to ensure clear accountabilities and responsibilities. The project manager oversees the entire project, while the construction supervisors are responsible for the different segments of the construction work. Clear accountabilities are important to ensure that the project will be completed on time and as planned.
Purchasing building supplies and construction materials	This is an important step before commencing a construction project and through the construction as well. Budgeting and resources need to be planned in advance as they are key in the success of the project. Also, if the material purchase is delayed, it may delay the whole project as some materials need to be ordered and that may take more time. This is important to ensure the project is completed in a timely manner.
Refining project critical path information	As the project commences, there are several factors that may influence and impact on the completion of the project phases. It is important to regularly refine and revise the project plan to ensure the work is under control and it will reach the desired outcome.

Question 13

In your own words, briefly explain the following items concerning the project schedule of a building and construction project.

Instructions to assessor:

This is an example of a competent response.

Project schedule	Description (15-25 words)
Human resource schedule	This refers to the schedule developed for each member of the construction process with details of the timeframes for each task they are involved in.
Material delivery schedule	This is made to let the seller know the future dates when the purchased goods will be delivered.

Project critical path	This is a form of project management technique wherein tasks are evaluated to identify how each task can be performed in the least amount of time possible while also maximising efficiency.
Project timeframes	These are made to establish the schedule, and when the key milestones and project objective are met.
Scheduling plant use	This refers to the type, quantity and timings where heavy machinery is needed. This is specifically important if the machinery is being rented.
Scheduling equipment use	Equipment use schedule shows when specific equipment will be used during construction.

Assessment checklist

Students must have completed all questions within the assessment before submitting. This includes:

13 short answer questions to be completed in the spaces provided
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Congratulations you have reached the end of Assessment 2!