



Australian Government

CPCCBBC4022 Supervise tilt-up work

Release: 3

CPCBC4022 Supervise tilt-up work

Modification History

- Release 3 Updated reference to general construction induction training program.
- Release 2 This version first released with CPC Construction, Plumbing and Services Training Package Release 5.1.
Weight corrected in Performance Evidence. Formatting corrected in the Knowledge Evidence.
- Release 1 This version first released with CPC Construction, Plumbing and Services Training Package Release 5.0.
Supersedes and is equivalent to CPCBC4022A Supervise tilt-up work. *Prior to final endorsement of this unit of competency, the Construction IRC changed the weight in the Performance Evidence of the in-situ tilt slab from at least 10 tonnes to at least 6 tonnes. This change occurred to provide more flexible assessment conditions to suit industry.*

Application

This unit of competency specifies the skills and knowledge required to organise, coordinate and supervise tilt-up work on a construction site. It includes the application of safe work practices during the erection and temporary bracing of tilt-up pre-cast concrete panels.

This unit of competency applies to site supervisors and builders who have a sound understanding of licensing and competency requirements for crane operation, dogging and rigging and are responsible for planning, organising and supervising tilt-up work on a construction site.

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 CPCWHS1001 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.

Pre-requisite Unit

Nil.

Unit Sector

Building and Construction

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe what needs to be done to demonstrate achievement of the element.

- | | |
|--|---|
| 1 Provide effective administration. | <ul style="list-style-type: none">1.1 Read and interpret relevant project plans, details and specifications for tilt-up work.1.2 Store all structural and design documents, pre-cast panel shop drawings, layout plans and other required documents on site.1.3 Check licence and competency details of persons assigned to perform tilt-up work and ensure regulatory training requirements have been met.1.4 Check mandatory licences and approvals required for tilt-up work are obtained.1.5 Notify relevant regulatory authorities of work commencement and ensure the administration process is complete. |
| 2 Plan work and set up site. | <ul style="list-style-type: none">2.1 Prepare and implement a site-specific work health and safety (WHS) management plan and work plan and apply WHS risk control measures.2.2 Provide site security, amenities, services and emergency/first aid facilities and prepare site procedures.2.3 Develop traffic management and public safety plans and procedures and plan exclusion zones for concrete panel delivery, casting and erection operations.2.4 Review and provide requirements for footings, structural elements, concrete slabs and site access roads for the tilt-up work.2.5 Determine suitable onsite crane operating positions in consultation with crane suppliers and operators.2.6 Identify ground conditions such as soak wells and drains likely to affect crane stability and check crane standing areas for strength and compaction. |
| 3 Supervise and | <ul style="list-style-type: none">3.1 Check concrete panel inspection records to confirm |

coordinate tilt-up work.	design specifications have been followed during panel fabrication and manufacture.
3.2	Coordinate delivery sequence for concrete panels cast off site or coordinate a casting and curing schedule and distribution of panels on site.
3.3	Supervise placement and storage of concrete panels onsite and ensure it meets engineer's requirements.
3.4	Put in place processes to ensure erection areas are cleared, exclusion zones set up, barriers erected, and site personnel advised of restricted access areas prior to erection of concrete panels.
3.5	Check fixings and anchor bolts supplied for temporary bracing are compliant with designer and engineer specifications.
3.6	Check correct type of braces, locating dowels and shims are correctly placed and components positioned and propped in accordance with shop drawings or as approved by the engineer.
3.7	Supervise workers and contractors during the erection of the concrete panels and ensure that safe systems of work and safe work practices are enforced and followed.
3.8	Use job safety and environmental analysis (JSEA) and other tools to identify hazards, assess risks and create safe systems in the event of unanticipated circumstances.
4 Confirm tilt-up stabilisation.	4.1 Check erected concrete panels for compliance with design and engineering specifications.
	4.2 Check compliance of structural steel elements being fixed to the temporarily braced panels are in accordance with designed engineering specifications.
	4.3 Inspect integrity of erected structure prior to removal of temporary bracing to ensure it meets engineer certification.
	4.4 Supervise the sequential removal of temporary bracing.
	4.5 Oversee the safe removal of temporary bracing, plant and equipment from site.

- 4.6 Supervise the completion of the erection work and clearing and cleaning of work areas prior to other trades being permitted to enter work zones.
- 4.7 Notify relevant personnel of work completion and maintain site records to company requirements.

Foundation Skills

As well as the foundation skills explicit in the performance criteria of this unit, candidates require:

- technology skills to:
 - use digital tools and devices to communicate and collaborate effectively with others
 - use equipment and programs to access and extract information and develop relevant documentation.

Unit Mapping Information

Supersedes and is equivalent to CPCCB4022A Supervise tilt-up work. Prior to final endorsement of this unit of competency, the Construction IRC changed the weight in the Performance Evidence of the in-situ tilt slab from at least 10 tonnes to at least 6 tonnes. This change occurred to provide more flexible assessment conditions to suit industry.

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>

Assessment Requirements for CPCBC4022 Supervise tilt-up work

Modification History

- Release 3 Updated reference to general construction induction training program.
- Release 2 This version first released with CPC Construction, Plumbing and Services Training Package Release 5.1.
- Weight corrected in Performance Evidence. Formatting corrected in the Knowledge Evidence.
- Release 1 This version first released with CPC Construction, Plumbing and Services Training Package Release 5.0.
- Supersedes and is equivalent to CPCBC4022A Supervise tilt-up work. *Prior to final endorsement of this unit of competency, the Construction IRC changed the weight in the Performance Evidence of the in-situ tilt slab from at least 10 tonnes to at least 6 tonnes. This change occurred to provide more flexible assessment conditions to suit industry.*

Performance Evidence

To demonstrate competency, a candidate must meet the performance criteria of this unit by demonstrating the supervision on at least one occasion of the erection of:

- one multi-point pre-cast tilt slab or one cast in-situ tilt slab each of at least 6 tonnes.

Knowledge Evidence

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

- government building and construction legislation, standards and codes
- National Standard for Construction Work and the Code of Practice for Construction Work
- relevant tilt-up construction codes and standards including current versions of AS3850.1:2015 Prefabricated concrete elements Part 1: General requirements and National Code of Practice for Precast Tilt-Up and Concrete Elements in Building Construction
- project plans, drawings and specifications for tilt-up work
- processes, procedures and techniques for:
 - lifting and placing tilt-up panels
 - securing panels to base
 - levelling and plumbing panels
 - temporary bracing panels

- grouting, bracing, torquing, stabilisation and fixing of panels
- competency and licensing requirements to operate plant and equipment and carry out tilt-up panel work
- capacity and limitations of plant, lifting gear and equipment used in tilt-up work
- capacity and limitations of rigging and equipment
- workplace safety:
 - hierarchy of control
 - hazard identification
 - emergency first aid
 - emergency shutdown and stopping
 - working at heights
 - fall arrest equipment
 - scaffolding
 - access equipment
 - electrical hazards
 - overhead hazards
 - confined spaces.

Assessment Conditions

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

Assessment can be undertaken in the workplace or in a simulated workplace environment.

A simulated environment is one that realistically replicates workplace conditions, materials and equipment, interactions with others and workplace irregularities, and which meets industry standards for safety and environmental practices.

Candidates must have access to:

- relevant government building and construction legislation
- current relevant building and construction industry codes and standards
- organisational policies, procedures and other quality documentation to undertake the performance criteria and assessment requirements
- project plans and specifications
- plant, equipment and qualified personnel necessary to supervise tilt-up work.

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>