READ AND INTERPRET PLANS AND SPECIFICATIONS
CERTIFICATE II IN BUILDING AND CONSTRUCTION (PATHWAY – PARAPROFESSIONAL)
CPCCCM2001A
LECTURER’S GUIDE
BUILDING AND CONSTRUCTION
Read and interpret plans and specifications

CPCCCM2001A

Lecturer’s guide
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Read and interpret plans and specifications
Lecturer’s guide

CPCCCM2001A
Introduction

This lecturer’s guide takes you through the various documents associated with the unit of competency and the resources you will require to deliver it. It also provides some suggestions to assist you in delivering and assessing the knowledge and skills a learner needs to be able to read and interpret plans and specifications relevant to construction operations in the residential sector of the industry.

Areas of explanation include:

- the types of drawings used and the kinds of information they show
- title panels and the kind of information they show
- dimensions – how they are shown and how to read them
- paper sizes and common scales that are used
- abbreviations and symbols found on drawings
- written specifications.

Qualification overview

This unit of competency, CPCCCM2001A Read and interpret plans and specifications, forms part of Certificate II in Building and Construction (Pathway – Paraprofessional) and is aimed at people who are considering a paraprofessional career in the residential building industry (as opposed to a career in the trade sector).

The course consists of 12 units of study and a period of work placement. These two components, study and work, will provide learners with an introductory background to the paraprofessional side of the residential building industry.

To progress further in the industry from this introductory level, learners will then need to specialise in a particular field of study, such as building, estimating, scheduling, drafting or building design. Courses for these careers usually commence at Certificate IV level and progress through to diploma or even advanced diploma levels at a registered training provider who delivers these programs.

Some areas of study, such as architecture, interior design and construction management, can then be studied further at degree level at a university.
Unit overview

This unit of competency specifies the outcomes required to read and interpret plans and specifications relevant to construction operations in the residential sector of the building industry. It does not cover the commercial sector of the industry.

It includes the identification of types of plans and drawings and their functions, the recognition of commonly used symbols and abbreviations, the identification of key features, dimensions and specifications on drawings, the comprehension of written job specifications and the recognition of document status and amendment detail.

Competence in this unit will be demonstrated by successful completion of two written assessments – a written theory assessment and a written plan-reading practical assessment.

The full unit of competency is provided for you at Annex A to this guide.

Resources and preparation

You will need to source a range of single residential construction drawings to reproduce and compile into class sets so learners can carry out the learning, activities and assessments in the learner’s guide. Specifically, you will require:

- a site plan
- a floor plan
- elevations
- sections
- an electrical plan
- a specification
- an additional specification for Assessment 1 Part C
- an additional set of plans for Assessment 2.
You should also have a range of additional example plans and their specifications – for example, specific to the prevalent construction style in your area – available to use in class as examples for discussion and activities.

Many of the examples in the learner’s guide are based on brick construction so using similar plans will require less adaptation of the content. Check the plans you have selected for compatibility with the content and activities in the learner’s guide before copying them or using them with learners.

Learners need to provide:

- a scale rule
- pens, pencils and highlighters
- an A4 notepad
- an A4 file for notes and handouts
- a USB thumb drive.

You will need to check all websites noted in the learner’s guide before each delivery session, as addresses can change without notice.

Resources noted in the learner’s guide may also vary across regions, especially where state/territory legislation is referenced. Please review these within the context of your own local requirements.

Check the resources column of the delivery plan, provided at Annex B to this guide, for resources required in each section.
Read and interpret plans and specifications
Lecturer’s guide
Delivery strategy

This section provides suggestions to assist you to deliver this unit and achieve the desired learning outcomes.

Construction methods vary across Australia, across market segments and even between local areas and neighbourhoods. As you prepare to deliver this unit, decide whether there is a particular type of construction that it would be beneficial for your learners to know most about. If there is, try to source plans, specifications and ideas or examples that will enable you to provide learning experiences with an emphasis on that type of construction.

If you haven’t done so already, get a copy of the learner’s guide and familiarise yourself with it. Also, look at the delivery plan provided at Annex B to this guide.
The learner’s guide

Format and intent

General

In the learner’s guide, you’ll find a variety of material to help you deliver this unit. This includes:

- text, images and diagrams
- activities, including fill in the blanks, discussions, research and written activities, all related to the content most recently covered.

All written activities are designed to be written directly into the learner’s guide. When learners have finished the unit, their guide should be complete and able to be used as a reliable reference in the future. For this to be the case, the activities need to be checked and/or discussed to give learners the opportunity to correct any incorrect or incomplete parts.

Note: The learner’s guide is not intended to be content-heavy, and it is not a textbook. It is designed to complement your classroom delivery and provide learners with a summary of the unit content.

For this unit

Throughout Sections 1 to 6 of the learner’s guide, learners will complete assessment tasks to check their competence in the areas covered. Providing these assessments at regular intervals through the course will allow both you and your learners to quickly identify any areas of the course content that might need more attention.

One simple way of supplementing the content of the learner’s guide is to have learners carry out the activities, then repeat the same (or similar) task using drawings from the class set. This approach allows you to vary the difficulty level and provide different tasks to different learners or groups.

Once learners are confident with the concepts covered in the first six sections of their guide, they will then move on to practise using their new knowledge and skills to read and interpret real plans and specifications in Section 7.

Section 8 is optional. Working in groups, learners will produce a simple set of construction drawings and a matching specification. It is up to you to decide whether your learner group would benefit from these activities or whether this time would be better spent reviewing and revising other parts of the unit material.
Content

In Section 1 of the learner’s guide, the types of drawings learners might come across are discussed, along with a brief background about how these are created and why. Learners should also be introduced to the class set of drawings to get an idea of what real plans look like.

Environmental management is discussed, in the context of planning for and managing construction projects.

Section 2 is devoted to title panels, or title blocks. As the information shown in these can vary, it could be useful to have several different examples of title panels from a range of plans to show learners, perhaps on overheads.

In Section 3, learners move on to dimensions. While the basics of what these are for and how they are laid out is covered in the learner’s guide, most learners will need a lot more practice using the class drawing set and perhaps some examples discussed as a whole group before they will grasp even the basic concepts. Learners are also introduced to reduced levels in this section. The temporary benchmark, in particular, can be a difficult concept to understand, perhaps because it is so abstract compared to a lot of other elements of construction. Some learners might benefit from being directed to look out for indications of levels at the edge of blocks or construction sites in their area, and then discuss these in class.

Scale is presented in Section 4. Like dimensions, the basic idea is covered in the learner’s guide as well as several practice activities, but this will not be sufficient for some to fully grasp the concept, especially those who have difficulties with maths. Be prepared to provide more teaching and practice with scale.

Section 5 looks at abbreviations and symbols. As there are so many of these, it could be useful to provide learners with a supporting handout showing the most common or important ones. Perhaps a class research activity could involve all learners contributing to a combined class-produced symbols resource.

Section 6 moves on to specifications. Again, it may be necessary to provide additional practice to support this content, particularly for learners with lower reading abilities. The language and terminology used in specifications can be quite confusing. Having some additional example specifications available for learners to compare and find common elements with is a good way to help them become comfortable with these important project documents. In this qualification, there is an entire unit devoted to estimating and another to measuring, so there’s no need to go into detail about those topics here.

Section 7 is devoted to finding requested information in each of the drawings in the class set. If you have already used the class set of drawings extensively in Sections 1 to 6, you may need to source some new drawings for this section.
For those learners who require additional plan-reading exercises, a range of sources can be used, including an old but still useful resource: Earnshaw, K. 1988, Carpentry and Joinery: Plan Reading, *Basic Training Manual*, 2nd edn, Vol 14(10), Sections 1–6, Australian Government Publishing Service, Canberra.

**Section 8** is designed to reinforce the learning that’s taken place up to this point, and allow you to explore learners’ understanding of the important aspects of the unit in another way. As this section is to be used at your discretion, it is only briefly mentioned in the learner’s guide. Section 8 is provided in full at Annex G to this lecturer’s guide should you wish to use it.

While most of the knowledge and skills required to achieve competency in this unit is supported in the learner’s guide, the guide does not claim to completely cover all performance criteria. Content and activities for some of the unit will need to be supplemented by you. In particular, performance criteria 1.3, 1.4 and 5.3 will require you to prepare content and activities specific to your state/territory, local area and learner group.
Assessment summary

The assessments for this unit are designed to assess competency in the six elements of the unit.

Assessments 1 and 2 will be closed-book written tests done in class. An assessment plan is included at Annex C to this guide, explaining when each assessment could be administered, what it covers and the resources required.

The focus of Assessment 1 is reading, and for Assessment 2 it is interpreting.

A matrix is included at Annex E to this guide showing how the assessment tasks map to the unit performance criteria.

Results and appeals

Please refer to your training organisation or association website for information about the assessment process.
Annex A – Unit details

<table>
<thead>
<tr>
<th>Unit title</th>
<th>Read and interpret plans and specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Descriptor</td>
<td>This unit of competency specifies the outcomes required to read and interpret plans and specifications relevant to construction operations. It includes the identification of types of plans and drawings and their functions, the recognition of commonly used symbols and abbreviations, the identification of key features and specifications on a site plan, the comprehension of written job specifications and the recognition of document status and amendment detail.</td>
</tr>
<tr>
<td>National code</td>
<td>CPCCCM2001A</td>
</tr>
<tr>
<td>Employability skills</td>
<td>This unit contains employability skills.</td>
</tr>
<tr>
<td>Prerequisite units</td>
<td>Nil</td>
</tr>
<tr>
<td>Application</td>
<td>This unit of competency supports achievement of basic reading and interpretation of plans and specifications commonly used in the construction industry.</td>
</tr>
</tbody>
</table>

**Element 1 Identify types of drawings and their functions.**

1.1 Main types of *plans and drawings* used in the construction sector of the industry are identified.

1.2 *Key features* and functions of each type of drawing are identified.

1.3 *Quality requirements* of company operations are recognised and adhered to.

1.4 *Environmental requirements* and controls are identified from job plans, specifications and environmental plan.

**Element 2 Recognise amendments.**

2.1 Title panel of *project documentation* is checked to verify latest amendments to drawing.

2.2 Amendments to *specifications* are checked to ensure currency of *information* and conveyed to others where appropriate.
### Element 3 Recognise commonly used symbols and abbreviations.

| 3.1 | Construction symbols and abbreviations are recognised. |
| 3.2 | Legend is located on project drawings, and symbols and abbreviations are correctly interpreted. |

### Element 4 Locate and identify key features on a site plan.

| 4.1 | Orientation of the plan with the site is achieved. |
| 4.2 | Key features of the site are identified and located. |
| 4.3 | Access to site is gained and services, main features, contours and datum are identified. |

### Element 5 Identify project requirements.

| 5.1 | Dimensions for project and nominated locations are identified. |
| 5.2 | Construction types and dimensions for nominated locations are identified. |
| 5.3 | Environmental controls and locations are identified. |
| 5.4 | Location, dimensions and tolerances for ancillary works are identified. |

### Element 6 Read and interpret job specifications.

| 6.1 | Job specifications are identified from drawings, notes and descriptions. |
| 6.2 | Standards of work, finishes and tolerances are identified from the project specifications. |
| 6.3 | **Material attributes** are identified from specifications. |
Required skills and knowledge

Required skills

• communication skills to:
  ◦ enable clear and direct communication, using questioning to identify and confirm requirements, share information, listen and understand
  ◦ read and interpret:
    – documentation from a variety of sources
    – drawings and specifications
  ◦ use language and concepts appropriate to cultural differences
  ◦ use and interpret non-verbal communication, such as hand signals

• identifying and accurately reporting to appropriate personnel any faults in tools, equipment or materials

• numeracy skills to apply measurements and make calculations, including heights, areas, volumes and grades

• organisational skills, including the ability to plan and set out work

• teamwork skills to work with others to action tasks and relate to people from a range of cultural and ethnic backgrounds and with varying physical and mental abilities

• technological skills to:
  ◦ use a range of mobile technology, such as two-way radio and mobile phones
  ◦ voice and hand signals to access and understand site-specific instructions.

Required knowledge

• basic calculations of heights, areas, volumes and grades

• commonly used construction symbols and abbreviations

• construction terminology

• drawing conventions

• features of plans and elevations, including direction, scale, key, contours, symbols and abbreviations

• job safety analysis (JSA) and safe work method statements

• key features of formal job specifications

• processes for application of scales in plan preparation and interpretation

• project quality requirements

• site and equipment safety (OHS) requirements

• techniques for orienting/confirming the orientation of a plan.
## Evidence guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

<table>
<thead>
<tr>
<th>Overview of assessment</th>
<th>This unit of competency could be assessed in the workplace or a close simulation of the workplace environment, provided that simulated or project-based assessment techniques fully replicate construction workplace conditions, materials, activities, responsibilities and procedures.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical aspects for assessment and evidence required to demonstrate competency in this unit</td>
<td>A person who demonstrates competency in this unit must be able to provide evidence of the ability to:</td>
</tr>
<tr>
<td></td>
<td>• locate, interpret and apply relevant information, standards and specifications</td>
</tr>
<tr>
<td></td>
<td>• comply with site safety plan, OHS regulations and state and territory legislation applicable to workplace operations</td>
</tr>
<tr>
<td></td>
<td>• comply with organisational policies and procedures, including quality requirements</td>
</tr>
<tr>
<td></td>
<td>• communicate and work effectively and safely with others</td>
</tr>
<tr>
<td></td>
<td>• for a minimum of two different projects, read and interpret the project plans, including:</td>
</tr>
<tr>
<td></td>
<td>◦ confirmation of amendment status and drawings confirmed ‘for construction’</td>
</tr>
<tr>
<td></td>
<td>◦ orientation of plans to the ground</td>
</tr>
<tr>
<td></td>
<td>◦ six key features on both the plan and the site</td>
</tr>
<tr>
<td></td>
<td>◦ confirmation of six items of information from the title block of the project plans</td>
</tr>
<tr>
<td></td>
<td>◦ six construction dimensions, levels and locations from the project plans</td>
</tr>
<tr>
<td></td>
<td>◦ six ancillary works dimensions, levels and locations from the project plans</td>
</tr>
<tr>
<td></td>
<td>◦ for a minimum of two formal specifications, identify the dimensions, material requirements and processes to be followed.</td>
</tr>
</tbody>
</table>
| **Context of and specific resources for assessment** | This competency is to be assessed using standard and authorised work practices, safety requirements and environmental constraints.  
Assessment of essential underpinning knowledge will usually be conducted in an off-site context.  
Assessment is to comply with relevant regulatory or Australian Standards® requirements.  
Resource implications for assessment include:  
• an induction procedure and requirement  
• realistic tasks or simulated tasks covering the mandatory task requirements  
• relevant specifications and work instructions  
• tools and equipment appropriate to applying safe work practices  
• support materials appropriate to activity  
• workplace instructions relating to safe work practices and addressing hazards and emergencies  
• material safety data sheets  
• research resources, including industry related systems information.  
Reasonable adjustments for people with disabilities must be made to assessment processes where required. This could include access to modified equipment and other physical resources, and the provision of appropriate assessment support. |


## Method of assessment

<table>
<thead>
<tr>
<th>Assessment methods must:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• satisfy the endorsed Assessment Guidelines of the Construction, Plumbing and Services Training Package</td>
</tr>
<tr>
<td>• include direct observation of tasks in real or simulated work conditions, with questioning to confirm the ability to consistently identify and correctly interpret the essential underpinning knowledge required for practical application</td>
</tr>
<tr>
<td>• reinforce the integration of employability skills with workplace tasks and job roles</td>
</tr>
<tr>
<td>• confirm that competency is verified and able to be transferred to other circumstances and environments.</td>
</tr>
</tbody>
</table>

Validity and sufficiency of evidence requires that:

• competency will need to be demonstrated over a period of time reflecting the scope of the role and the practical requirements of the workplace
• where the assessment is part of a structured learning experience the evidence collected must relate to a number of performances assessed at different points in time and separated by further learning and practice, with a decision on competency only taken at the point when the assessor has complete confidence in the person’s demonstrated ability and applied knowledge
• all assessment that is part of a structured learning experience must include a combination of direct, indirect and supplementary evidence.

Assessment processes and techniques should as far as is practical take into account the language, literacy and numeracy capacity of the candidate in relation to the competency being assessed.

Supplementary evidence of competency may be obtained from relevant authenticated documentation from third parties, such as existing supervisors, team leaders or specialist training staff.
**Range statement**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

| Plans and drawings | • construction plans  
|                    | • cross-sectional plans  
|                    | • dimensions and notes  
|                    | • illustrations  
|                    | • longitudinal plans  
|                    | • project specifications  
|                    | • site plans  
|                    | • structural detail and specification providing illustrations and dimensions.  
| Plans and drawings include: |  
| Key features of plans and specifications include: | • characteristics  
| | • compatibility  
| | • construction  
| | • location  
| | • pattern dimension  
| | • quantities  
| | • sizes  
| | • type of product or service.  
| Quality requirements include relevant regulations, including: | • Australian Standards®  
| | • internal company quality policy and standards  
| | • manufacturer specifications, where specified  
| | • workplace operations and procedures.  
| Environmental requirements include: | • clean-up management  
| | • waste management.
### Project documentation includes:
- contracts
- drawings
- schedule of rates
- specifications
- standard procedures and practices
- supplementary specifications
- work schedules.

### Specifications include:
- detail relating to materials and quality of work, quality assurance, nominated subcontractors, and provision of site access/facilities
- details relating to performance, including:
  - characteristics
  - material types
  - standards of work
  - tolerances
  - treatments and finishes.

### Information includes:
- diagrams or sketches and graphics
- instructions issued by authorised organisational or external personnel
- manufacturer specifications and instructions
- maps
- material safety data sheets (MSDS)
- memos
- organisation work specifications and requirements
- plans and specifications
- regulatory and legislative requirements pertaining to operations and the environment
- relevant Australian standards
- safe work procedures related to construction site operations
- signage
- verbal or written and graphical instructions
- work bulletins
- work schedules.

### Material attributes include:
- characteristics
- construction requirements
- treatments and finishes
- types.
Annex B – Delivery plan

The following notes will help you to prepare for the delivery of this unit’s content.

The learner’s guide is a required resource for all sessions. In addition, each session may require specific resources (see below), while some will share resources over a number of weeks’ delivery.

This delivery strategy is not intended to be the only way the unit content could be delivered. Delivery methods may vary depending on local, regional and/or organisational requirements.

**Note:** This delivery plan is based on 16 × two-hour sessions. A different session length or number of sessions will require adjustments to the plan.

<table>
<thead>
<tr>
<th>Session</th>
<th>Performance criteria</th>
<th>Guide</th>
<th>Resources</th>
</tr>
</thead>
</table>
| 1       | 1.1                  | Section 1 – Introduction  
Types of drawings  
Views:  
Plan view | Class set of drawings |
| 2       | 1.1, 1.2, 1.4  
3.1, 3.2  
4.1, 4.2, 4.3  
5.4 | Revision of previous session  
Continue Section 1:  
Views, plan view:  
Site plan  
Floor plan  
Electrical plan | Class set of drawings |
| 3       | 1.1, 1.2, 1.3, 1.4  
3.1  
5.3 | Revision of previous session  
Continue Section 1:  
Views:  
Elevations  
Sections  
Details  
Environmental management | Class set of drawings |
| 4       | 1.3  
2.1, 2.2 | Revision of Views  
Section 2 – Title panels | Class set of drawings |
<table>
<thead>
<tr>
<th>Session</th>
<th>Performance criteria</th>
<th>Guide</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>–</td>
<td>Assessment 1 Part A: Drawing types, Title panels</td>
<td>Assessment 1 Part A</td>
</tr>
<tr>
<td>6</td>
<td>5.1, 5.2, 5.4</td>
<td>Review Assessment 1 Part A Section 3 – Dimensions</td>
<td>Class set of drawings</td>
</tr>
<tr>
<td>7</td>
<td>5.1, 5.2</td>
<td>Revision of previous session Section 4 – Scale</td>
<td>Class set of drawings, Spare scale rules</td>
</tr>
<tr>
<td>8</td>
<td>3.1, 3.2</td>
<td>Revision of previous session Section 5 – Abbreviations and symbols</td>
<td>Class set of drawings, Handout of symbols</td>
</tr>
<tr>
<td>9</td>
<td>–</td>
<td>Assessment 1 Part B: Scaled dimensions Abbreviations and symbols</td>
<td>Assessment 1 Part B, Spare scale rules</td>
</tr>
<tr>
<td>10</td>
<td>2.2, 6.1, 6.2, 6.3</td>
<td>Review Assessment 1 Part B Section 6 – Specifications</td>
<td>Class set of drawings, Extracts from or examples of a specification</td>
</tr>
<tr>
<td>11</td>
<td>1.1, 1.2, 2.1, 3.1, 3.2, 4.1, 4.2, 4.3, 5.1, 5.2, 5.3, 6.1</td>
<td>Assessment 1 Part C: Specifications Section 7 – Finding information on drawings: Site plan Floor plan</td>
<td>Assessment 1 Part C, Example complete specification, Class set of drawings</td>
</tr>
<tr>
<td>12</td>
<td>1.1, 1.2, 2.1, 3.1, 3.2, 5.1, 5.2, 5.3, 6.1</td>
<td>Review Assessment 1 Part C Revision of previous session Continue Section 7 – Finding information on drawings: Elevations Electrical plan</td>
<td>Class set of drawings</td>
</tr>
<tr>
<td>Session</td>
<td>Performance criteria</td>
<td>Guide</td>
<td>Resources</td>
</tr>
<tr>
<td>---------</td>
<td>----------------------</td>
<td>-------</td>
<td>-----------</td>
</tr>
</tbody>
</table>
| 13      | 1.1, 1.2  
3.1  
4.1, 4.2, 4.3  
5.1, 5.2, 5.4 | Assessment 2 Part A:  
Site plans  
Floor plans | Assessment 2 Part A  
Unseen site plan  
Unseen floor plan |
| 14      | 1.1, 1.2  
3.1, 3.2  
5.1, 5.2 | Assessment 2 Part B:  
Elevations  
Electrical plan | Assessment 2 Part B  
Unseen elevations  
Unseen electrical plan |
| 15      | All | Section 8 group drawing activity | Section 8, Annex G  
A2 or A3 paper  
Sample drawings  
Scale rules  
Set squares |
| 16      | 6.1, 6.2, 6.3 | Continue Section 8 group specification writing activity | Section 8, Annex G  
A4 paper or computer access with word-processing software  
Sample specifications |
Annex C – Assessment plan

The assessments for this unit are designed to assess competency in the elements of the unit.

<table>
<thead>
<tr>
<th>Due</th>
<th>Assessment</th>
<th>Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Session 5</td>
<td><strong>Assessment 1 Part A</strong></td>
<td>1, 2, 3, 4, 5</td>
</tr>
<tr>
<td></td>
<td>Written theory assessment.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Questions will require a short answer. Learners will need a scale rule for some of them.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Topics will be from Sections 1 and 2 in the learner’s guide.</td>
<td></td>
</tr>
<tr>
<td>Session 9</td>
<td><strong>Assessment 1 Part B</strong></td>
<td>3, 5</td>
</tr>
<tr>
<td></td>
<td>Written theory assessment.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Questions will require a short answer. Learners will need a scale rule for some of them.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Topics will be from Sections 3, 4 and 5 in the learner’s guide.</td>
<td></td>
</tr>
<tr>
<td>Session 11</td>
<td><strong>Assessment 1 Part C</strong></td>
<td>1, 5, 6</td>
</tr>
<tr>
<td></td>
<td>Written theory assessment.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Questions will require a short answer. Learners will need a scale rule for some of them.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Topics will be from Section 6 in the learner’s guide.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Learners will be required to find information from a specification provided by you.</td>
<td></td>
</tr>
<tr>
<td>Session 13</td>
<td><strong>Assessment 2 Part A</strong></td>
<td>1, 2, 3, 4, 5</td>
</tr>
<tr>
<td></td>
<td>Written practical assessment.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Learners will be required to find information from a site plan and a floor plan provided by you.</td>
<td></td>
</tr>
<tr>
<td>Session 14</td>
<td><strong>Assessment 2 Part B</strong></td>
<td>1, 2, 3, 5</td>
</tr>
<tr>
<td></td>
<td>Written practical assessment.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Learners will be required to find information from an elevations drawing and an electrical plan provided by you.</td>
<td></td>
</tr>
</tbody>
</table>
Annex D – Assessments
Read and interpret plans and specifications
Lecturer’s guide

Annex D
Assessment 1 – Written theory

Introduction

This assessment is designed to assess learners’ ability to:

• understand the various types of drawing used in the residential sector of the construction industry and what their purposes are
• understand the information found on title panels of drawings
• understand the system and conventions used to dimension construction drawings
• accurately use a scale rule to ascertain dimensions from drawings
• understand the main abbreviations and symbols used on construction drawings
• understand the layout and conventions used in written specifications and their relevance to the drawings.

Requirements and format

Assessment 1 is divided into three parts: A, B and C. Learners are required to answer a series of short-answer questions relevant to the above elements. Some questions require the measuring of lines with a scale rule to determine dimensions.

The suggested due dates for the assessment are detailed in the assessment plan at Annex C to this guide.

Materials and equipment

To attempt this assessment, learners will need:

• a scale rule
• pens, pencils, etc
• the assessment paper
• a specification (lecturer to provide).
CPCCCMA2001A

Read and interpret plans and specifications

Assessment 1– Written theory Part A

Name ________________________________ Date ____________

I have received feedback on this assessment.

Signature ________________________________ Date ____________

Assessor’s initials
Assessment 1 – Written theory Part A

Section 1 – Drawing types

Below is a table with four types of drawings listed across the top, and 10 items of information that can be found on them listed down the left-hand side.

For each of the items of information, place a tick in the box below the type of drawing where you think you would find that information.

The first one is done as an example, indicating that the overall width of a building can be found on the floor plan.

<table>
<thead>
<tr>
<th>Information</th>
<th>Site plan</th>
<th>Floor plan</th>
<th>Elevation</th>
<th>Electrical plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>eg Overall width of building</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Width of driveway</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Position of downpipes (RWPs)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Type of windows</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Position of external lights</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Width of doors</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Finished floor level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Pitch (slope) of roof</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Thickness of external walls</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Ceiling height</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Height of GPOs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Answer the following questions about types of drawings.

11. List three reasons why drawings are essential to the construction of a house.
   1. 
   2. 
   3. 

12. Why isn’t it necessary for the draftsperson to show details of every little thing to be built?

13. List three pieces of information that you would expect to find on any site plan.
   1. 
   2. 
   3. 

14. Briefly explain what ancillary works are.

15. How are elevations labelled?

16. Environmental management is an essential part of any project. List 3 controls that might be required on a building project.
   a. 
   b. 
   c. 
Section 2 – Title panels

Below at right is the title panel from a drawing for a new house. In the spaces below, write the answers to the following questions. For some questions ‘not shown’ may be the answer.

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>17. Where is the house to be built?</td>
<td>___________________________</td>
</tr>
<tr>
<td>18. When was the house originally designed?</td>
<td>___________________________</td>
</tr>
<tr>
<td>19. Who is the builder?</td>
<td>___________________________</td>
</tr>
<tr>
<td>20. When was Door 12 changed?</td>
<td>___________________________</td>
</tr>
<tr>
<td>21. Who will be the owner of the house?</td>
<td>___________________________</td>
</tr>
<tr>
<td>22. How many drawings are in the set?</td>
<td>___________________________</td>
</tr>
<tr>
<td>23. When was the most recent change made?</td>
<td>___________________________</td>
</tr>
<tr>
<td>24. When is the house due to be completed?</td>
<td>___________________________</td>
</tr>
</tbody>
</table>

Amendments

<table>
<thead>
<tr>
<th>Date</th>
<th>Amendment</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 6-10-12</td>
<td>Door 6 changed to FH opening</td>
</tr>
<tr>
<td></td>
<td>Bulkhead to kitchen deleted</td>
</tr>
<tr>
<td>2 14-8-12</td>
<td>Door 12 widened to 1440</td>
</tr>
<tr>
<td>1 21-7-12</td>
<td>Window 17 added</td>
</tr>
</tbody>
</table>

Terrific Homes

28 Main St Sandhurst 6399 Ph 9000 1212

Client

Mr J K & Mrs M W Williams

Project

New Residence

Address

Lot 132 Hillview Close
Oakville

Scale 1:100

Floor Plan

Job No
2012/15

Sheet 2 of 6

Issue date
14 – 05 – 2012

Designed by R Edwards

Revision no 3

Drawn by J L W

End of Assessment 1 Part A
Read and interpret plans and specifications
Lecturer’s guide

CPCCCM2001A
CPCCCM2001A

Read and interpret plans and specifications

Assessment 1 – Written theory Part B

Name ___________________________ Date ____________

I have received feedback on this assessment.

Signature _________________________ Date ____________

Assessor’s initials
Read and interpret plans and specifications
Lecturer’s guide

CPCCCM2001A

Annex D
## Assessment 1 – Written theory Part B

### Section 3 – Scaled dimensions

Below are some lines drawn to various scales. Using your scale rule, carefully measure each line according to the scale shown to its left, and write down its length (in mm) in the box to the right of the line.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Line</th>
<th>Length (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>25. 1:2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26. 1:50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27. 1:5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28. 1:200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29. 1:10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30. 1:50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31. 1:100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>32. 1:5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>33. 1:10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>34. 1:20</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
35. Below are some details from drawings. The scale of each is shown.

Using your scale rule, write in the missing dimensions indicated by the arrows.

Scale 1:5

Scale 1:10

Scale 1:50
Section 4 – Symbols and abbreviations

Below are some symbols that are commonly used on construction drawings. Below each one, write what you think the symbol represents.

36. ____________  
37. ____________  
38. ____________  
39. ____________  
40. ____________  
41. ____________  
42. ____________  
43. ____________  
44. ____________  
45. ____________
Below are some abbreviations that are commonly used on construction drawings. Next to each one, write what you think the abbreviation means.

46. BWK  
47. SHR  
48. WC  
49. GPO  
50. DP  
51. SS  
52. FGL  
53. WIR  
54. CL  
55. HWU  

End of Assessment 1 Part B
CPCCCM2001A

Read and interpret plans and specifications

Assessment 1 – Written theory Part C

Name ___________________________ Date ____________

I have received feedback on this assessment.

Signature ___________________________ Date ____________

Assessor’s initials
Assessment 1 – Written theory Part C

Section 5 – Specifications

Below are five statements about specifications. Some are true and some are false. Indicate by circling either the word ‘True’ or ‘False’ which one you think applies to each statement.

<table>
<thead>
<tr>
<th>Statement</th>
<th>True</th>
<th>False</th>
</tr>
</thead>
<tbody>
<tr>
<td>56. A typical specification for a house will have all of these items in it:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• type and colour of bricks</td>
<td>True</td>
<td>False</td>
</tr>
<tr>
<td>• room sizes</td>
<td>True</td>
<td>False</td>
</tr>
<tr>
<td>• window positions</td>
<td>True</td>
<td>False</td>
</tr>
<tr>
<td>• door locks and hardware</td>
<td>True</td>
<td>False</td>
</tr>
<tr>
<td>57. The specification for a job forms part of the legal contract that the builder has with the client.</td>
<td>True</td>
<td>False</td>
</tr>
<tr>
<td>58. Specifications are usually divided into sections representing the trades involved in the job, such as carpenter, bricklayer, painter, etc.</td>
<td>True</td>
<td>False</td>
</tr>
<tr>
<td>59. If the information in the specification about part of a job is different from what the drawings show, the builder has the choice of doing that part of the job either way.</td>
<td>True</td>
<td>False</td>
</tr>
<tr>
<td>60. The purpose of a specification is to describe in words information that is difficult to show on drawings.</td>
<td>True</td>
<td>False</td>
</tr>
</tbody>
</table>

The following questions refer to the specification supplied with this question paper. Find the information required and write it in the spaces provided.

61. What does the specification say to do if a measurement on the floor plan is different from that shown on the elevations?

__________________________________________________________________________

62. Who pays for the water used during construction of the house?

__________________________________________________________________________

63. What finish is the concrete floor slab to have?

__________________________________________________________________________

64. What type of bricks are to be used for the window sills?

__________________________________________________________________________
65. How long is the warranty for the termite treatment to be?

________________________________________

66. There will be a variation to the contract if the sewer connection is deeper than what?

________________________________________

67. How many shelves will the pantry have?

________________________________________

68. What size are the wall tiles to be?

________________________________________

69. Are any amendments noted in the specification? Yes/No
   If yes, what do they state?

________________________________________

70. Are any environmental controls in the specifications? Yes/No
   If yes, state or describe one example here.

________________________________________

71. Find an example of a requirement to follow an Australian Standard®. State:
   the number of the Standard ____________________________
   the material or process the requirement relates to ____________________________
   Briefly explain the requirement ____________________________

________________________________________

End of Assessment 1
Assessment 2 – Practical

Introduction
This assessment is designed to assess learners’ ability to:
• find required dimensions on various types of construction drawing
• find and interpret written information on various types of construction drawing.

Requirements and format
Assessment 2 is divided into two parts, A and B. Learners are required to answer a series of short-answer questions relating to a set of drawings.
The due dates for the assessment and the elements it assesses are detailed in the assessment plan at Annex C to this guide.

Materials and equipment
To attempt this assessment, learners will need:
• a scale rule
• pens, pencils, etc
• the assessment paper
• a set of drawings (lecturer to provide)
• a set of drawing standards (lecturer to provide).
CPCCCM2001A

Read and interpret plans and specifications

Assessment 2 – Practical Part A

Name _____________________________ Date ____________

I have received feedback on this assessment.

Signature ___________________________ Date ____________

Assessor’s initials
**Assessment 2 – Practical Part A**

**Section 1 – Site plans**

On the site plan provided, find the following information and write it in the spaces provided. Note that some information asked for may not be shown on the site plan provided.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>What is the depth of the building block?</td>
</tr>
<tr>
<td>2.</td>
<td>What is the width of the driveway?</td>
</tr>
<tr>
<td>3.</td>
<td>What does ‘FFL’ on the outline of the house mean?</td>
</tr>
<tr>
<td>4.</td>
<td>Which direction does the garage face?</td>
</tr>
<tr>
<td>5.</td>
<td>What is the ‘setback’ of the house?</td>
</tr>
<tr>
<td>6.</td>
<td>What is the address of the site?</td>
</tr>
<tr>
<td>7.</td>
<td>Where is the datum (T.B.M.) located?</td>
</tr>
<tr>
<td>8.</td>
<td>State the highest and lowest points on the site. Use the correct units (m or mm).</td>
</tr>
<tr>
<td>9.</td>
<td>What is the width of the house?</td>
</tr>
<tr>
<td>10.</td>
<td>List three key features of the site plan.</td>
</tr>
</tbody>
</table>

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Section 2 – Floor plans

On the floor plan provided, find the following information and write it in the spaces provided. Note that some information asked for may not be shown on the floor plan provided.

11. What is the width of the main bedroom (Bed 1)?

12. How many downpipes are there?

13. What size (width × depth) is the WIR in the main bedroom?

14. How wide is the kitchen window?

15. How wide is the door to Bed 2?

16. How wide is the fridge recess?

17. How wide is the garage door?

18. How many bedrooms are there?

19. What is the floor covering to the kitchen?

20. How wide is Bed 3?

21. What is the overall depth of the house?

22. How long (ie wide) is the outside wall nearest the back boundary?

23. How many 720-wide doors are there in the house?

24. Over which rooms is the water heater located?

25. What is the thickness of the concrete floor slabs?

26. Where is the manhole into the roof space located?

27. How thick are the internal walls?

28. How high are the skirting boards?

29. How wide is the robe recess in Bed 2?

30. What is the size of the brick piers to the alfresco area?

End of Assessment 2 Part A
CPCCCM2001A

Read and interpret plans and specifications

Assessment 2 – Practical Part B

Name ___________________________ Date ____________

I have received feedback on this assessment.

Signature ___________________________ Date ____________

Assessor’s initials
Assessment 2 – Practical Part B

Section 3 – Elevations

On the elevations drawing provided, find the following information and write it in the spaces provided. Note that some information asked for may not be shown on the elevations drawing provided.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>31.</td>
<td>What is the pitch (slope) of the roof?</td>
</tr>
<tr>
<td>32.</td>
<td>How many brick courses high is the window to the private lounge?</td>
</tr>
<tr>
<td>33.</td>
<td>What is the bulkhead beam in the multimedia room lined with?</td>
</tr>
<tr>
<td>34.</td>
<td>How many brick courses high are the ensuite windows?</td>
</tr>
<tr>
<td>35.</td>
<td>How many brick courses above floor level is the bottom of the window to the multimedia room?</td>
</tr>
<tr>
<td>36.</td>
<td>What is the floor-to-ceiling height?</td>
</tr>
<tr>
<td>37.</td>
<td>What is the finish to the eaves?</td>
</tr>
<tr>
<td>38.</td>
<td>What cladding does the gable above the garage door have?</td>
</tr>
</tbody>
</table>

Section 4 – Electrical plan

On the electrical plan provided, find the following information and write it in the spaces provided. Note that some information asked for may not be shown on the electrical plan provided.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>39.</td>
<td>How many lights are there in the living room?</td>
</tr>
<tr>
<td>40.</td>
<td>Where is the switch for the kitchen lights located?</td>
</tr>
<tr>
<td>41.</td>
<td>How many mm above floor level is the GPO for the fridge?</td>
</tr>
<tr>
<td>42.</td>
<td>How many lights are there outside the house?</td>
</tr>
<tr>
<td>43.</td>
<td>How many GPOs are there in the garage?</td>
</tr>
</tbody>
</table>

End of Assessment 2
Read and interpret plans and specifications
Lecturer’s guide

CPCCCM2001A
## Annex E – Assessment guide

<table>
<thead>
<tr>
<th>Unit name</th>
<th>National ID</th>
<th>State ID (WA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read and interpret plans and specifications</td>
<td>CPCCM2001A</td>
<td>W9370</td>
</tr>
</tbody>
</table>

### Element 1 Identify types of drawings and their functions.

<table>
<thead>
<tr>
<th>Main types of <strong>plans and drawings</strong> used in the construction sector of the industry are identified.</th>
<th>Section 1 Q1–Q10</th>
<th>Sections 1 and 2</th>
<th>Sections 3 and 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Key features</strong> and functions of each type of drawing are identified.</td>
<td>Section 1 Q1–Q11, Q13, Q15</td>
<td>Section 1 Q10</td>
<td>Section 2 Q11–Q30</td>
</tr>
<tr>
<td><strong>Quality requirements</strong> of company operations are recognised and adhered to.</td>
<td>Section 1 Q15</td>
<td>Section 5 Q70</td>
<td></td>
</tr>
<tr>
<td><strong>Environmental requirements</strong> and controls are identified from job plans, specifications and environmental plan.</td>
<td>Section 1 Q16</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Element 2 Recognise amendments.

<table>
<thead>
<tr>
<th>Title panel of <strong>project documentation</strong> is checked to verify latest amendments to drawing.</th>
<th>Section 2 Q19, Q20</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Amendments to <strong>specifications</strong> are checked to ensure currency of <strong>information</strong> and conveyed to others where appropriate.</td>
<td></td>
<td></td>
<td>Section 5 Q68</td>
</tr>
</tbody>
</table>
### Element 3 Recognise commonly used symbols and abbreviations.

<table>
<thead>
<tr>
<th>3.1</th>
<th>Construction symbols and abbreviations are recognised.</th>
<th>Section 1 Q1–Q10</th>
<th>Section 4 Q35–Q54</th>
<th>Section 1 Q3, Q5, Q10</th>
<th>Section 2 Q11–Q30</th>
<th>Section 3 Q31–Q38</th>
<th>Section 4 Q39–Q43</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.2</td>
<td>Legend is located on project drawings, and symbols and abbreviations are correctly interpreted.</td>
<td>Section 1 Q1–Q10</td>
<td>Section 4 Q35–Q54</td>
<td>Section 1 Q3, Q5, Q10</td>
<td>Section 2 Q11–Q30</td>
<td>Section 3 Q31–Q38</td>
<td>Section 4 Q39–Q43</td>
</tr>
</tbody>
</table>

### Element 4 Locate and identify key features on a site plan.

| 4.1 | Orientation of the plan with the site is achieved. | Section 1 Q4 |
| 4.2 | Key features of the site are identified and located. | Section 1 Q13 | Section 1 Q1, Q10 |
| 4.3 | Access to site is gained and services, main features, contours and datum are identified. | Section 1 Q6–Q8 |

### Element 5 Identify project requirements.

| 5.1 | Dimensions for project and nominated locations are identified. | Section 1 Q1–Q10 | Section 3 Q34 | Section 1 Q1–Q10 | Section 2 Q11, Q13–Q17, Q20–Q23, Q25, Q27–Q30 | Section 3 Q32, Q34, Q35, Q36 | Section 4 Q41 |
| 5.2 | Construction types and dimensions for nominated locations are identified. | Section 3 Q34 | Section 4 Q45–Q54 | Section 2 Q25, Q30 | Section 3 Q32–Q38 |
| 5.3 | Environmental controls and locations are identified. | Section 1 Q16 | Section 5 Q69 |
| 5.4 | Location, dimensions and tolerances for ancillary works are identified. | Section 1 Q14 | Section 3 Q34 | Section 1 Q2, Q7 |
### Element 6 Read and interpret job specifications.

| 6.1 Job specifications are identified from drawings, notes and descriptions. | Section 4 Q45–Q54 |  
|---|---|---|
| 6.2 Standards of work, finishes and tolerances are identified from the project specifications. | Section 5 Q55–Q67 |  
| 6.3 Material attributes are identified from specifications. | Section 5 Q55–Q67 |  

### Required skills

<table>
<thead>
<tr>
<th>communication skills to:</th>
<th>Assessment 1</th>
<th>Assessment 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>• enable clear and direct communication, using questioning to identify and confirm requirements, share information, listen and understand</td>
<td>Q2.1–Q2.2</td>
<td>Q14</td>
</tr>
<tr>
<td>• read and interpret:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• documentation from a variety of sources</td>
<td>Q1.4–Q1.7</td>
<td>Section 1 Q1–Q18</td>
</tr>
<tr>
<td>• drawings and specifications</td>
<td>Q2.3</td>
<td></td>
</tr>
<tr>
<td>• use language and concepts appropriate to cultural differences</td>
<td>Q2.3</td>
<td></td>
</tr>
<tr>
<td>• use and interpret non-verbal communication, such as hand signals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>identifying and accurately reporting to appropriate personnel any faults in tools, equipment or materials</td>
<td>6.1</td>
<td></td>
</tr>
<tr>
<td>numeracy skills to apply measurements and make calculations, including heights, areas, volumes and grades</td>
<td>Q4.2, Q7.2</td>
<td>Q21</td>
</tr>
<tr>
<td>organisational skills, including the ability to plan and set out work</td>
<td>All</td>
<td></td>
</tr>
<tr>
<td>teamwork skills to work with others to action tasks and relate to people from a range of cultural and ethnic backgrounds and with varying physical and mental abilities</td>
<td>Q7.1</td>
<td></td>
</tr>
<tr>
<td>technological skills to:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• use a range of mobile technology, such as two-way radio and mobile phones</td>
<td>Q2.1–Q2.2</td>
<td></td>
</tr>
<tr>
<td>• voice and hand signals to access and understand site-specific instructions.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Required knowledge**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Assessment 1</th>
<th>Assessment 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>basic calculations of heights, areas, volumes and grades</td>
<td>Q7.2–Q7.3</td>
<td>Q21</td>
</tr>
<tr>
<td>commonly used construction symbols and abbreviations</td>
<td>Q5.1–Q5.3</td>
<td>Section 1 Q1–Q18</td>
</tr>
<tr>
<td>construction terminology</td>
<td>All</td>
<td></td>
</tr>
<tr>
<td>drawing conventions</td>
<td>Q5.1–Q5.3</td>
<td></td>
</tr>
<tr>
<td>features of plans and elevations, including direction, scale, key,</td>
<td>Q7.1–Q7.2</td>
<td></td>
</tr>
<tr>
<td>contours, symbols and abbreviations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>job safety analysis (JSA) and safe work method statements</td>
<td>Q6.1</td>
<td></td>
</tr>
<tr>
<td>key features of formal job specifications</td>
<td>Q6.1</td>
<td></td>
</tr>
<tr>
<td>processes for application of scales in plan preparation and</td>
<td>Q6.1, Q7.2</td>
<td></td>
</tr>
<tr>
<td>interpretation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>project quality requirements</td>
<td>Q6.1</td>
<td></td>
</tr>
<tr>
<td>site and equipment safety (OHS) requirements</td>
<td>Q6.1</td>
<td></td>
</tr>
<tr>
<td>techniques for orienting/confirming the orientation of a plan</td>
<td>Q7.1</td>
<td></td>
</tr>
</tbody>
</table>

**Critical aspects of evidence**

A person who demonstrates competency in this unit must be able to provide evidence of the ability to:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Assessment 1</th>
<th>Assessment 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>locate, interpret and apply relevant information, standards and</td>
<td>All</td>
<td>Q1–Q51</td>
</tr>
<tr>
<td>specifications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>comply with site safety plan, OHS regulations and state and territory</td>
<td>All</td>
<td></td>
</tr>
<tr>
<td>legislation applicable to workplace operations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>comply with organisational policies and procedures, including quality</td>
<td>All</td>
<td></td>
</tr>
<tr>
<td>requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>communicate and work effectively and safely with others</td>
<td>All</td>
<td></td>
</tr>
</tbody>
</table>
for a minimum of two different projects, read and interpret the project plans, including:

- confirmation of amendment status and drawings confirmed ‘for construction’
- orientation of plans to the ground
- six key features on both the plan and the site
- confirmation of six items of information from the title block of the project plans
- six construction dimensions, levels and locations from the project plans
- six ancillary works dimensions, levels and locations from the project plans
- for a minimum of two formal specifications, identify the dimensions, material requirements and processes to be followed.

<table>
<thead>
<tr>
<th>Dimensions of competency</th>
<th>Assessment 1</th>
<th>Assessment 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task skills</td>
<td>All</td>
<td>All</td>
</tr>
<tr>
<td>Task management skills</td>
<td>All</td>
<td>All</td>
</tr>
<tr>
<td>Task contingency skills</td>
<td>All</td>
<td>All</td>
</tr>
<tr>
<td>Job role/Work environment skills</td>
<td>All</td>
<td>All</td>
</tr>
</tbody>
</table>
Read and interpret plans and specifications
Lecturer’s guide

Annex E
Annex F – Assessment marking keys
# Marking key – Assessment 1 Part A

## Section 1 – Drawing types

<table>
<thead>
<tr>
<th></th>
<th>Site plan</th>
<th>Floor plan</th>
<th>Elevation</th>
<th>Electrical plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>eg Overall width of building</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Width of driveway</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Position of downpipes (RWPs)</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Type of windows</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>4. Position of external lights</td>
<td></td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>5. Width of doors</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Finished floor level</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Pitch (slope) of roof</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>8. Thickness of external walls</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Ceiling height</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>10. Height of GPOs</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>
11. List three reasons why drawings are essential to the construction of a house.
   1. Architect can translate client’s wishes.
   2. Client can confirm that their wishes are met.
   3. Builder can construct what’s required.

12. Why isn’t it necessary for the draftsperson to show details of every little thing to
    be built?
    Because of standard methods of construction.

13. List three pieces of information that you would expect to find on any site plan.
    Numerous answers can be correct.

14. Briefly explain what ancillary works are.
    Ancillary works are those parts of the construction process other than the main
    building(s) – retaining walls, clothes hoist, fences, etc.

15. How are elevations usually labelled?
    By orientation, for example, North, South, East, West. Or by view, for example
    Elevation 1 or Elevation B. Or by company standard procedure.

16. Environmental management is an essential part of any project. List 3 controls that
    might be required on a building project.
    a Various answers
    b Various answers
    c Various answers
Section 2 – Title panels

Below at right is the title panel from a drawing for a new house. In the spaces below, write the answers to the following questions. For some questions ‘not shown’ may be the answer.

17. Where is the house to be built?
Lot 132 Hillview Close Oakville

18. When was the house originally designed?
14/05/2012

19. Who is the builder?
Terrific Homes

20. When was Door 12 changed?
14/8/2012

21. Who will be the owner of the house?
Mr JK & Mrs MW Williams

22. How many drawings are in the set?
6

23. When was the most recent change made?
6/10/2012

24. When is the house due to be completed?
Not shown

Amendments

3 6-10-12 Door 6 changed to FH opening
   ‘ ‘ Bulkhead to kitchen deleted
2 14-8-12 Door 12 widened to 1440
1 21-7-12 Window 17 added

Terrific Homes

28 Main St Sandhurst 6399 Ph 9000 1212

Client
Mr J K & Mrs M W Williams

Project
New Residence

Address
Lot 132 Hillview Close
Oakville

Scale 1:100
Floor Plan

Job No
2012/15
Sheet 2 of 6

Issue date
14 – 05 – 2012
Designed by R Edwards

Revision no 3
Drawn by J L W
Marking key – Assessment 1 Part B

Section 3 – Scaled dimensions

Questions 25 to 34

Exact scaled length of lines may vary during photocopying. Measure an actual assessment copy.

| 25. | 30. |
| 26. | 31. |
| 27. | 32. |
| 28. | 33. |
| 29. | 34. |

Question 35

Exact scaled length of lines may vary during photocopying. Measure an actual assessment copy.

Scale 1:5

Scale 1:10
Section 4 – Symbols and abbreviations

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>36.</td>
<td>North indicator</td>
<td>46.</td>
</tr>
<tr>
<td>37.</td>
<td>Top hinged sash plus fixed glass</td>
<td>47.</td>
</tr>
<tr>
<td>38.</td>
<td>Double-bowl sink</td>
<td>48.</td>
</tr>
<tr>
<td>39.</td>
<td>Left-hand hung door</td>
<td>49.</td>
</tr>
<tr>
<td>40.</td>
<td>Toilet suite</td>
<td>50.</td>
</tr>
<tr>
<td>41.</td>
<td>Single door in plan</td>
<td>51.</td>
</tr>
<tr>
<td>42.</td>
<td>Window 2</td>
<td>52.</td>
</tr>
<tr>
<td>43.</td>
<td>Door 6</td>
<td>53.</td>
</tr>
<tr>
<td>44.</td>
<td>Bath</td>
<td>54.</td>
</tr>
<tr>
<td>45.</td>
<td>Section C-C</td>
<td>55.</td>
</tr>
</tbody>
</table>
Marking key – Assessment 1 Part C

Section 5 – Specifications

56. False
57. True
58. True
59. False
60. True

Answers to questions 61 to 70 depend on which specification is used in the assessment. Use the blank key to record answers you will accept.

61. 
62. 
63. 
64. 
65. 
66. 
67. 
68. 
69. 
70. 

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Annex F
Marking key – Assessment 2 Part A

Answers to questions in this assessment depend on which set of drawings is used in the assessment. Use this blank key to record the answers you will accept from learners for each section of the assessment.

**Section 1 – Site plans**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>6</td>
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<td>2</td>
<td>7</td>
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<tr>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>5</td>
<td>10</td>
</tr>
</tbody>
</table>

**Section 2 – Floor plans**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>21</td>
</tr>
<tr>
<td>12</td>
<td>22</td>
</tr>
<tr>
<td>13</td>
<td>23</td>
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<tr>
<td>14</td>
<td>24</td>
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<td>15</td>
<td>25</td>
</tr>
<tr>
<td>16</td>
<td>26</td>
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<tr>
<td>17</td>
<td>27</td>
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<tr>
<td>18</td>
<td>28</td>
</tr>
<tr>
<td>19</td>
<td>29</td>
</tr>
<tr>
<td>20</td>
<td>30</td>
</tr>
</tbody>
</table>
Marking key – Assessment 2 Part B

Answers to questions in this assessment depend on which set of drawings is used in the assessment. Use this blank key to record the answers you will accept from learners for each section of the assessment.

Section 3 – Elevations

<table>
<thead>
<tr>
<th>32.</th>
<th>36.</th>
</tr>
</thead>
<tbody>
<tr>
<td>33.</td>
<td>37.</td>
</tr>
<tr>
<td>34.</td>
<td>38.</td>
</tr>
</tbody>
</table>

Section 4 – Electrical plans

<table>
<thead>
<tr>
<th>39.</th>
</tr>
</thead>
<tbody>
<tr>
<td>40.</td>
</tr>
<tr>
<td>41.</td>
</tr>
<tr>
<td>42.</td>
</tr>
<tr>
<td>43.</td>
</tr>
</tbody>
</table>
Annex G – Section 8

Lecturer’s brief

Section 8 takes the form of a drawing activity (Part A) with accompanying specification (Part B). It is designed to provide learners with an additional opportunity to:

- identify the key features and dimensions required to be on the drawings
- identify the key information required to be on the title panel
- identify and use symbols on the drawings
- understand and apply the principles of a written specification.

Please note that drawing skills are not a requirement of this unit and, therefore, this activity should not be used as an assessment.

Requirements and format

Learners are required to draw some views for construction of a small, simple house as an A2 drawing and write an accompanying specification.

Materials and equipment

Please refer to Annex B – Delivery plan for details.

Suggested delivery

Details that learners will be required to complete could be listed on a whiteboard as part of class discussion at the start of the assignment, including placement and sizes of doors and windows, wall construction, thickness of walls, external finishes, and so on.

Some amendments are to be shown in the title panel to demonstrate understanding of what these mean. The idea is to get the learner to put into practice what has been learned to date. The drawing is to be fully dimensioned and annotated.

Note: It is not intended that all learners’ finished drawings and specifications should be identical. Learners should be encouraged to ‘design’ the house to their own ideas within the limits of the general outline above and as discussed in class.

Depending on time constraints and learner experience, each learner should be given between two and four trades for which to write a specification. All can do the same trades, although it is suggested that trades be varied across the group. Specification details can be written according to the format and detail covered in class examples. It can be word-processed (preferred) or handwritten, depending on available facilities.

Now read through the learners’ brief on the following page for an example of how you could present this (optional) section. Remember you can change this to suit your learners or any institutional or local requirements.
Section 8 – Part A

Draw a plan and two elevations for a simple, small house (a holiday cottage or granny flat, perhaps). A part site plan is to be included.

The drawings are to be done on A2-size paper (two A3 sheets can be used if more convenient). Figure 8.1 shows a suggested layout sketch.

![Suggested layout sketch](image)

Figure 8.1: Suggested layout for drawings.

Section 8 – Part B

The second part of the activity is to write a specification for your Part A house. Your lecturer will provide more information.
DESCRiPTION
This lecturer’s guide has been written to support the delivery and assessment of the unit CPCCCM2001A Read and interpret plans and specifications from Certificate II in Building and Construction (Pathway – Paraprofessional). The course, and the learner’s guide, focus on the skills and knowledge required as a paraprofessional in the residential building industry.

The lecturer’s guide provides you with the following resources and tools:
- unit delivery strategy
- unit delivery plan
- assessment plan
- assessment instruments and marking keys
- assessment matrix.

Support is also provided through highlighting of any pre-delivery preparation required, and of any specific requirements for each delivery session and assessment.

EDITION
Edition 1, 2012

TRAINING PACKAGE
Construction, Plumbing and Services – CPC08

COURSE/QUALIFICATION
Certificate II in Building and Construction (Pathway – Paraprofessional)

UNIT
CPCCCM2001A Read and interpret plans and specifications

RELATED PRODUCTS
BC1934: Read and interpret plans and specifications – learner’s guide.

This resource is one of a series that covers all 12 units of the Certificate II in Building and Construction (Pathway – Paraprofessional) qualification. Please refer to our product catalogue for more information.