



**Australian Government**

# **CPPBDN4004 Set up BIM-capable software and files for building design drafting projects**

**Release: 1**

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## Modification History

Release 1. New unit.

This version first released with CPP Property Services Training Package Version 1.

## Application

This unit of competency specifies the outcomes required to set up digital project files in building information modelling (BIM)-capable industry-standard building design drawing software for residential, commercial and industrial building design projects as defined in the Building Code of Australia (BCA).

It covers installing BIM-capable design software and applying its functions and options to create, name and save project files and templates for different types of building design projects.

The unit supports the work of drafters who assist and work under the supervision and instruction of architects, building designers and other personnel, such as home sustainability assessors.

Licensing, legislative, regulatory or certification requirements apply to building design drafting in some states. Relevant state and territory regulatory authorities should be consulted to confirm those requirements.

## Pre-requisite Unit

Nil

## Competency Field

Drafting

## Unit Sector

Building design

## Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the range of conditions.

- |                   |                                                                      |
|-------------------|----------------------------------------------------------------------|
| 1. Prepare to use | 1.1. <b><i>Building design drawing software</i></b> is installed and |
|-------------------|----------------------------------------------------------------------|

|                                                           |                                                                                                                                                  |
|-----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| building design drawing software to set up project files. | 1.2. Information to operate building design drawing software is accessed and interpreted to prepare for setting up project files.                |
|                                                           | 1.3. Support for software installation and interpretation and application of <b>software functions and operations</b> is obtained as required.   |
| 2. Plan software drawing file requirements.               | 2.1. Project brief and designer's notes are reviewed and scope and nature of building design project are identified.                             |
|                                                           | 2.2. Naming protocols for digital drawing files are determined according to project and workplace requirements and systems.                      |
|                                                           | 2.3. Types of drawings required by client, project and relevant authorities are determined in consultation with designer.                        |
|                                                           | 2.4. Title block information is confirmed with designer.                                                                                         |
|                                                           | 2.5. Checklist of drawing files required for project is prepared with file-naming protocols applied.                                             |
|                                                           | 2.6. Folder name and location for digital project drawing files are confirmed with designer.                                                     |
| 3. Set up project templates.                              | 3.1. Building design drawing software support information is accessed to assist in adapting built-in templates to set up project template files. |
|                                                           | 3.2. Software support information is accessed to assist in creating original project template files.                                             |
|                                                           | 3.3. Project template files are named according to file-naming protocols and saved in project folder in correct location.                        |
|                                                           | 3.4. Files are backed up according to workplace procedures.                                                                                      |

## Foundation Skills

This section describes core skills that are essential to performance and not explicit in the performance criteria. Employment skills essential to performance are explicit in the

performance criteria of this unit of competency.

| Skill                         | Performance feature                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Learning skills to:           | <ul style="list-style-type: none"><li>• access a range of resources, professional development activities, information and support, including proprietary help tutorials and instructions, to assist in understanding the operation of building design drawing software, especially relating to new versions and functions</li><li>• draw on experience with the functions and operations of building design software and apply to new work.</li></ul> |
| Numeracy skills to:           | <ul style="list-style-type: none"><li>• interpret numerical information relating to building design project information and software options and functions including measurements of dimensions, scales, scale conversions and version control.</li></ul>                                                                                                                                                                                             |
| Oral communication skills to: | <ul style="list-style-type: none"><li>• participate in workplace discussions using specialised vocabulary relevant to building design drawing software and its functionality.</li></ul>                                                                                                                                                                                                                                                               |
| Reading skills to:            | <ul style="list-style-type: none"><li>• interpret software operation manuals and building design project information with specialised vocabulary and technical content, sometimes in graphic form</li><li>• apply strategies to clarify meaning of texts.</li></ul>                                                                                                                                                                                   |
| Writing skills to:            | <ul style="list-style-type: none"><li>• make accurate notes of technical discussions with colleagues relating to digital building design drawings.</li></ul>                                                                                                                                                                                                                                                                                          |

## Range of Conditions

This section specifies work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included. Bold italicised wording, if used in the performance criteria, is detailed below.

***Building design drawing software*** must include:

- BIM-capable current industry-standard software.

***Software functions and operations*** for setting project parameters and templates must include those for:

- fundamental project information, including:
  - name
  - number
  - location
- project settings, including predefined elements
- view templates
- groups or families

- title blocks
- project views, including:
  - plan views
  - levels
  - schedules
  - legends
  - sheets
- visibility and graphic settings
- print settings
- project and shared parameters.

## Unit Mapping Information

No equivalent unit.

## Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=6f3f9672-30e8-4835-b348-205dfcf13d9b>