



Australian Government

Assessment Requirements for CPCBIM4002 Use BIM processes to carry out construction work

Release: 2

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Modification History

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| Release 2 | Updated reference to general construction induction training program. |
| Release 1 | This version first released with CPC Construction, Plumbing and Services Training Package Release 6.0.
New unit. |

Performance Evidence

To demonstrate competency, a candidate must meet the elements and performance criteria of this unit by using Building Information Modelling (BIM) processes, including at least two different BIM technologies (tools and software) to carry out construction work and, in doing so:

- create and test at least two virtual construction (design) models within the same federated space
- detect coordination and clashing in the federated model based on two different criteria
- detect two work health and safety (WHS) or regulatory compliance risks associated with planned construction work by using a 3D model and visual communication tools
- consult with two other project participants to discuss and agree strategies to resolve model coordination issues and mitigate risks
- analyse and communicate a construction activity using 4D modelling methods.

Knowledge Evidence

To be competent in this unit, a candidate must demonstrate knowledge of:

- BIM project delivery methods
- BIM standards relevant to planned construction work including the BIM ISO 19650 *Organization and digitization of information about buildings and civil engineering works, including building information modelling (BIM)* – Information management using building information modelling (or its successor)
- BIM uses relevant to construction phases
- common BIM tools and technologies
- graphical and data communication methods when working with BIM
- meaning and benefits of visual communication and extended reality technologies during the construction phase of a BIM project
- methods for confirming currency of construction documentation and data
- methods for scheduling equipment and resources for construction work

- methods for sequencing construction work to achieve efficiencies across multi-disciplinary construction projects
- purpose and content of BIM Execution Plans and their relationship to project information requirements
- purpose of virtual construction models and methods for detecting construction coordination issues and other project risks
- role of the Common Data Environment (CDE) in managing project information
- roles and responsibilities of BIM project participants across multiple disciplines
- types of drawings, models and documentation used when conducting construction work that is part of a BIM project
- 4D modelling techniques to record and represent information about the construction sequence
- workplace requirements for conducting construction work using BIM processes:
 - compliance with relevant regulations and standards
 - WHS
 - quality control procedures
 - reporting and documentation.

Assessment Conditions

Assessors must meet the requirements for assessors contained in the Standards for Registered Training Organisations.

Assessment must be conducted in the workplace or a simulated workplace using realistic conditions, materials, activities, responsibilities, procedures, safety requirements and environmental considerations.

Candidates must have access to documentation, technologies, equipment and other resources required to achieve the performance criteria and performance evidence.

Links

Companion volumes to this training package are available at the VETNet website - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=7e15fa6a-68b8-4097-b099-030a5569b1ad>