**Unit of Competency**

**CPCBIM4003 Finalise building or construction work to comply with BIM project requirements**

**Modification history**

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| --- | --- |
| Release | Comments |
| 1 | New unit. No equivalent unit.  This version first released with CPC Construction, Plumbing and Services Training Package Release 8.0. |

**Application**

This unit of competency specifies the skills and knowledge required to finalise building or construction work to comply with Building Information Modelling (BIM) project requirements. It includes confirming handover requirements and deliverables, validating data for completed work, and completing handover in compliance with the BIM execution plan for the project.

The unit applies to builders, tradespersons, project and site managers who work on building or construction projects that require BIM interaction and collaboration. The unit provides BIM skills and knowledge which can be adapted to a range of tools and technologies and applied to normal building or construction work activities. It requires basic information technology skills.

A person who has achieved this unit of competency is able to work with autonomy and take responsibility for applying BIM processes to building or construction work.

Completion of the general construction induction training program specified by the model Code of Practice for Construction Work is required for any person who is to carry out construction work. Achievement of *CPCCWHS1001 Prepare to work safely in the construction industry* meets this requirement.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

**Prerequisite Unit**

None.

**Unit Sector**

Construction.

**Elements and Performance Criteria**

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| --- | --- |
| 1. Confirm deliverables and handover requirements. | 1.1 Check plans and relevant documentation to clarify project deliverables and handover requirements to comply with BIM execution plan.  1.2 Prepare documentation necessary to enable model-based collaboration between project participants.  1.3 Consult with project participants to confirm project deliverables including asset identifiers and other requirements for digital handover. |
| 2. Validate project information for completed building or construction work. | 2.1 Check completed building or construction work to confirm compliance with plans and specifications and BIM execution plan.  2.2 Input information and data required to complete asset register and comply with project requirements for model and data deliverables.  2.3 Verify currency and format of common data environment information and data associated with completed building or construction work to meet requirements of BIM execution plan.  2.4 Implement actions required to address problems with work outcomes or data capture to meet BIM execution plan. |
| 3. Complete handover for building or construction work. | 3.1 Export asset data and check for completeness and accuracy.  3.2 Prepare open format models and data for handover to meet BIM execution plan.  3.3 Deliver 2D versions of 3D models that record as-built plans.  3.4 Complete digital handover to meet BIM execution plan, performance, quality, commissioning, regulatory and workplace requirements. |

**Foundation skills**

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

**Unit Mapping Information**

New unit. No equivalent unit.

**Links**

The Companion Volume Implementation Guide for the CPC Construction, Plumbing and Services Training Package is available at: <https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=7e15fa6a-68b8-4097-b099-030a5569b1ad>.

**Assessment Requirements for CPCBIM4003 Finalise building or construction work to comply with BIM project requirements**

**Modification history**

|  |  |
| --- | --- |
| Release | Comments |
| 1 | New unit. No equivalent unit.  This version first released with CPC Construction, Plumbing and Services Training Package Release 8.0. |

**Performance Evidence**

To demonstrate competency, a candidate must meet the elements and performance criteria of this unit by finalising building or construction work activities that comply with BIM project requirements specified in a BIM execution plan using a minimum of two different BIM technologies (tools and software) and, in doing so:

* identifying five common asset register attributes provided at project handover and the asset groups/disciplines they can be applied to
* identifying and correcting two problems associated with data capture, information currency and/or format
* preparing two open format models and associated data for handover:
  + one combined
  + one separated but associated.

**Knowledge Evidence**

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

* BIM project delivery methods
* BIM standards relevant to planned building or construction work including ISO 19650 *Organization and digitization of information about buildings and civil engineering works, including building information modelling (BIM) — Information management using building information modelling*
* BIM uses relevant to construction phases
* common BIM tools and technologies
* common methods for identifying assets in a BIM asset register
* documentation used to enable model-based collaboration between project participants
* graphical and data communication methods when working with BIM
* meaning of open formats and interoperability in the BIM context
* meaning and benefits of visual communication and extended reality technologies during the construction phase of a BIM project
* meaning and purpose of ‘digital twin’, its interface with BIM and its context within the facets of the operations and maintenance phase
* methods for confirming currency of building or construction documentation and data
* purpose and content of BIM execution plans
* purpose of Asset Information Management (AIM) and Project Information Management (PIM) and deliverables that can be expected at handover from using BIM tools and workflows for building or construction projects
* role of common data environments in managing project information
* roles and responsibilities of BIM project participants across multiple disciplines
* types of drawings, models and documentation used for a BIM handover
* workplace requirements for finalising building or construction work to comply with BIM project requirements:
  + 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**

The Companion Volume Implementation Guide for the CPC Construction, Plumbing and Services Training Package is available at: <https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=7e15fa6a-68b8-4097-b099-030a5569b1ad>.