



Australian Government

Department of Education, Employment and Workplace Relations

AHCLSC302A Construct landscape features using concrete

Release: 1

AHCLSC302A Construct landscape features using concrete

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit covers the process of constructing concrete structures and features and defines the standard required to: interpret site plans and specifications; set out and prepare a site for receipt of concrete, pour, set and finish concrete; check quality of work and clean up site.
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Application of the Unit

Application of the unit	This unit applies to the construction of concrete structures and features as a component of landscape project works.
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Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.
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Elements and Performance Criteria Pre-Content

Not Applicable

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA

ELEMENT	PERFORMANCE CRITERIA
1. Plan and prepare work	1.1.Plans and specifications are interpreted and clarified with the supervisor. 1.2.The quantity and quality of materials are checked to ensure they conform to design drawings and specifications. 1.3.Tools and equipment are selected and checked for serviceability according to enterprise guidelines. 1.4.Occupational Health and Safety (OHS) hazards are identified, risks assessed and controls implemented. 1.5.Environmental implications of constructing concrete structures are identified and reported to the supervisor.
2. Set out and prepare the site	2.1.Services are determined and located from site plans. 2.2.The position of the structure or feature is marked out according to design drawings and specifications. 2.3.Profiles are established to conform to the tolerances nominated within the design drawings and specifications. 2.4.Subsoil is prepared by removing all debris, vegetable matter and topsoil to provide a solid foundation for concrete. 2.5.Drainage systems are installed according to design drawings and specifications. 2.6.Form work is installed to the site in a manner that will ensure it remains rigid during concrete pouring operations. 2.7.Sub-base material is placed and compacted to the required finished levels. 2.8.Preparation of the site is completed according to the type of structure or feature to be constructed.
3. Mix and pour concrete	3.1.Proportions for concrete mix are determined according to the strength requirements of the project. 3.2.Volume of dry materials necessary to produce final concrete mix is determined. 3.3.All dry ingredients and required additives are mixed together to ensure a thorough blending of all materials is achieved. 3.4.Sufficient water is introduced to produce a concrete mix to the required consistency. 3.5.Concrete mix samples are taken for testing, if required, to check for conformity to specifications.

ELEMENT	PERFORMANCE CRITERIA
	3.6. Concrete is poured to designated levels in a manner to avoid segregation of materials. 3.7. Concrete is consolidated using an approved vibration method to industry standard (AS3600) to ensure air pockets are eliminated.
4. Finish concrete	4.1. Concrete is screeded to a flat surface to maintain the desired finished level. 4.2. Surface is trowelled according to design drawings and specifications. 4.3. A Concrete is finished off according to design drawings and specifications.
5. Check quality of work and clean up site	5.1. Quality of finished works is inspected to ensure the standard of the finished structure or feature is in accordance with design drawings and specifications. 5.2. Form work is removed and cleaned in a manner which will allow for re-use of the form work. 5.3. All debris is removed and disposed of in a manner that minimises risk to the environment. 5.4. All tools and equipment are cleaned and stored according to enterprise guidelines.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

- measure and construct profiles using mathematical techniques
- establish levels using levelling equipment
- undertake and interpret tests performed on a concrete mix
- place, consolidate and finish concrete
- use literacy skills to read, interpret and follow organisational policies and procedures, follow sequenced written instructions, record accurately and legible information collected and select and apply procedures for a range of tasks
- use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning techniques, active listening, clarifying information and consulting with supervisors as required
- use interpersonal skills to work with and relate to people from a range of cultural,

REQUIRED SKILLS AND KNOWLEDGE

social and religious backgrounds and with a range of physical and mental abilities.

Required knowledge

- MPA testing theory and what effects MPA specifications in a concrete mix
- the comparative environmental implications associated with soil removal and the establishment of drainage systems
- industry standards in relation to reinforcing and consolidating concrete.
- sub-base and sub-grade materials and preparation.

Evidence Guide

EVIDENCE GUIDE	
The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.	
Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	The evidence required to demonstrate competency in this unit must be relevant to workplace operations and satisfy holistically all of the requirements of the performance criteria and required skills and knowledge and include achievement of the following: • interpret site plans and specifications • set out and prepare a site for receipt of concrete • pour, set and finish concrete • check quality of work and clean up site.
Context of and specific resources for assessment	Competency requires the application of work practices under work conditions. Selection and use of resources for some worksites may differ due to the regional or enterprise circumstances.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole.	
Features may include:	• structures including paths, driveways, edgings, footings, floors, steps, walls, fences, pool surrounds, entertaining areas and ornamental garden elements.

Unit Sector(s)

Unit sector	Landscape
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Co-requisite units

Co-requisite units		

Competency field

Competency field	
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