



Australian Government

Assessment Requirements for CPCCBC6017 Evaluate services layout and connection methods for the planning of large building projects

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Modification History

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 5.0.

Supersedes and is equivalent to CPCCBC6017A Evaluate services layout and connection methods for the planning of large building projects. Updated to meet the Standards for Training Packages 2012.

Performance Evidence

To demonstrate competency, a candidate must meet the elements and performance criteria of this unit by evaluating the layout of services and connection methods for the planning of one large building project.

In doing this, the candidate must:

- establish the class of building and determine that layout and connection of services meet the requirements of the National Construction Code (NCC) and other relevant standards
- identify any non-compliances, determine solutions and seek advice from relevant professional expertise to meet compliance.

Knowledge Evidence

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

- relevant government building and construction legislation
- the NCC:
 - evidence of suitability
- organisational quality assurance systems
- design concepts and principles in relation to service installations
- hot water system:
 - type of occupancy and area to be serviced
 - type of system
 - energy sources available
 - height of installation
- general electrical and electronic service systems:

- cabling and equipment layout for data, lift controls, power supplies and telecommunications
- switchroom and substations for electrical supply and distribution
- emergency lighting and exit signage systems
- emergency warning and intercommunication systems
- fire stopping
- service systems safeguards
- service systems access for maintenance, repair and extension
- lighting system:
 - natural and artificial lighting
 - emergency and exit signage
 - terminology such as brightness, control of glare, installation of fire stopping, intensity, reflections, lifespan and locations for installation
- sewerage connections:
 - local authority sewerage drainage system
 - septic or bio-chemical treatment unit
 - graded or vertical discharge pipes
 - inspection shafts and overflow relief gullies (ORGs)
- stormwater:
 - design, installation and disposal
 - connection to local government water drains
 - use of soakage pits and on-site water detection systems
 - size, location and construction requirements for eaves and box gutters
- downpipes and underground or concealed piping
- water supply:
 - town supply
 - tank storage supply relative to public water supply and reservoir heights
 - single and two-stage pumping for multi-function and single function connected services
- mechanical ventilation and air conditioning:
 - air conditioning applications
 - air distribution, including mechanical ventilation requirements for enclosed car parks
 - air filtration, including air filters, ducting and main filter types
 - air intake systems
 - fire dampers
 - fume discharge systems
 - installation of fire stopping
 - smoke control and exhaust systems
 - warm water and cooling towers
- general services installation terminology, definitions and installation methods

- nature of materials and effect of performance
- processes for the interpretation of working drawings and specifications
- construction terminology relating to services installation
- research methods
- processes for the preparation of documentation
- workplace safety requirements.

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 legislation codes and standards
- the NCC
- environmental and sustainability requirements
- manufacturer specifications and installation instructions
- project plans, working drawings and specifications
- business equipment and technology, applications and software to facilitate effective evaluation of services layout and connection methods.

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>