



### Assessment Resources Required

To complete this assessment, you will need:

- o Project documents.
- o Participant Guide “Building Structures”.
- o AS 1684.2 (or 1684.3):2010 (depending on the region) “Residential timber framed construction”.
- o AS 2870-2011 “Residential slabs and footings”.
- o AS 4773.2-2010 “Masonry in small buildings – Construction”.
- o NCC/BCA Volumes 1 and 2.
- o Access to residential building legislation for the local jurisdiction.
- o Access to safety legislation for the local jurisdiction.
- o Access to the Safe Work Australia “Demolition Work Code of Practice”.
- o Access to the Safe Work Australia “How to safely remove asbestos Code of Practice”.
- o Documentation for the HIA Residential Project.



### Assessment Task 8 – Participant Instructions How to complete this assessment task

**Tasks 8.1 to 8.10 are project tasks relating to Building Structures that are to be completed outside the learning delivery environment.**

Select at least 3 low-rise commercial buildings local to your home, workplace or HIA Training venue to use as case study examples for this assessment. These may be either new construction projects or existing buildings.

Carry out a site visit, inspection and review of each of the buildings. Provide photographs and sketches to provide a portfolio case study of each building, identifying and discussing the following structural elements.

- Footing systems.
- The different materials and their related construction methods.
- Floor systems.
- Structural wall systems.
- Structural roof systems.
- Structural wall cladding systems.
- Relevant service essential for the building’s occupation.

- 8.1. Provide a brief description of your selections including identifying the use of the building and its building classification in accordance with the BCA.

- 8.2. Identify the predominant structural system used (e.g. portal frame, reinforced concrete etc.) and the key structural elements of each of the buildings.
- 8.3. Provide photographs or sketches of each of the building elements. The building must be clearly identified and the building elements labelled.
- 8.4. Your survey and portfolios should provide at least two (2) examples of each of the following:
  - 8.4.1. Footing systems
  - 8.4.2. The different materials and their related construction methods
  - 8.4.3. Floor systems
  - 8.4.4. Structural wall systems
  - 8.4.5. Structural roof systems
  - 8.4.6. Structural wall cladding systems
  - 8.4.7. Relevant service essential for the building's occupation
  - 8.4.8. Roof or wall penetrations in the structure.

You do not have to provide information on every structural element listed above for each building but your portfolio should include at least two (2) examples of each structural element listed above

- 8.5. Against each of the examples provided, list with some positive aspects and some negative aspects for each structural element.
- 8.6. This task requires you to plan, manage and check that the erection of roof trusses meets the building plan, the relevant code and is within accepted industry principles. You are required to list the items which are to be included in the Roof Truss Inspection Schedule and the Quality Control Checklist below:

<b>ROOF TRUSS INSPECTION SCHEDULE</b>				
Conformance codes: <b>C</b> = Conform <b>N</b> = Non-conformance <b>N/A</b> = Not Applicable				
Inspection Items	Date checked	C,N,N/A	Comments	Initials
<i>DOCUMENTATION</i>				
<i>PRE-DELIVERY</i>				





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8.8. Identify the building elements that each professional would be responsible for.

Industry Professional	Building Design/Certification	Portable Frame	Concrete Footings and Slab	Metal Deck Roofing	Metal Wall Cladding	Plumbing and Drainage	Heating and Ventilation	Electrical Services	Car Parks / Access	Fire Services
Architect										
Engineer - Geotechnical										
Land Surveyor										
Engineer - Structural										
Engineer - Civil										
Engineer - Hydraulic										
Engineer - Electrical										
Engineer - Fire Services										
Engineer - HVAC										
Building Surveyor										

8.9. You have been asked by the client to consider fibre cement sheeting as an alternative wall cladding for this project. Firstly you will list the documents you will need to read and interpret to assess if this change is a viable one:

List three documents that you will read and interpret:

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- 1.
- 2.
- 3.

### 8.10. Role Play

This role play involves you and your trainer taking on different roles. You will be the builder and your trainer will be the building surveyor. This role play will be done one on one either by telephone or face to face (your trainer will liaise with you in regard to the preferred method and time).

The aim of this role play is practice liaising with industry professionals in regard to the design process. You as the builder will set up a meeting with the building surveyor (your trainer) to identify and confirm the requirements for an alternative wall cladding. This role play will demonstrate your ability to consult with an industry professional by:

- Sharing your interpretation of:
  - BCA
  - Building Authority Documents
  - Manufacturer's Document
- Using direct and clear questioning
- Providing confirmation through active listening

Your task:

To prepare for the role play you will write a 100 word background of the situation and include how you interpret the BCA and building authority and manufacturer documents to choose an alternative wall cladding. You will provide this background information verbally to the building surveyor. You will be assessed on your ability to give clear and direct background information.

Write four questions you will ask the building surveyor to confirm that you are on the right track in terms of your interpretation. The aim is to identify and confirm the requirements of the wall cladding as an option.

When the building surveyor gives you his /her advice, you will use active listening. You will be assessed based on the following criteria that demonstrates active listening.

- Pay Attention. Give the speaker your undivided attention, and acknowledge the message.
- Show That You're Listening
- Provide Feedback.
- Defer Judgment
- Respond Appropriately

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