

BOARD OF STUDIES
NEW SOUTH WALES

DRAFT Stage 6 Syllabus

CONSTRUCTION
Curriculum Framework

Part B

Units of Competency and HSC Requirements

for implementation from 2010

Construction (120 indicative hours)

Construction (240 indicative hours)

2009

© 2009 Copyright Board of Studies NSW for and on behalf of the Crown in right of the State of New South Wales.

This document contains Material prepared by the Board of Studies NSW for and on behalf of the State of New South Wales. The Material is protected by Crown copyright.

All rights reserved. No part of the Material may be reproduced in Australia or in any other country by any process, electronic or otherwise, in any material form or transmitted to any other person or stored electronically in any form without the prior written permission of the Board of Studies NSW, except as permitted by the *Copyright Act 1968*. School students in NSW and teachers in schools in NSW may copy reasonable portions of the Material for the purposes of bona fide research or study.

When you access the Material you agree:

- to use the Material for information purposes only
- to reproduce a single copy for personal bona fide study use only and not to reproduce any major extract or the entire Material without the prior permission of the Board of Studies NSW
- to acknowledge that the Material is provided by the Board of Studies NSW
- not to make any charge for providing the Material or any part of the Material to another person or in any way make commercial use of the Material without the prior written consent of the Board of Studies NSW and payment of the appropriate copyright fee
- to include this copyright notice in any copy made
- not to modify the Material or any part of the Material without the express prior written permission of the Board of Studies NSW.

The Material may contain third-party copyright materials such as photos, diagrams, quotations, cartoons and artworks. These materials are protected by Australian and international copyright laws and may not be reproduced or transmitted in any format without the copyright owner's specific permission. Unauthorised reproduction, transmission or commercial use of such copyright materials may result in prosecution.

The Board of Studies has made all reasonable attempts to locate owners of third-party copyright material and invites anyone from whom permission has not been sought to contact the Copyright Officer, ph (02) 9367 8289, fax (02) 9279 1482.

Published by Board of Studies NSW

GPO Box 5300
Sydney 2001
Australia

Tel: (02) 9367 8111

Fax: (02) 9367 8484

Internet: www.boardofstudies.nsw.edu.au

May 2009

2009198

Acknowledgements

Units of competency from the Construction, Plumbing and Services Integrated Framework Training Package (CPC08) in Part B of this syllabus are © 2008 copyright Commonwealth of Australia. Reproduced with permission.

The following copyright warning applies to the material from the Training Package:

This work is copyright. It may be reproduced in whole or part for study or training purposes, subject to the inclusion of an acknowledgement of the source and it is not used for commercial use or sale. Reproduction for purposes other than those indicated above requires the prior written permission from the Commonwealth. Requests and enquiries concerning reproduction and copyright should be addressed to:

Branch Manager
Technology and Information Services Branch
Industry Skills Development Group
Department of Education, Science and Training
GPO Box 9880 Canberra City, ACT 2601.

The Construction Curriculum Framework

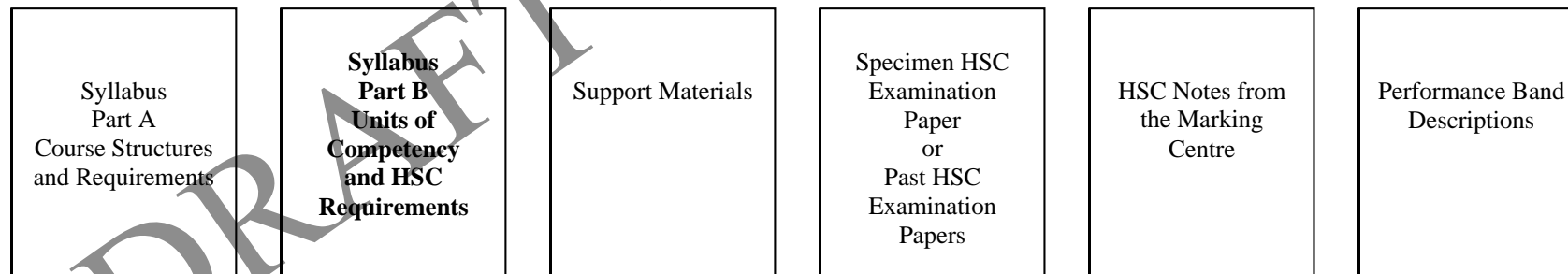
The Construction Curriculum Framework has been developed to provide students with the opportunity to gain credit towards the NSW Higher School Certificate and credit towards national vocational qualifications in the Hospitality industry under the Australian Qualifications Framework. The Framework is based on the national Construction, Plumbing and Services Integrated Framework Training Package (CPC08).

This Industry Curriculum Framework incorporates all Higher School Certificate Hospitality VET courses including:

- courses delivered by schools
- courses delivered by TAFE colleges
- courses delivered by other Registered Training Organisations on behalf of schools or TAFE colleges.

This document, Part B of the *Construction Curriculum Framework Stage 6 Syllabus*, contains the text of the units of competency from the Construction, Plumbing and Services Integrated Framework Training Package (CPC08). Each examinable unit of competency is accompanied by HSC requirements and advice. The HSC requirements and advice column indicates the depth of study required for the purposes of the HSC. The terms, concepts and content contained in that column must be included in programming and delivery for the HSC.

Construction Curriculum Framework Stage 6 Syllabus Documentation



Construction Curriculum Framework – units of competency contained in Part B

This document contains the following units of competency together with HSC requirements and advice for each examinable unit. The HSC requirements and advice column indicates the depth of study required for the purposes of the HSC. The terms, concepts and content contained in that column must be included in programming and delivery for the HSC.

Unit code	Unit title	HSC indicative hours of credit	Page numbers
CPCCCM1002A	Work effectively and sustainably in the construction industry	25	8–25
CPCCCM1003A	Plan and organise work	10	26–32
CPCCCM1004A	Conduct workplace communication	10	33–44
CPCCCM1005A	Carry out measurements and calculations	20	45–51
CPCCCM2001A	Read and interpret plans and specifications	20	52–60
CPCCOHS1001A	Work safely in the construction industry	15	61–73
CPCCOHS2001A	Apply OHS requirements, policies and procedures in the construction industry	10	74–91
CPCCCM2005A	Use construction tools and equipment	25	92–105

All other units of competency from the Construction Curriculum Framework are available from the Construction, Plumbing and Services Integrated Framework Training Package (CPC08) at www.ntis.gov.au.

The following **Key to Units** explains the purpose of each part of the layout of the units.

Required Skills and Knowledge		HSC Requirements and Advice
This section describes the skills and knowledge required for this unit.		
<p>Required skills</p> <p>Required skills for this unit are:</p> <ul style="list-style-type: none"> • communication skills to: <ul style="list-style-type: none"> – enable clear and direct communication, using questioning to identify and confirm requirements, share information, listen and understand – read and interpret: <ul style="list-style-type: none"> ▪ documentation from a ▪ drawings and specifica • use language and concepts ap • use and interpret non-verbal c • identifying and accurately rep • faults in tools, equipment or r • numeracy skills to apply meas • including heights, areas, volu • organisational skills, includin • teamwork skills to work with others to action tasks and relate to people from a range of cultural and ethnic backgrounds and with varying physical and mental abilities • technological skills to: <ul style="list-style-type: none"> – use a range of mobile technology, such as two-way radio and mobile phones – voice and hand signals to access and understand site-specific instructions. 	<p>Required knowledge</p> <p>Required knowledge for this unit is:</p> <ul style="list-style-type: none"> • basic calculations of heights, areas, volumes and grades • commonly used construction symbols and abbreviations • construction terminology • drawing conventions • features of plans and elevations including direction, scale, ke 	<p>Key Terms and Concepts</p> <ul style="list-style-type: none"> • amendments • dimensions • drawing conventions • environmental requirements • orientation • plans and drawings
<p>This section describes the essential skills and knowledge and their level required for this unit.</p> <p>Knowledge identifies what a person needs to know to perform the work in an informed and effective manner.</p> <p>Skills describe the application of knowledge to situations where understanding is converted into a workplace outcome.</p>		<p>Key terms and concepts to be addressed when undertaking this unit of competency for the purposes of the HSC.</p> <ul style="list-style-type: none"> • tolerances.

Indicates the industry curriculum framework to which the unit of competency belongs.

Date of release for the HSC.

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
<p>1 Identify types of drawings and their functions.</p>	<p>1.1 Main types of <i>plans and drawings</i> used in the construction sector of the industry are identified.</p>	<p>The Range Statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. <i>Bold italicised</i> wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p> <p><i>Plans and drawings include:</i></p> <ul style="list-style-type: none"> • construction plans 	<p>Learning experiences for the HSC must address:</p> <p>An awareness of the use of a range of technical drawings/plans.</p> <p>An understanding of the purpose of project documentation.</p>
	<p>1.2 <i>Key features</i> and functions of each type of drawing are identified.</p>	<p><i>Key features</i> of plans and specifications include:</p> <ul style="list-style-type: none"> characteristics compatibility construction location pattern dimension quantities sizes type of product or service. 	<p>Learning experiences for the HSC must address:</p> <p>The function and key features of a range of drawings including:</p> <ul style="list-style-type: none"> • orientation • position of structures and ancillary works • boundary dimensions • setback from boundaries • contour lines • construction plans <ul style="list-style-type: none"> - overall dimensions - position of doors and windows

Elements of competency are the basic building blocks of the unit of competency. They describe, in terms of outcome, the significant functions and tasks that make up the competency.

The range statement provides a context for the unit of competency, describing: essential operating conditions that may be present with training and assessment, depending on the work situation; needs of the candidate; accessibility of the item; and local industry and regional contexts.

The performance criteria indicate the level of performance that is required for each element. These are used as the tools for assessment. Critical terms or phrases may be written in ***bold italics*** and then defined in the range statement.

Indicates the depth of study required for purposes of the HSC for the corresponding performance criteria.

Training Package	Construction, Plumbing and Services Integrated Framework (CPC08)		HSC Requirements and Advice
Unit title	Work effectively and sustainably in the construction industry		
Unit code	Competency field	Unit sector	HSC Indicative Hours
CPCCCM1002A	Common	Construction	25

Unit descriptor	This unit of competency specifies the outcomes required to prepare for and sustain effective work within the construction industry. It covers the identification and clarification of the construction industry work context, scope and employment conditions, responsibility required to be accepted by the individual, working in a team, individual career path improvement activities and sustainable work practices and techniques.
Prerequisite units	CPCCOHS1001A
Co-requisite units	Nil
Application of the unit	This unit of competency supports the attainment of basic understanding of the structure, culture and role expectations of workers within the construction industry and sustainable use of materials and resources.
Employability skills	This unit contains employability skills.

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	Context of and specific resources for assessment	Method of assessment
This unit of competency could be assessed in the workplace or a close simulation of the workplace environment, provided that simulated or project-based assessment techniques fully replicate construction workplace conditions, materials, activities, responsibilities and procedures.	<p>A person who demonstrates competency in this unit must be able to provide evidence of the ability to:</p> <ul style="list-style-type: none"> locate, interpret and apply relevant construction industry information, standards and specifications comply with site safety plans and OHS legislation, regulations and codes of practice applicable to workplace operations comply with organisational policies and procedures, including quality requirements 	<p>This competency is to be assessed using standard and authorised work practices, safety requirements and environmental constraints.</p> <p>Assessment of essential underpinning knowledge will usually be conducted in an off-site context.</p> <p>Assessment is to comply with relevant regulatory or Australian standards' requirements.</p>	<p>Assessment methods <u>must</u>:</p> <ul style="list-style-type: none"> satisfy the endorsed Assessment Guidelines of the Construction, Plumbing and Services Integrated Framework Training Package include direct observation of tasks in real or simulated work conditions, with questioning to confirm the ability to consistently identify and correctly interpret the essential underpinning knowledge required for practical application

	Critical aspects for assessment and evidence required to demonstrate competency in this unit cont/d	Context of and specific resources for assessment cont/d	Method of assessment cont/d
	<ul style="list-style-type: none"> • communicate and work effectively and safely with others • explain to others scope, employment and economic importance of the construction industry • locate and identify documentation on site employment conditions and source of these conditions • set personal and team work goals and participate in site meetings • respond to personal conflict situations • identify personal development needs and apply learning to future work tasks • follow workplace procedures according to instructions given and report information only at own level of responsibility, including: <ul style="list-style-type: none"> - complying with environmental/sustainability legislation, and organisational and procedural requirements relevant to specific daily responsibilities - use of tools, such as an inspection checklist to collect and measure relevant information on resource and energy consumption - participating in and supporting an improved environmental and resource - recognising efficiency processes involving work practices and reporting as required. 	<p>Resource implications for assessment include:</p> <ul style="list-style-type: none"> • an induction procedure and requirement • realistic tasks or simulated tasks covering the mandatory task requirements • relevant specifications and work instructions • tools and equipment appropriate to applying safe work practices • support materials appropriate to activity • workplace instructions relating to safe work practices and addressing hazards and emergencies • material safety data sheets • research resources, including industry related systems information. <p>Reasonable adjustments for people with disabilities must be made to assessment processes where required. This could include access to modified equipment and other physical resources, and the provision of appropriate assessment support.</p>	<ul style="list-style-type: none"> • reinforce the integration of employability skills with workplace tasks and job roles • confirm that competency is verified and able to be transferred to other circumstances and environments. <p>Validity and sufficiency of evidence <u>requires</u> that:</p> <ul style="list-style-type: none"> • competency will need to be demonstrated over a period of time reflecting the scope of the role and the practical requirements of the workplace • where the assessment is part of a structured learning experience the evidence collected must related to a number of performance assessment at different points in time and separated by further learning and practice, with a decision on competency only taken at the point when the assessor has complete confidence in the person's demonstrated ability and applied knowledge • all assessment that is part of a structured learning experience must include a combination of direct, indirect and supplementary evidence. <p>Assessment processes and techniques should as far as is practical take into account the language, literacy and numeracy capacity of the candidate in relation to the competency being assessed.</p> <p>Supplementary evidence of competency may be obtained from relevant authenticated documentation from third parties, such as existing supervisors, team leaders or specialist training staff.</p>

Required Skills and Knowledge		HSC Requirements and Advice
This section describes the skills and knowledge required for this unit.		
<p>Required skills</p> <p>Required skills for this unit are:</p> <ul style="list-style-type: none"> • communication skills to: <ul style="list-style-type: none"> – enable clear and direct communication, using questioning to identify and confirm requirements, share information, listen and understand – establish and communicate deadlines – follow supervisor's instructions – read and interpret: <ul style="list-style-type: none"> ▪ documentation from a variety of sources ▪ drawings and specification – report fault – report variations or difficulties in performance and additional support required – use language and concepts appropriate to cultural differences – use and interpret non-verbal communication, such as hand signals – written skills to record resource use • identifying and accurately reporting to appropriate personnel any faults in tools, equipment or materials • numeracy skills to apply measurements and make calculations • organisational skills, including the ability to plan and set out work • teamwork skills to work with others to action tasks and relate to people from a range of cultural and ethnic backgrounds and with varying physical and mental abilities • technological skills to: <ul style="list-style-type: none"> – use a range of mobile technology, such as two-way radio and mobile phones – voice and hand signals to access and understand site-specific instructions. 	<p>Required knowledge</p> <p>Required knowledge for this unit is:</p> <ul style="list-style-type: none"> • basic understanding of sustainability on a construction work site • common construction industry terminology and interpersonal communication requirements • construction industry quality requirements • construction industry size, scope of work and national economic importance • environmental and resource hazards/risks, including compliance with relevant legislation associated with the environment, job specifications and procedures • federal, state, and territory environmental or sustainability legislation, regulations and codes of practice relevant to this sector and applicable to own work role, e.g. Building Code of Australia (BCA) • job safety analysis (JSA) and safe work method statements • relevant environmental and resource efficiency systems and practices • relevant industrial awards and enterprise agreements • relevant legislation, regulations and workplace requirements relating to provisions covering discrimination and equal employment opportunity • site meeting procedures • typical site/team work structure, methods and communication processes. 	<p>Key Terms and Concepts</p> <ul style="list-style-type: none"> • construction industry knowledge • environmental hazards/risks • environmental issues • environmental requirements • environmental sustainability • legislation • personal protective equipment • quality requirements • resource efficiency • safe work methods/practices • teams

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
1 Identify industry structure, occupations, job roles and work conditions.	1.1 Scope and nature of the construction industry and its national economic importance are recognised.	The Range Statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. <i>Bold italicised</i> wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	<p>Learning experiences for the HSC must address:</p> <p>An understanding of the scope of the following in relation to the construction industry in Australia:</p> <ul style="list-style-type: none"> • the interrelationship of the construction industry and other related industries • employment • contribution to the economy • environmental impact. <p>The role and function of key construction industry bodies including:</p> <ul style="list-style-type: none"> • Construction, Forestry, Mining and Energy Union (CFMEU) • Housing Industry Association (HIA) • Master Builders Association (MBA). <p>Awareness of regulatory requirements affecting the construction industry including:</p> <ul style="list-style-type: none"> • building regulations • council requirements • Australian standards. <p>Basic research skills:</p> <ul style="list-style-type: none"> • identification of relevant information • questioning techniques to obtain information • sorting, summarising and presenting information. <p>An awareness of sources for current industry information including:</p> <ul style="list-style-type: none"> • industry associations and organisations • unions • industry journals • media • the internet • libraries • reference manuals • policy and procedure manuals • personal observations and experience • industry contacts, mentors and advisors • colleagues, supervisors and managers • professional development opportunities • industry functions.

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
			<p>How to access and validate sources of information relevant to the construction industry.</p> <p>A range of opportunities to source, access, read and interpret a range of information and relevant workplace documentation in relation to the construction industry.</p>
	<p>1.2 <i>Construction job roles</i>, occupations and trade callings of the construction industry are identified and related to direct and indirect employment opportunities.</p>	<p><i>Construction job roles include:</i></p> <ul style="list-style-type: none"> • bricklaying and blocklaying • carpentry • concreting • demolition • dogging • formwork and falsework • painting and decorating • rigging • roof tiling • scaffolding • solid plastering • steelfixing • wall and ceiling lining • wall and floor tiling • waterproofing. 	<p>Learning experiences for the HSC must address:</p> <p>An awareness of career opportunities and pathways in the construction industry.</p> <p>Knowledge of job roles, occupations and trade callings in the construction industry including:</p> <ul style="list-style-type: none"> • the role and service/s offered by each • interrelationship between roles. <p>Personal attributes and work ethics of construction industry workers including:</p> <ul style="list-style-type: none"> • attendance and punctuality • ethical behaviour • honesty • work performance • taking directives • attention to detail • personal presentation and grooming • attitude • confidentiality • consistency of service • safe work practices.
	<p>1.3 Trends in technology, work processes and environmental issues which are likely to impact on the construction industry are identified and evaluated in terms of employment options.</p>		<p>Learning experiences for the HSC must address:</p> <p>How to source current information about emerging technologies relevant to the construction industry.</p> <p>An awareness of emerging technologies relevant to the construction industry and their effect on:</p> <ul style="list-style-type: none"> • current work practices • productivity • employment • construction methods

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
			<ul style="list-style-type: none"> • construction materials and building components in common use • market conditions/new markets • cost-effectiveness. <p>An awareness of current environmental issues including:</p> <ul style="list-style-type: none"> • sustainability • waste management • energy usage/efficiency • water resource management • fire management • conservation • natural resource management • recycling. <p>Knowledge of opportunities available for upgrading skills including:</p> <ul style="list-style-type: none"> • industry seminars • in-services • training courses • in-house training • reference manuals. <p>Sources of technical advice and support:</p> <ul style="list-style-type: none"> • industry bodies • journals • the internet • industry experts.
	<p>1.4 <i>Construction employment conditions , organisational requirements, responsibilities and duties</i> are identified and related to jobs and career paths.</p>	<p><i>Construction employment conditions</i> include coverage of:</p> <ul style="list-style-type: none"> • AWAs • bulletins and newsletters • enterprise agreements • industrial awards • industry and workplace codes of practice • workplace agreements. <p><i>Organisational requirements</i> include:</p> <ul style="list-style-type: none"> • access and equity principles and practice • anti-discrimination and related policy • business and performance plans 	<p>Learning experiences for the HSC must address:</p> <p>An awareness of employment conditions within the business services industry including:</p> <ul style="list-style-type: none"> • industrial award(s) • enterprise agreement(s) • workplace agreement(s). <p>An awareness of the primary role/function of industry bodies including:</p> <ul style="list-style-type: none"> • employer/employee groups • unions • professional associations (if appropriate) • training.

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
		<ul style="list-style-type: none"> • ethical standards • goals and objectives • legal and organisation policy, guidelines and requirements • quality • systems and processes. <p><i>Responsibilities and duties include:</i></p> <ul style="list-style-type: none"> • codes of conduct • job description and employment arrangements • organisation's policy relevant to work role • skills training and competencies • supervision and accountability requirements, including OHS • team structures. 	<p>An awareness of current industrial relations issues affecting the industry.</p> <p>Knowledge of employee rights and responsibilities including:</p> <ul style="list-style-type: none"> • attendance • confidentiality and privacy of enterprise, client and colleague information • knowing the terms and conditions of own employment • obeying lawful orders • protection from discrimination and sexual harassment • punctuality • right to union representation • safety and care with respect to OHS. <p>Knowledge of employer rights and responsibilities including:</p> <ul style="list-style-type: none"> • responsibility of providing a safe environment free from discrimination and sexual harassment • right to dismiss employees if employees <ul style="list-style-type: none"> - are negligent, careless or cause an accident - commit a criminal offence - commit acts of disloyalty such as revealing confidential information. <p>An understanding of the principles of and anti-discrimination and an awareness of the purpose and scope of the <i>Anti-Discrimination Act 1977</i> (NSW).</p> <p>An awareness of workplace policies and procedures designed to prevent discrimination and harassment in the workplace.</p> <p>An awareness of legal ramifications of inappropriate workplace conduct.</p> <p>Recourse in the event of inappropriate conduct including:</p> <ul style="list-style-type: none"> • reporting complaints • grievance procedures • disciplinary action.

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
	<p>1.5 <i>Safe work methods and practices</i> are identified to meet <i>Australian government and state and territory OHS legislative requirements</i>.</p>	<p><i>Safe work methods and practices</i> include:</p> <ul style="list-style-type: none"> • access to site amenities, such as drinking water and toilets • day to day observation of OHS policies and procedures • drugs and alcohol at work • emergency procedures and use of basic fire fighting equipment • general requirements for safe use of plant and equipment • general requirements for use of personal protective equipment and clothing • housekeeping to ensure a clean, tidy and safer work area • preventing bullying and harassment • risk assessment • smoking in designated areas • storage and removal of debris. <p><i>Australian government and state and territory OHS legislative requirements</i> include:</p> <ul style="list-style-type: none"> • Australian standards • construction industry OHS standards and guidelines • duty of care • health and safety representatives, committees and supervisors • licences, tickets or certificates of competency • National Code of Practice for Induction Training for Construction Work • national safety standards • OHS and welfare Acts and regulations • safety codes of practice, and JSA and safe work method statements. 	<p>Learning experiences for the HSC must address:</p> <p>A range of safe work practices and procedures for the construction industry in accordance with occupational health and safety (OHS) regulations, legislation and statutory requirements.</p> <p>Project/site safety plan.</p>
<p>2 Accept responsibility for own workload.</p>	<p>2.1 Work activities are planned and priorities and deadlines are established with <i>work group members</i> such as supervisors and communicated to others whose own work plans and timelines may be affected.</p>	<p><i>Work group members</i> include:</p> <ul style="list-style-type: none"> • coach or mentor • employee representative • peers, work colleagues, team, enterprise and • other members of the organisation • supervisor or manager. 	<p>Learning experiences for the HSC must address:</p> <p>The importance of the following to successful planning:</p> <ul style="list-style-type: none"> • organising tasks: • prioritising

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
			<ul style="list-style-type: none"> • time management to meet deadlines • negotiation • individual needs • group needs • clarifying personal responsibilities • work ethic • seeking assistance where necessary • acknowledging if tasks are beyond current capacity • planning and organising work routines on a daily, weekly or monthly basis. <p>A range of strategies to assess and manage workloads including:</p> <ul style="list-style-type: none"> • time management • seeking help/assistance when needed • contingency planning • effective use of technology. <p>Organising tasks in terms of:</p> <ul style="list-style-type: none"> • prioritising • negotiating • time management • time frames • individual needs • group needs. <p>Principles of time and task management.</p> <p>Application of time management techniques to project/work activities in a construction industry context.</p> <p>Factors impacting on workplace activities including: occupational health and safety (OHS)</p> <ul style="list-style-type: none"> • legislative/regulatory requirements • duty of care • workplace awards and agreements • industry codes of practice. <p>Acknowledgement of the effect poor time management has on:</p> <ul style="list-style-type: none"> • other workers and trades people • clients • organisation/company.

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
	<p>2.2 Work is completed against the plan and to the standard expected in the workplace and in accordance with any guidelines, directions and specifications provided by supervisors, including use of <i>personal protective equipment</i> .</p>	<p><i>Personal protective equipment</i> includes:</p> <ul style="list-style-type: none"> • caps • dust masks and respirators • ear muffs and plugs • gloves • hard hats • high visibility vests • jackets • overalls • safety glasses/goggles • steel capped boots. 	<p>Learning experiences for the HSC must address:</p> <p>Interpretation of plans and specifications.</p> <p>A basic overview of the role of employees in quality assurance.</p> <p>Selection, use, application and maintenance of a range of PPE.</p>
	<p>2.3 Variations and difficulties affecting performance or <i>quality requirements</i> of own work are identified and these issues reported to appropriate personnel using appropriate communication techniques and accessing relevant <i>information</i>.</p>	<p><i>Quality requirements include relevant regulations, including:</i></p> <ul style="list-style-type: none"> • Australian standards • internal company quality policy and standards • manufacturer specifications; where specified • workplace operations and procedures. <p><i>Information</i> includes:</p> <ul style="list-style-type: none"> • diagrams or sketches • instructions issued by authorised organisational or external personnel • manufacturer specifications and instructions • material safety data sheets (MSDS) • memos • organisation work specifications and requirements • plans and specifications • regulatory and legislative requirements • relevant Australian standards • safe work procedures or equivalent • signage • verbal or written and graphical instructions • work bulletins • work schedules. 	<p>Learning experiences for the HSC must address:</p> <p>Variations and difficulties affecting work requirements including:</p> <ul style="list-style-type: none"> • weather • unrealistic employer expectations • time and resource availability • faulty/damaged machinery and equipment • overwork • personal issues • lack of licensing/training • staff shortages/changes in staff • transport to and from site • injury/illness • safety concerns • union policy. <p>Appropriate personnel including:</p> <ul style="list-style-type: none"> • supervisor • colleagues • union representative • sub-contractor/s • principal contractor. <p>The importance of acting within level of authority in terms of:</p> <ul style="list-style-type: none"> • taking initiative • problem-solving • decision-making.

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
	2.4 Additional support needed to achieve or improve work outcomes or quality is communicated clearly to the appropriate personnel.		<p>Learning experiences for the HSC must address:</p> <p>An awareness of possible support including:</p> <ul style="list-style-type: none"> • further training • provision of tools and equipment • additional workers and team approach • variation to work hours and leave • return to work program.
3 Work in a team.	3.1 Site goals and the contributions to be made by <i>teams</i> in a construction activity are identified and understood.	<p>Teams:</p> <ul style="list-style-type: none"> • is a generic term that refers to the site work organisation • may be known/titled locally as crews, gangs, shifts or other industrially and historically acceptable term. 	<p>Learning experiences for the HSC must address:</p> <p>A definition of:</p> <ul style="list-style-type: none"> • team • teamwork. <p>Principles and characteristics of team building and effective teamwork.</p> <p>An understanding of the benefit of teamwork to the workplace/company.</p> <p>Analysis of teams and their:</p> <ul style="list-style-type: none"> • purpose/aims • goals • size. <p>The importance of the following to successful teamwork:</p> <ul style="list-style-type: none"> • goal setting • planning and organising work routines on a daily, weekly or monthly basis • cooperation and good working relationships • knowledge of work group members' responsibilities and duties • clarifying personal responsibilities. <p>An understanding of work requirements including:</p> <ul style="list-style-type: none"> • goals/objectives/priorities • specified targets/results • time frames • coordination with other work processes • roles • application of particular procedures

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
			<ul style="list-style-type: none"> • organisation of work materials • roster arrangements • assisting new workers • sharing knowledge of particular tasks or work requirements.
	<p>3.2 Individual contributions to team activities are identified and confirmed with others in the team.</p>		<p>Learning experiences for the HSC must address:</p> <p>An understanding of the difference between individual and organisational goals and plans and the relationship between individual roles and the role of the team.</p> <p>An understanding of the relationship between individual work roles and the role of the team/group.</p> <p>Identifying roles through:</p> <ul style="list-style-type: none"> • job/role statement • manager/supervisor • experienced colleagues.
	<p>3.3 Assistance and encouragement are provided to other team members wishing to meet or enhance their role and the role of the team.</p>		<p>Learning experiences for the HSC must address:</p> <p>Knowledge of appropriate colleagues from whom to seek assistance including:</p> <ul style="list-style-type: none"> • coach/mentor • peers/team members • supervisor/manager. <p>Knowledge of work group member's responsibilities and duties.</p> <p>Understanding of the importance of cooperation and good working relationships.</p> <p>Strategies for the promotion of cooperative working environments including:</p> <ul style="list-style-type: none"> • good communication • mutual respect • understanding roles and responsibilities • positive working relationships • application of codes of conduct • application of workplace policies and procedures • teamwork.

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
	<p>3.4 Team improvements are initiated where possible and/or encouraged from other team members.</p>		<p>Learning experiences for the HSC must address:</p> <p>Recognising potential for conflict.</p> <p>The value of anticipating and addressing potential conflict prior to its escalation.</p> <p>Issues that might cause conflict or misunderstanding in the workplace including:</p> <ul style="list-style-type: none"> • speaking too quickly or slowly • hearing loss • no visual clues • poor observation • poor communication style • intolerance • prejudice • inadequate language skills • not clarifying or asking questions • inappropriate body language • poor understanding of other cultures • aggressive behaviour • variation in colleague’s work practices/methods. <p>An understanding of conflict resolution techniques.</p> <p>Understanding lines of reporting and communication with supervisor and others in the workplace.</p> <p>How and when to seek assistance.</p> <p>An awareness of:</p> <ul style="list-style-type: none"> • organisation/company complaints handling and grievance policies and procedures • the importance of documenting complaints and incidents • the importance of a harmonious environment which promotes negotiation, communication and understanding.
	<p>3.5 Causes of disharmony and other barriers to achievement are referred to the appropriate party for resolution.</p>		

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
4 Identify own development needs.	4.1 Skills and knowledge necessary to work effectively in the construction industry are identified.		<p>Learning experiences for the HSC must address:</p> <p>An awareness of skills required for different job roles.</p>
	4.2 Steps are taken, in consultation with appropriate personnel, to identify own <i>learning needs</i> for future work requirements.	<p><i>Learning needs</i> and development processes include competency achievement/maintenance processes, which <u>include</u>:</p> <ul style="list-style-type: none"> • assessment processes • formal vocational education and training • on-the-job training and job rotation • recognition of prior learning • refresher training. 	<p>Learning experiences for the HSC must address:</p> <p>Recognition of learning as an ongoing process.</p> <p>Self-reflection skills including:</p> <ul style="list-style-type: none"> • recognition of current knowledge and skills • identification of: <ul style="list-style-type: none"> - knowledge and skills required for current job - knowledge and skills gaps - learning opportunities to meet potential learning needs and fulfil career aspirations and/or future workplace/company objectives. <p>The importance of feedback in the learning process.</p> <p>How to elicit and interpret feedback.</p> <p>Acknowledging work performance including:</p> <ul style="list-style-type: none"> • evaluating work performance • conducting performance appraisals • improving work practices.
	4.3 Appropriate opportunities to learn and develop required skills and knowledge for future construction industry work opportunities are identified and evaluated.		<p>Learning experiences for the HSC must address:</p> <p>An awareness of opportunities to meet learning needs including:</p> <ul style="list-style-type: none"> • seminars/workshops/courses • multiskilling/job rotation in current workplace • mentoring programs. <p>An understanding of the difference between on-the-job and off-the-job training.</p> <p>Evidence of learning including:</p> <ul style="list-style-type: none"> • transcripts/qualifications/ticket/licence • work diary • supervisor's reports/evaluations/appraisals • competency record • learning portfolio.

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
5 Identify current resource use and identify opportunities to improve resource efficiency.	5.1 Work site <i>environmental and resource efficiency issues</i> and resources used in own work role are identified and recorded using <i>appropriate techniques</i> .	<p><i>Environmental and resource efficiency issues include:</i></p> <ul style="list-style-type: none"> • minimisation of environmental risks and maximisation of opportunities to improve environmental performance and to promote more efficient production and consumption of natural resources on the work site, for example by minimising waste, through participation in or use of a waste minimisation system • using resources efficiently, including reducing material usage and supporting efficient energy and water use, such as: <ul style="list-style-type: none"> - air testing pipes - efficient fittings - insulation - site management to minimise stormwater pollution - strategic use of materials to reduce off-cuts and wastage - tool maintenance - transportation - using alternative practices, procedures and materials/products that reduce or eliminate resource consumption. <p><i>Appropriate techniques</i> for recording resource use include:</p> <ul style="list-style-type: none"> • examination and documentation of resources on work site • examination and measurement of resources, materials and products from suppliers • examination of relevant information and data on efficiency and resource reduction • instructions and reports from other parties involved in the process of identifying and implementing improvements. 	<p>Learning experiences for the HSC must address:</p> <p>An awareness of current environmental issues applicable to the construction industry including:</p> <ul style="list-style-type: none"> • sustainability • waste management • energy use and efficiency • resource use and efficiency • water resource management • recycling/re-use. <p>Define:</p> <ul style="list-style-type: none"> • environmentally sustainable work practices. <p>An understanding of the environmental responsibilities of staff in accordance with workplace/organisation policy and procedures including:</p> <ul style="list-style-type: none"> • following work instructions, standard operating procedures and inspection processes • reporting and communication of environmental issues • maintaining environmental records <ul style="list-style-type: none"> - incident and accident reports - inspection reports. <p>Define:</p> <ul style="list-style-type: none"> • resource. <p>An awareness of a range of resources including:</p> <ul style="list-style-type: none"> • human resources • facilities and equipment • raw materials • stock and supply. <p>Awareness of the potential environmental threat of types of resources commonly used in the construction industry including:</p> <ul style="list-style-type: none"> • materials • energy • equipment and associated consumables.

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
			<p>Techniques to collect and measure information regarding workplace/organisation resource consumption including:</p> <ul style="list-style-type: none"> • examining resources in work area • examining invoices from suppliers • examining/monitoring relevant information and data • measuring resource usage under different conditions. <p>An awareness of electronic and manual tools available to measure and document resource use including:</p> <ul style="list-style-type: none"> • checklists • databases • spreadsheets • graphs • stock control tools • software.
	<p>5.2 Work site <i>environmental hazards</i> relating to the use of resources are identified and reported to designated personnel.</p>	<p><i>Environmental hazards</i> include:</p> <ul style="list-style-type: none"> • substances (e.g. resource, waste, by-product) that are dangerous to living things in the environment, such as humans, animals, plants and water, including storage and handling of the following substances: <ul style="list-style-type: none"> - toxic - corrosive - flammable - explosive • may be infectious or have other dangerous characteristics. 	<p>Learning experiences for the HSC must address:</p> <p>Knowledge of designated personnel in relation to environmental hazard identification and control within the workplace/organisation.</p> <p>The importance of acting within level of authority in terms of:</p> <ul style="list-style-type: none"> • taking initiative • problem-solving • decision-making. <p>Awareness of organisational structures and lines of reporting.</p> <p>Appropriate person(s) including:</p> <ul style="list-style-type: none"> • supervisor/team leader • manager • trainer. <p>An awareness of monitoring and reporting for environmental hazards including:</p> <ul style="list-style-type: none"> • formal/informal • verbal

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
			<ul style="list-style-type: none"> • written <ul style="list-style-type: none"> - checklists - incident and accident reports - inspection reports - registers/logs/files.
	5.3 Enterprise plans to improve environmental practices, environmental requirements and resource efficiency are followed.	<p>Environmental requirements are to cover workplace quality management and <u>include</u>:</p> <ul style="list-style-type: none"> • clean-up protection • stormwater protection • waste management. 	<p>Learning experiences for the HSC must address:</p> <p>An understanding of a range of strategies and procedures to work in an environmentally sustainable manner in a construction environment and to minimise the potential negative environmental impacts of work practices including:</p> <ul style="list-style-type: none"> • efficient use of energy and resources • opportunities for use of alternative forms of energy • use of renewable, recyclable, reusable and recoverable resources • avoidance or minimisation strategies <ul style="list-style-type: none"> - purchasing sustainable products - regular maintenance of tools and equipment - use of biodegradable/non-toxic materials • waste minimisation <ul style="list-style-type: none"> - accurate measurements and calculations - recycling - using recyclable products • removal and disposal of non-reusable materials in a responsible manner: <ul style="list-style-type: none"> - consumables • chemicals and hazardous substances. <p>Knowledge of workplace/organisation policies and procedures for waste disposal.</p>
	5.4 Suggestions are made for improvements to work site practices in own work area.	<p>Suggestions for sustainable use of resources <u>includes</u> ideas that help to:</p> <ul style="list-style-type: none"> • ensure appropriate use of materials and make recommendations to others to use sustainable products and practices • identify alternative sources of energy or energy conservation • improve energy and water efficiency • prevent and minimise risks and maximise 	

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
		<p>opportunities, such as use of solar or grey water, and other alternative forms of energy/resources where appropriate</p> <ul style="list-style-type: none"> • reduce emissions of greenhouse gases by reducing waste, transportation and use of non-renewable resources, such as energy, water, fuel, and materials • use alternative products/materials, procedures and installation techniques to support efficiency and sustainability • use renewable, recyclable, reusable and recoverable resources (energy, water, materials/products and waste). 	
6 Comply with environmental regulations.	6.1 Procedures are followed to ensure <i>compliance with environmental requirements</i> .	<p>Compliance with <i>environmental requirements</i> includes:</p> <ul style="list-style-type: none"> • meeting relevant acts, laws, by-laws and regulations or best practice to support compliance in environmental performance and sustainability at each level as required (such as Environmental Protection, Biodiversity Conservation Act, BCA), including: <ul style="list-style-type: none"> - federal - industry - international - local government - organisation - reporting breaches - state and territory. 	<p>Learning experiences for the HSC must address:</p> <p>Define:</p> <ul style="list-style-type: none"> • compliance. <p>A basic understanding of the difference between:</p> <ul style="list-style-type: none"> • an act • a regulation • codes of practice. <p>Awareness of the main features and intent of environmental legislation including:</p> <ul style="list-style-type: none"> • <i>Protection of the Environment Operations Act 1997</i> (NSW) and amendments • Codes of Practice (WorkCover NSW) <ul style="list-style-type: none"> - Control of Workplace Hazardous Substances.
	6.2 Breaches or potential breaches are reported to <i>designated personnel</i> .	<p><i>Designated personnel</i> to be contacted are determined by the enterprise and include:</p> <ul style="list-style-type: none"> • managers • supervisors • other senior personnel assigned to particular work site roles, such as safety officer. 	

Training Package	Construction, Plumbing and Services Integrated Framework (CPC08)		HSC Requirements and Advice
Unit title	Plan and organise work		
Unit code	Competency field	Unit sector	<ul style="list-style-type: none"> • HSC Indicative Hours 10
CPCCCM1003A	Common	Construction	

Unit descriptor	This unit of competency specifies the outcomes required to plan and organise individual and group work activities on a construction site. The unit includes identifying task requirements, planning steps and organising work.
Prerequisite units	CPCCOHS2001A - Apply OHS requirements, policies and procedures in the construction industry
Co-requisite units	Nil
Application of the unit	This unit of competency supports the attainment of capabilities and understanding to prioritise work tasks and organise time and resources to undertake given tasks effectively and cooperatively with other team members.
Employability skills	This unit contains employability skills.

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	Context of and specific resources for assessment	Method of assessment
This unit of competency could be assessed in the workplace or a close simulation of the workplace environment, provided that simulated or project-based assessment techniques fully replicate construction workplace conditions, materials, activities, responsibilities and procedures.	A person who demonstrates competency in this unit must be able to provide evidence of the ability to plan and organise a variety of work activities. Evidence should be collected over a period of time in a range of general construction relevant contexts and include dealings with an appropriate range of situations.	<p>This competency is to be assessed using standard and authorised work practices, safety requirements and environmental constraints.</p> <p>Assessment of essential underpinning knowledge will usually be conducted in an off-site context.</p> <p>Assessment is to comply with relevant regulatory or Australian standards' requirements.</p> <p>Resource implications for assessment include:</p>	<p>Assessment methods <u>must</u>:</p> <ul style="list-style-type: none"> • satisfy the endorsed Assessment Guidelines of the Construction, Plumbing and Services Integrated Framework Training Package • include direct observation of tasks in real or simulated work conditions, with questioning to confirm the ability to consistently identify and correctly interpret the essential underpinning knowledge required for practical application • reinforce the integration of employability skills with workplace tasks and job role

		Context of and specific resources for assessment cont/d	Method of assessment cont/d
		<ul style="list-style-type: none"> • an induction procedure and requirement • realistic tasks or simulated tasks covering the mandatory task requirements • relevant specifications and work instructions • tools and equipment appropriate to activity • support materials appropriate to activity • workplace instructions relating to safe work practices and addressing hazards and emergencies • material safety data sheets • research resources, including industry related systems information. <p>Reasonable adjustments for people with disabilities must be made to assessment processes where required. This could include access to modified equipment and other physical resources, and the provision of appropriate assessment support.</p>	<ul style="list-style-type: none"> • confirm that competency is verified and able to be transferred to other circumstances and environments. <p>Validity and sufficiency of evidence <u>requires</u> that:</p> <ul style="list-style-type: none"> • competency will need to be demonstrated over a period of time reflecting the scope of the role and the practical requirements of the workplace • where the assessment is part of a structured learning experience the evidence collected must related to a number of performance assessment at different points in time and separated by further learning and practice, with a decision on competency only taken at the point when the assessor has complete confidence in the person’s demonstrated ability and applied knowledge • all assessment that is part of a structured learning experience must include a combination of direct, indirect and supplementary evidence. <p>Assessment processes and techniques should as far as is practical take into account the language, literacy and numeracy capacity of the candidate in relation to the competency being assessed.</p> <p>Supplementary evidence of competency may be obtained from relevant authenticated documentation from third parties, such as existing supervisors, team leaders or specialist training staff.</p>

Required Skills and Knowledge		HSC Requirements and Advice
This section describes the skills and knowledge required for this unit.		
<p>Required skills</p> <p>Required skills for this unit are::</p> <ul style="list-style-type: none"> • communication skills to: <ul style="list-style-type: none"> – determine or confirm and clarify task requirements – enable clear and direct communication, using questioning to identify and confirm requirements, share information, listen and understand – plan steps and organise work activities with others – use language and concepts appropriate to cultural differences – use and interpret non-verbal communication, such as hand signals – written skills to complete workplace documentation • evaluating own actions and make judgements about performance and necessary improvements • identifying and accurately reporting to appropriate personnel any faults in tools, equipment or materials • interpret information relevant to the work activity including plans, specifications and drawings and documentation from a variety of sources • teamwork skills to work with others to action tasks and relate to people from a range of cultural and ethnic backgrounds and with varying physical and mental abilities • technological skills to: <ul style="list-style-type: none"> – use a range of mobile technology, such as two-way radio and mobile phones – voice and hand signals to access and understand site-specific instructions. – using time management techniques to organise and prioritise work. 	<p>Required knowledge</p> <p>Required knowledge for this unit is:</p> <ul style="list-style-type: none"> • work activity that needs to be planned and organised • work safety, environmental and quality requirements • workplace personnel that are to be involved in planning and organising tasks • workplace reporting requirements. 	<p>Key Terms and Concepts</p> <ul style="list-style-type: none"> • environmental requirements • quality requirements • safety • workplace personnel • workplace reporting

DRAFT for consultation

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
1 Identify task requirements.	1.1 Task requirements are determined or confirmed and clarified to ensure correct interpretation of specifications or requirements.	The Range Statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. <i>Bold italicised</i> wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	<p>Learning experiences for the HSC must address:</p> <p>An understanding of work requirements including:</p> <ul style="list-style-type: none"> • goals • objectives • priorities • specified targets or results • time frames/construction schedule • coordination with other work processes • roles • application of particular procedures • organisation of work materials. <p>Strategies for obtaining, understanding and clarifying work goals and plans including:</p> <ul style="list-style-type: none"> • correct sourcing and selection of information • consult appropriate personnel • active listening • open and closed questions. <p>Skills required including:</p> <ul style="list-style-type: none"> • consultation • negotiation • communication • prioritisation. <p>Planning and preparation for a range of tasks/ activities applicable to daily work routines in a business services workplace/organisation.</p>
2 Plan steps to complete tasks.	2.1 Task is interpreted and relevant steps are identified to ensure efficient conduct of work, and in accordance with <i>safety (OHS), environmental requirements and quality requirements.</i>	<p>Safety (OHS) is to be in accordance with legislation, regulations, codes of practice, organisational safety policies and procedures, and project safety plan and may include:</p> <ul style="list-style-type: none"> • emergency procedures, including extinguishing fires, organisational first aid requirements and evacuation • handling of materials • hazard control • hazardous materials and substances • safe operating procedures, including the 	<p>Learning experiences for the HSC must address:</p> <p>Safe work practices and procedures for the construction industry.</p> <p>Project/site safety plan.</p> <p>Environmentally sustainable work practices to minimise potential negative environmental impacts</p> <p>An awareness of project environment management plan.</p>

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
		<p>conduct of operational risk assessment and treatments associated with:</p> <ul style="list-style-type: none"> - earth leakage boxes - lighting - power cables, including overhead service trays, cables and conduits - restricted access barriers - surrounding structures - traffic control - trip hazards - work site visitors and the public - working at heights - working in confined spaces - working in proximity to others - working with dangerous materials <ul style="list-style-type: none"> • organisational first aid • personal protective clothing and equipment prescribed under legislation, regulations and workplace policies and practices • use of firefighting equipment • use of tools and equipment • workplace environment and safety. <p><i>Environmental requirements</i> include:</p> <ul style="list-style-type: none"> • clean-up management • noise and dust • vibration • waste management. <p><i>Quality requirements</i> include relevant regulations, <u>including</u>:</p> <ul style="list-style-type: none"> • Australian standards • internal company quality policy and standards • manufacturer specifications, where specified • workplace operations and procedures. 	<p>A basic overview of the role of employees in quality assurance.</p>
	<p>2.2 Steps are planned in conjunction with others.</p>		<p>Learning experiences for the HSC must address:</p> <p>The importance of the following to successful planning:</p> <ul style="list-style-type: none"> • organising tasks

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
			<ul style="list-style-type: none"> • prioritising • time management to meet deadlines • negotiation • individual needs • group needs • clarifying personal responsibilities • work ethic • seeking assistance where necessary • acknowledging if tasks are beyond current capacity • planning and organising work routines on a daily, weekly or monthly basis. <p>Factors impacting on workplace activities including: occupational health and safety (OHS)</p> <ul style="list-style-type: none"> • legislative/regulatory requirements • duty of care • workplace awards and agreements • industry codes of practice. <p>Information in a work plan including:</p> <ul style="list-style-type: none"> • designated work tasks • tools, equipment and materials for use • procedures for pre-start and safety checks of tools and equipment • time frame for work completion • supervisor's instructions • reporting procedures and requirements.
3 Organise work.	3.1 Work activity is organised with other involved personnel to ensure safe and appropriate sequencing of tasks.		<p>Learning experiences for the HSC must address:</p> <p>Work sequencing including:</p> <ul style="list-style-type: none"> • receiving instruction • organising for the task <ul style="list-style-type: none"> - selection of tools and equipment - locate materials • carry out the task <ul style="list-style-type: none"> - in a logical order - within deadlines - according to quality measures • clean-up after task completion.

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
	3.2 All necessary documentation related to job planning progress is completed and recorded in accordance with workplace requirements.		<p>Learning experiences for the HSC must address:</p> <p>Job/project documentation typical to the construction industry.</p> <p>Written communication media including:</p> <ul style="list-style-type: none"> • paper-based • electronic. <p>Organisation/company practices for recording and reporting including:</p> <ul style="list-style-type: none"> • formal/informal • verbal/written. <p>The importance of recording information that is:</p> <ul style="list-style-type: none"> • clear • legible • accurate • concise • contains appropriate use of industry terminology and abbreviations.
4 Review planning and organising process.	4.1 Planning and organising of work activities is reviewed to establish the effectiveness of the process. 4.2 Ideas for improvement are suggested and implemented in future planning and organising of work activities.		

Training Package	Construction, Plumbing and Services Integrated Framework (CPC08)		HSC Requirements and Advice
Unit title	Conduct workplace communication		
Unit code	Competency field	Unit sector	<ul style="list-style-type: none"> • HSC Indicative Hours 10
CPCCCM1004A	Common	Construction	

Unit descriptor	This unit of competency specifies the outcomes required to communicate effectively with other workers in a construction workplace environment. It includes gathering, conveying and receiving information through verbal and written forms of communication.
Prerequisite units	COCCOHS2001A - Apply OHS requirements, policies and procedures in the construction industry
Co-requisite units	Nil
Application of the unit	This unit of competency supports achievement of communication skills carried out as an integral part of routine work.
Employability skills	This unit contains employability skills.

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	Context of and specific resources for assessment	Method of assessment
This unit of competency could be assessed in the workplace or a close simulation of the workplace environment, provided that simulated or project-based assessment techniques fully replicate construction workplace conditions, materials, activities, responsibilities and procedures.	<p>A person who demonstrates competency in this unit must be able to provide evidence of the ability to:</p> <ul style="list-style-type: none"> • locate, interpret and apply relevant information • comply with site safety plan, OHS regulations and state and territory legislation applicable to workplace operations • comply with organisational policies and procedures, including quality requirements • safely and effectively use communication equipment 	<p>This competency is to be assessed using standard and authorised work practices, safety requirements and environmental constraints.</p> <p>Assessment of essential underpinning knowledge will usually be conducted in an off-site context.</p> <p>Assessment is to comply with relevant regulatory or Australian standards' requirements.</p> <p>Resource implications for assessment include:</p>	<p>Assessment methods <u>must</u>:</p> <ul style="list-style-type: none"> • satisfy the endorsed Assessment Guidelines of the Construction, Plumbing and Services Integrated Framework Training Package • include direct observation of tasks in real or simulated work conditions, with questioning to confirm the ability to consistently identify and correctly interpret the essential underpinning knowledge required for practical application • reinforce the integration of employability skills with workplace tasks and job roles

	Critical aspects for assessment and evidence required to demonstrate competency in this unit cont/d	Context of and specific resources for assessment cont/d	Method of assessment cont/d
	<ul style="list-style-type: none"> • communicate and work effectively and safely with others • interpret all signage accurately • complete tasks successfully following instruction • convey pieces of information to other workers accurately • fill out workplace documents accurately • frame questions at an on-site meeting in a range of contexts or occasions over time. 	<ul style="list-style-type: none"> • an induction procedure and requirement • realistic tasks or simulated tasks covering the mandatory task requirements • relevant specifications and work instructions • tools and equipment appropriate to activity • support materials appropriate to activity • workplace instructions relating to safe work practices and addressing hazards and emergencies • material safety data sheets • research resources, including industry related systems information. <p>Reasonable adjustments for people with disabilities must be made to assessment processes where required. This could include access to modified equipment and other physical resources, and the provision of appropriate assessment support.</p>	<ul style="list-style-type: none"> • confirm that competency is verified and able to be transferred to other circumstances and environments. <p>Validity and sufficiency of evidence <u>requires</u> that:</p> <ul style="list-style-type: none"> • competency will need to be demonstrated over a period of time reflecting the scope of the role and the practical requirements of the workplace • where the assessment is part of a structured learning experience the evidence collected must related to a number of performance assessment at different points in time and separated by further learning and practice, with a decision on competency only taken at the point when the assessor has complete confidence in the person's demonstrated ability and applied knowledge • all assessment that is part of a structured learning experience must include a combination of direct, indirect and supplementary evidence. <p>Assessment processes and techniques should as far as is practical take into account the language, literacy and numeracy capacity of the candidate in relation to the competency being assessed.</p> <p>Supplementary evidence of competency may be obtained from relevant authenticated documentation from third parties, such as existing supervisors, team leaders or specialist training staff.</p>

Required Skills and Knowledge		HSC Requirements and Advice
This section describes the skills and knowledge required for this unit.		
<p>Required skills</p> <p>Required skills for this unit are:</p> <ul style="list-style-type: none"> • communication skills to communicate with others to: <ul style="list-style-type: none"> – enable clear and direct communication, using questioning to identify and confirm requirements, share information, listen and understand – read and interpret: <ul style="list-style-type: none"> ▪ signage and other relevant documentation ▪ simple instructions and messages – use language and concepts appropriate to cultural differences – use and interpret non-verbal communication, such as hand signals – written skills to complete records and reports as required • identifying and accurately reporting to appropriate personnel any faults in tools, equipment or materials • numeracy skills to apply measurements and make calculations • organisational skills, including the ability to plan and set out work • participating in meetings • teamwork skills to work with others to action tasks and relate to people from a range of cultural and ethnic backgrounds and with varying physical and mental abilities • technological skills to: <ul style="list-style-type: none"> – use a range of mobile technology, such as two-way radio and mobile phones – voice and hand signals to access and understand site-specific instructions. 	<p>Required knowledge</p> <p>Required knowledge for this unit is:</p> <ul style="list-style-type: none"> • bulletins • checklists • communication devices • company procedures • construction terminology • emergency procedures • job safety analysis (JSA) and safe work method statements • material safety data sheets (MSDS) and materials handling methods • memos • OHS requirements • project quality requirements • signage • work instructions • workplace policies. 	<p>Key Terms and Concepts</p> <ul style="list-style-type: none"> • communication • communication modes • emergency procedures • safety • signage • work instructions • workplace policies

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
1 Gather, convey and receive information.	1.1 Verbal and written instructions are gathered, received and responded to with correct actions.	The Range Statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. <i>Bold italicised</i> wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	<p>Learning experiences for the HSC must address:</p> <p>Importance of communication in a construction workplace/organisation.</p> <p>How to access and validate sources of information relevant to the construction industry.</p> <p>A range of sources for work instructions and procedures including:</p> <ul style="list-style-type: none"> • work schedule • plans/specifications • diagrams/sketches • job card/job sheet • job safety analysis (JSA)/safe work method statement • standard operating procedures (SOP) • material safety data sheets (MSDS) • regulations/legislation/codes of practice • Australian Standards • workplace/company/site policies and procedures • workplace/company bulletins/memos • manufacturer specifications and instructions • client requirements. <p>Strategies for obtaining, understanding and clarifying instructions/procedures including:</p> <ul style="list-style-type: none"> • correct sourcing and selection of information • consultation with appropriate personnel • active listening • open and closed questions. <p>Brief overview of the communication process/cycle:</p> <ul style="list-style-type: none"> • sender • receiver • message • feedback. <p>An awareness of various modes of communication including:</p> <ul style="list-style-type: none"> • verbal <ul style="list-style-type: none"> - face-to-face (supervisor to employee)

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
			<ul style="list-style-type: none"> - telephone/mobile phone/pager - two-way radio - on-site meeting - voice signals • written communication <ul style="list-style-type: none"> - work plan/job card - memo/message - job description/statement - workplace form - roster - facsimile - email - intranet • non-verbal <ul style="list-style-type: none"> - gestures - signals - signage - diagrams. <p>Barriers to effective communication including:</p> <ul style="list-style-type: none"> • bias and stereotyping • lack of empathy • negative subtext • gender issues • individual differences • inconsistency • emotions • physical barriers, eg background noise • inattention • pressure of time. <p>Effective communication techniques in relation to listening:</p> <ul style="list-style-type: none"> • active listening • barriers to effective listening. <p>General features and benefits of a range of communication methods/equipment.</p> <p>Factors affecting the selection of particular communication methods/equipment:</p> <ul style="list-style-type: none"> • technical and operational features • access of the sender and receiver to necessary equipment • technical skills required to use the medium

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
	1.2 Instructions are conveyed accurately.		<ul style="list-style-type: none"> • required format • degree of formality required • urgency and time frames. <p>Learning experiences for the HSC must address:</p> <p>Selection and use of various communication methods/equipment in a variety of potential and real situations in the workplace.</p> <p>An understanding of workplace/organisation communication procedures, systems and technology relevant to the individual's work responsibilities.</p> <p>The importance of communicating in language that is:</p> <ul style="list-style-type: none"> • clear • concise • directive • purposeful • correct • courteous • culturally sensitive.
	1.3 Work <i>signage interpretation</i> and other <i>safety (OHS)</i> requirements are responded to with correct action.	<p><i>Signage interpretation</i> includes:</p> <ul style="list-style-type: none"> • directional signs • facility or location signs and hazards • site safety signs • traffic signs. <p><i>Safety (OHS)</i> is to be in accordance with state or territory legislation and regulations, organisational safety policies and procedures, and project safety plan and may include:</p> <ul style="list-style-type: none"> • handling of materials • hazard control • hazardous materials and substances • organisational first aid • personal protective clothing and equipment prescribed under legislation, regulations and workplace policies and practices • use of firefighting equipment • use of tools and equipment • workplace environment and safety. 	<p>Learning experiences for the HSC must address:</p> <p>Selection and use of standard signs and symbols common to the general construction industry including:</p> <ul style="list-style-type: none"> • legislative requirements • meaning of colour and shape • appropriate placement and positioning. <p>Safe work practices and procedures for the construction industry.</p> <p>Project/site safety plan.</p>

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
	<p>1.4 Information is conveyed in English, and the information is <i>interpreted</i> and message confirmed.</p>	<p>Information includes:</p> <ul style="list-style-type: none"> • diagrams or sketches • instructions issued by authorised organisational or external personnel • manufacturer specifications and instructions, where specified • MSDS • memos • regulatory and legislative requirements • relevant Australian standards • safe work procedures or equivalent • signage • verbal, written and graphical instructions • work bulletins • work schedules, plans and specifications. <p>Interpretation of information includes:</p> <ul style="list-style-type: none"> • bulletins • checklists • company procedures and regulations • delivery dockets • emergency procedures • induction procedures • industrial agreements • instructions • job safety analysis (JSA) and safe work method statements • maps • MSDS • OHS requirements • quality requirements • work schedules • workplace policies. 	<p>Learning experiences for the HSC must address:</p> <p>Appropriate use of general construction terminology.</p>
	<p>1.5 Questions are used to gain additional information and to clarify understanding, using appropriate communication transfer techniques.</p>	<p>Communication transfer includes use of telephones (including mobile) and written communication, and includes:</p> <ul style="list-style-type: none"> • email • facsimile • internet • two-way radios. 	<p>Learning experiences for the HSC must address:</p> <p>Effective questioning techniques:</p> <ul style="list-style-type: none"> • open • closed • reflective.

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
2 Carry out face-to-face routine communication.	2.1 Routine instructions and messages are received and followed.		<p>Learning experiences for the HSC must address:</p> <p>Procedures for establishing the details of an instruction including:</p> <ul style="list-style-type: none"> • questioning • summarising • reiterating.
	2.2 Workplace procedures are carried out to company requirements in communication with others.	<p>Communication with others includes:</p> <ul style="list-style-type: none"> • contractors • co-workers • supervisors • the public • trainers. 	<p>Learning experiences for the HSC must address:</p> <p>Establishing good work habits through knowledge of the organisation/company policies and procedures.</p> <p>Completion of work tasks including:</p> <ul style="list-style-type: none"> • adhere to safety procedures • follow directions from supervisor • maintain personal presentation standards • adhere to workplace policies • maintain personal work space • contribute to productive work environment by accepting responsibility for own work and assisting co-workers as required • check required materials and equipment are available and meet requirements of the task • seek advice/obtain information as required from: <ul style="list-style-type: none"> - co-workers and supervisor - trade personnel - contractors - suppliers - industry/regulatory bodies. <p>A basic overview of the role of employees in quality assurance.</p> <p>Industry standards for workplace interaction including:</p> <ul style="list-style-type: none"> • courtesy • discretion • confidentiality • structured follow-up procedures. <p>Working with others including:</p> <ul style="list-style-type: none"> • one-to-one communication in a group or team • taking part in informal discussions • taking part in meetings • dealing with conflict.

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
			<p>An understanding of the concepts of:</p> <ul style="list-style-type: none"> • culture • cultural diversity • cultural awareness. <p>An understanding for the need for tolerance and respect in the workplace.</p> <p>An awareness of elements of cultural diversity including:</p> <ul style="list-style-type: none"> • interpersonal relations • festivals/celebrations • family structure/obligations • language • religion • customs • social values • work ethic • communication • product preferences. <p>The importance of respecting individual differences arising from:</p> <ul style="list-style-type: none"> • culture • race • language • gender • sexuality • age • religious beliefs • customs/traditions • people with special needs. <p>Effective cross-cultural communication skills including:</p> <ul style="list-style-type: none"> • active listening • questioning techniques • body language • appropriate speech • building rapport.

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
	2.3 Information from a range of sources is accessed and interpreted using a variety of <i>communication modes</i> .	<p><i>Communication modes</i> includes:</p> <ul style="list-style-type: none"> • active listening • group interaction • interpreting signage • meetings • questioning • verbal and written. 	<p>Learning experiences for the HSC must address:</p> <p>Effective communication techniques in relation to nonverbal communication including:</p> <ul style="list-style-type: none"> • body language • personal space.
	2.4 Information is selected and sequenced correctly.		
	2.5 Verbal and written reporting is completed where required.		<p>Learning experiences for the HSC must address:</p> <p>A range of written communication media including:</p> <ul style="list-style-type: none"> • workplace documents • messages • electronic mail • memorandum • facsimiles • delivery docketts • tax invoices • customer records • general correspondence • workplace forms • bill of quantities. <p>Workplace/organisation practices for recording, storing and exchanging written messages quickly and efficiently.</p> <p>The importance of recording information that is:</p> <ul style="list-style-type: none"> • clear • legible • accurate • concise • appropriate in terms of industry terminology. <p>Protocols for taking messages and sending them to the relevant person including:</p> <ul style="list-style-type: none"> • awareness of the type of information to be obtained • ensuring the accuracy of information recorded • system to record message (paper or electronic).

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
3 Apply visual communication.	3.1 Visual communication is used that follows accepted industry practice or social conventions.		<p>Learning experiences for the HSC must address:</p> <p>Forms of visual communication including:</p> <ul style="list-style-type: none"> • signage • symbols • gestures • signals <ul style="list-style-type: none"> - hand - lights • sound. <p>Knowledge of meaning and use of signage, symbols, gestures and signals common to the construction industry.</p>
	3.2 Attention of communicating parties is obtained, confirmed and/or acknowledged.		
	3.3 Intention of the visual communication is clarified and confirmed at each step.		
	3.4 Visual communication that is unclear or ambiguous is questioned or visually cancelled.		
	3.5 Instances of unclear visual communication are followed up to avoid repeated problems.		
4 Participate in simple on-site meeting processes.	4.1 Correct process for on site meetings is identified and followed to predetermined or agreed procedures.		<p>Learning experiences for the HSC must address:</p> <p>On-site meeting processes including:</p> <ul style="list-style-type: none"> • scheduling/notification <ul style="list-style-type: none"> - time - location • purpose <ul style="list-style-type: none"> - task discussions - local coordination of procedural and operational issues - group/team meetings - union meetings.

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
			Understanding of organisation/company procedures for conducting on-site meetings.
	4.2 Responses are sought and provided to others in the group.		
	4.3 Constructive contributions are made.		<p>Learning experiences for the HSC must address:</p> <p>The importance of:</p> <ul style="list-style-type: none"> • demonstrating respect and empathy when working with others • sensitivity when dealing with other points of view • constructively raising and discussing ideas • cooperation and good working relationships • knowledge of work group member's responsibilities and duties.
	4.4 Goals or outcomes are identified and/or recorded.		<p>Learning experiences for the HSC must address:</p> <p>Features and characteristics of successful teamwork including:</p> <ul style="list-style-type: none"> • identification of purpose and aim of team • goal setting • planning and organising work routines.

Training Package	Construction, Plumbing and Services Integrated Framework (CPC08)		HSC Requirements and Advice
Unit title	Carry out measurements and calculations		
Unit code	Competency field	Unit sector	HSC Indicative Hours
CPCCCM1005A	Common	Construction	20

Unit descriptor	This unit of competency specifies the outcomes required to carry out measurements and perform simple calculations to determine task and material requirements for a job in a construction work environment.
Prerequisite units	CPCCOHS2001A - Apply OHS requirements, policies and procedures in the construction industry
Co-requisite units	Nil
Application of the unit	This unit of competency supports achievement of skills to take measurements and use these to calculate material quantities and calculations for related tasks commonly used and applied in construction work.
Employability skills	This unit contains employability skills.

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	Context of and specific resources for assessment	Method of assessment
This unit of competency could be assessed in the workplace or a close simulation of the workplace environment, provided that simulated or project-based assessment techniques fully replicate construction workplace conditions, materials, activities, responsibilities and procedures.	<p>A person who demonstrates competency in this unit must be able to provide evidence of the ability to:</p> <ul style="list-style-type: none"> locate, interpret and apply relevant information comply with site safety plan, OHS regulations and state and territory legislation applicable to workplace operations comply with organisational policies and procedures, including quality requirements safely and effectively use tools and equipment 	<p>This competency is to be assessed using standard and authorised work practices, safety requirements and environmental constraints.</p> <p>Assessment of essential underpinning knowledge will usually be conducted in an off-site context.</p> <p>Assessment is to comply with relevant regulatory or Australian standards' requirements.</p> <p>Resource implications for assessment include:</p>	<p>Assessment methods <u>must</u>:</p> <ul style="list-style-type: none"> satisfy the endorsed Assessment Guidelines of the Construction, Plumbing and Services Integrated Framework Training Package include direct observation of tasks in real or simulated work conditions, with questioning to confirm the ability to consistently identify and correctly interpret the essential underpinning knowledge required for practical application reinforce the integration of employability skills with workplace tasks and job roles

	Critical aspects for assessment and evidence required to demonstrate competency in this unit cont/d	Context of and specific resources for assessment cont/d	Method of assessment cont/d
	<ul style="list-style-type: none"> • communicate and work effectively and safely with others • complete measurements, calculations and determination of quantities for different projects of varying complexity in a range of contexts or occasions over time • calculate each of the following using a realistic construction task or example: <ul style="list-style-type: none"> - length - perimeter - circumference - area - volume - number - ratio - percentage - conversion of metres to millimetres and millimetres to metres - measure using a rule or tape measure five separate tasks within 1mm accuracy. 	<ul style="list-style-type: none"> • an induction procedure and requirement • realistic tasks or simulated tasks covering the mandatory task requirements • relevant specifications and work instructions • tools and equipment appropriate to activity • support materials appropriate to activity • workplace instructions relating to safe work practices and addressing hazards and emergencies • material safety data sheets • research resources, including industry related systems information. <p>Reasonable adjustments for people with disabilities must be made to assessment processes where required. This could include access to modified equipment and other physical resources, and the provision of appropriate assessment support.</p>	<ul style="list-style-type: none"> • confirm that competency is verified and able to be transferred to other circumstances and environments. <p>Validity and sufficiency of evidence <u>requires</u> that:</p> <ul style="list-style-type: none"> • competency will need to be demonstrated over a period of time reflecting the scope of the role and the practical requirements of the workplace • where the assessment is part of a structured learning experience the evidence collected must related to a number of performance assessment at different points in time and separated by further learning and practice, with a decision on competency only taken at the point when the assessor has complete confidence in the person's demonstrated ability and applied knowledge • all assessment that is part of a structured learning experience must include a combination of direct, indirect and supplementary evidence. <p>Assessment processes and techniques should as far as is practical take into account the language, literacy and numeracy capacity of the candidate in relation to the competency being assessed.</p> <p>Supplementary evidence of competency may be obtained from relevant authenticated documentation from third parties, such as existing supervisors, team leaders or specialist training staff.</p>

Required Skills and Knowledge		HSC Requirements and Advice
This section describes the skills and knowledge required for this unit.		
<p>Required skills</p> <p>Required skills for this unit are:</p> <ul style="list-style-type: none"> • communication skills to: <ul style="list-style-type: none"> – determine requirements – enable clear and direct communication, using questioning to identify and confirm requirements, share information, listen and understand – follow instructions – read and interpret: <ul style="list-style-type: none"> ▪ documentation from a variety of sources ▪ drawings and specification – report faults – use language and concepts appropriate to cultural differences – use and interpret non-verbal communication, such as hand signals – written skills to record measurements, calculations and quantities • identifying and accurately reporting to appropriate personnel any faults in tools, equipment or materials • numeracy skills to apply measurements, calculations and geometry • organisational skills, including the ability to plan and set out work • teamwork skills to work with others to action tasks and relate to people from a range of cultural and ethnic backgrounds and with varying physical and mental abilities • technological skills to: <ul style="list-style-type: none"> – use a range of mobile technology, such as two-way radio and mobile phones – voice and hand signals to access and understand site-specific instructions. 	<p>Required knowledge</p> <p>Required knowledge for this unit is:</p> <ul style="list-style-type: none"> • basic calculators • communication devices • company procedures • construction terminology • job safety analysis (JSA) and safe work method statements • measuring, calculating, geometry and determination of quantities • processes for care of measuring equipment • project quality requirements • site and equipment safety (OHS) requirements • tolerances. 	<p>Key Terms and Concepts</p> <ul style="list-style-type: none"> • areas • basic calculators • calculating equipment • calculation factors • geometry • measurements • measuring equipment • safety • volumes • tolerances

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
1 Plan and prepare.	1.1 Work instructions are confirmed and applied using relevant <i>information</i> .	<p>The Range Statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. <i>Bold italicised</i> wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p> <p><i>Information includes:</i></p> <ul style="list-style-type: none"> • diagrams or sketches • instructions issued by authorised organisational or external personnel • manufacturer specifications and instructions • maps • material safety data sheets (MSDS) • memos • organisation's work specifications and requirements • plans and specifications • regulatory and legislative requirements • relevant Australian standards • safe work procedures or equivalent • signage • verbal or written and graphical instructions • work bulletins • work schedules. 	<p>Learning experiences for the HSC must address:</p> <p>A range of sources for work instructions and procedures including:</p> <ul style="list-style-type: none"> • work schedule • plans/specifications • diagrams/sketches • job card/job sheet • job safety analysis (JSA)/safe work method statement • standard operating procedures (SOP) • material safety data sheets (MSDS) • regulations/legislation/codes of practice • Australian Standards • workplace/company/site policies and procedures • workplace/company bulletins/memos • manufacturer specifications and instructions • client requirements. <p>An awareness of various modes of communication to receive work instructions including:</p> <ul style="list-style-type: none"> • verbal <ul style="list-style-type: none"> - face-to-face (supervisor to employee) - telephone/mobile phone/pager - two-way radio - on-site meeting - voice signals • written communication <ul style="list-style-type: none"> - work plan/job card - memo/message - job description/statement - workplace form - roster - facsimile - email - intranet • non-verbal <ul style="list-style-type: none"> - gestures - signals - signage - diagrams.

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
			<p>A basic overview of the role of employees in quality assurance.</p> <p>Strategies for obtaining, understanding and clarifying instructions/procedures including:</p> <ul style="list-style-type: none"> • correct sourcing and selection of information • consulting appropriate personnel • active listening • open and closed questions.
	<p>1.2 <i>Safety (OHS)</i> requirements are obtained from site safety plan, other regulatory specifications or legal obligations, and are applied.</p>	<p><i>Safety (OHS)</i> is to be in accordance with state or territory legislation and regulations, organisational safety policies and procedures, and project safety plan and may include:</p> <ul style="list-style-type: none"> • clothing and equipment • handling of materials • hazard control • hazardous materials and substances • organisational first aid • use of firefighting equipment • use of tools and equipment • workplace environment and safety. 	<p>Learning experiences for the HSC must address:</p> <p>Safe work practices and procedures for the construction industry.</p> <p>Project/site safety plan.</p>
	<p>1.3 Measuring and calculating <i>equipment</i> selected to carry out tasks is consistent with job requirements, is checked for serviceability, and any faults are rectified or reported.</p>	<p><i>Equipment includes:</i></p> <ul style="list-style-type: none"> • calculators and laser equipment • rulers • tape measures • trundle wheels. 	<p>Learning experiences for the HSC must address:</p> <p>General features, purpose, maintenance, working knowledge and the safe use of a range of measuring and calculating tools and equipment.</p> <p>Procedures and documentation for identifying faulty tools and equipment including those with:</p> <ul style="list-style-type: none"> • malfunctions • worn, broken or missing components. <p>The importance of acting within level of authority in terms of:</p> <ul style="list-style-type: none"> • taking initiative • problem-solving • decision-making. <p>Solutions to a range of potential faults.</p>

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
			Personnel to whom problems should be reported: <ul style="list-style-type: none"> • supervisor/manager • supplier/manufacturer. Reporting of faults including: <ul style="list-style-type: none"> • formal/informal • verbal/written.
2 Obtain measurements.	2.1 Method of obtaining the measurement is selected and applied.		
	2.2 <i>Measurements</i> are obtained using a rule or tape accurate to 1mm.	<i>Measurements are to:</i> <ul style="list-style-type: none"> • be in metric scale • cover all necessary calculations. 	Learning experiences for the HSC must address: Appropriate units of measurement and calculations.
	2.3 Measurements, including <i>areas and volumes</i> , are confirmed and recorded.	<i>Areas and volumes include:</i> <ul style="list-style-type: none"> • calculating regular and irregular shapes, such as rectangles, squares, circles, triangles, trapeziums, cubes, cones, pyramids and cylinders that represent calculations taken in a construction environment. 	Learning experiences for the HSC must address: The importance of accurate measurements. Documentation typical to the construction industry for recording material requirements for projects. The importance of recording information that is <ul style="list-style-type: none"> • clear • legible • accurate • concise • contains appropriate use of industry terminology and abbreviations.
3 Perform calculations.	3.1 Appropriate <i>calculation factors</i> are determined and correct method is selected for achieving required result.	<i>Calculation factors:</i> <ul style="list-style-type: none"> • <u>include</u> length, area, weight, height, width, depth, volume, mass, scales, ratios, perimeters, quantities, numbers, grade, percentages, addition, subtraction, multiplication and division • <u>are to</u> be performed manually and with the aid of a calculator. 	

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
	3.2 <i>Material quantities</i> for the project are correctly calculated using appropriate factors.	<p><i>Material quantities</i> are to be:</p> <ul style="list-style-type: none"> • calculated in either packed, bulk, loose or compacted states • converted to volumes in the other states. 	<p>Learning experiences for the HSC must address:</p> <p>An awareness of the consequences of incorrect measurements and calculations for:</p> <ul style="list-style-type: none"> • the client • the organisation/company • the environment.
	3.3 Results are confirmed and recorded.		<p>Learning experiences for the HSC must address:</p> <p>The importance of accurate calculations.</p>
4 Estimate approximate quantities.	4.1 Calculations for determining material requirements are taken.		<p>Learning experiences for the HSC must address:</p> <p>An understanding of:</p> <ul style="list-style-type: none"> • metric • scale • ratios • estimations • tolerances • project quality requirements • waste minimisation.
	4.2 Appropriate formulas for calculating quantities are selected.		<p>Learning experiences for the HSC must address:</p> <p>Knowledge of a range of mathematical formulae commonly used for the calculation of quantities in a construction environment.</p>
	4.3 Quantities are estimated from the calculations taken.		<p>Learning experiences for the HSC must address:</p> <p>Selection and application of mathematical formulae for calculation of quantities.</p>
	4.4 Material quantities for the project are calculated, confirmed and recorded within enterprise tolerances.		

Training Package	Construction, Plumbing and Services Integrated Framework (CPC08)		HSC Requirements and Advice
Unit title	Read and interpret plans and specifications		
Unit code	Competency field	Unit sector	HSC Indicative Hours
CPCCCM2001A	Common	Construction	20

Unit descriptor	This unit of competency specifies the outcomes required to read and interpret plans and specifications relevant to construction operations. It includes the identification of types of plans and drawings and their functions, the recognition of commonly used symbols and abbreviations, the identification of key features and specifications on a site plan, the comprehension of written job specifications and the recognition of document status and amendment detail.
Prerequisite units	Nil
Co-requisite units	Nil
Application of the unit	This unit of competency supports achievement of basic reading and interpretation of plans and specifications commonly used in the construction industry.
Employability skills	This unit contains employability skills.

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	Context of and specific resources for assessment	Method of assessment
This unit of competency could be assessed in the workplace or a close simulation of the workplace environment, provided that simulated or project-based assessment techniques fully replicate construction workplace conditions, materials, activities, responsibilities and procedures.	<p>A person who demonstrates competency in this unit <u>must</u> be able to provide evidence of the ability to:</p> <ul style="list-style-type: none"> locate, interpret and apply relevant information, standards and specifications comply with site safety plan, OHS regulations and state and territory legislation applicable to workplace operations comply with organisational policies and procedures, including quality requirements communicate and work effectively and safely with others 	<p>This competency is to be assessed using standard and authorised work practices, safety requirements and environmental constraints.</p> <p>Assessment of essential underpinning knowledge will usually be conducted in an off-site context.</p> <p>Assessment is to comply with relevant regulatory or Australian standards' requirements.</p> <p>Resource implications for assessment</p>	<p>Assessment methods <u>must</u>:</p> <ul style="list-style-type: none"> satisfy the endorsed Assessment Guidelines of the Construction, Plumbing and Services Integrated Framework Training Package include direct observation of tasks in real or simulated work conditions, with questioning to confirm the ability to consistently identify and correctly interpret the essential underpinning knowledge required for practical application reinforce the integration of employability skills with workplace tasks and job roles

		include:	
	Critical aspects for assessment and evidence required to demonstrate competency in this unit cont/d	Context of and specific resources for assessment cont/d	Method of assessment cont/d
	<ul style="list-style-type: none"> • <i>for a minimum of two different projects, read and interpret the project plans, including:</i> <ul style="list-style-type: none"> - <i>confirmation of amendment status and drawings confirmed 'for construction'</i> - <i>orientation of plans to the ground</i> - <i>six key features on both the plan and the site</i> - <i>confirmation of six items of information from the title block of the project plans</i> - <i>six construction dimensions, levels and locations from the project plans</i> - <i>six ancillary works dimensions, levels and locations from the project plans</i> • <i>for a minimum of two formal specifications, identify the dimensions, material requirements and processes to be followed.</i> 	<ul style="list-style-type: none"> • an induction procedure and requirement • realistic tasks or simulated tasks covering the mandatory task requirements • relevant specifications and work instructions • tools and equipment appropriate to activity • support materials appropriate to activity • workplace instructions relating to safe work practices and addressing hazards and emergencies • material safety data sheets • research resources, including industry related systems information. <p>Reasonable adjustments for people with disabilities must be made to assessment processes where required. This could include access to modified equipment and other physical resources, and the provision of appropriate assessment support.</p>	<ul style="list-style-type: none"> • confirm that competency is verified and able to be transferred to other circumstances and environments. <p>Validity and sufficiency of evidence <u>requires</u> that:</p> <ul style="list-style-type: none"> • competency will need to be demonstrated over a period of time reflecting the scope of the role and the practical requirements of the workplace • where the assessment is part of a structured learning experience the evidence collected must related to a number of performance assessment at different points in time and separated by further learning and practice, with a decision on competency only taken at the point when the assessor has complete confidence in the person's demonstrated ability and applied knowledge • all assessment that is part of a structured learning experience must include a combination of direct, indirect and supplementary evidence. <p>Assessment processes and techniques should as far as is practical take into account the language, literacy and numeracy capacity of the candidate in relation to the competency being assessed.</p> <p>Supplementary evidence of competency may be obtained from relevant authenticated documentation from third parties, such as existing supervisors, team leaders or specialist training staff.</p>

Required Skills and Knowledge		HSC Requirements and Advice
This section describes the skills and knowledge required for this unit.		
<p>Required skills</p> <p>Required skills for this unit are:</p> <ul style="list-style-type: none"> • communication skills to: <ul style="list-style-type: none"> – enable clear and direct communication, using questioning to identify and confirm requirements, share information, listen and understand – read and interpret: <ul style="list-style-type: none"> ▪ documentation from a variety of sources ▪ drawings and specification • use language and concepts appropriate to cultural differences • use and interpret non-verbal communication, such as hand signals • identifying and accurately reporting to appropriate personnel any faults in tools, equipment or materials • numeracy skills to apply measurements and make calculations, including heights, areas, volumes and grades • organisational skills, including the ability to plan and set out work • teamwork skills to work with others to action tasks and relate to people from a range of cultural and ethnic backgrounds and with varying physical and mental abilities • technological skills to: <ul style="list-style-type: none"> – use a range of mobile technology, such as two-way radio and mobile phones – voice and hand signals to access and understand site-specific instructions. 	<p>Required knowledge</p> <p>Required knowledge for this unit is:</p> <ul style="list-style-type: none"> • basic calculations of heights, areas, volumes and grades • commonly used construction symbols and abbreviations • construction terminology • drawing conventions • features of plans and elevations, including direction, scale, key, contours, symbols and abbreviations • job safety analysis (JSA) and safe work method statements • key features of formal job specifications • processes for application of scales in plan preparation and interpretation • project quality requirements • site and equipment safety (OHS) requirements • techniques for orienting/confirming the orientation of a plan. 	<p>Key Terms and Concepts</p> <ul style="list-style-type: none"> • amendments • dimensions • drawing conventions • environmental requirements • orientation • plans and drawings • project documentation • quality requirements • specifications • symbols and abbreviations • tolerances.

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
1 Identify types of drawings and their functions.	1.1 Main types of <i>plans and drawings</i> used in the construction sector of the industry are identified.	<p>The Range Statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. <i>Bold italicised</i> wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p> <p><i>Plans and drawings include:</i></p> <ul style="list-style-type: none"> • construction plans • cross-sectional plans • dimensions and notes • illustrations • longitudinal plans • project specifications • site plans • structural detail and specification providing illustrations and dimensions. 	<p>Learning experiences for the HSC must address:</p> <p>An awareness of the use of a range of technical drawings/plans.</p> <p>An understanding of the purpose of project documentation.</p>
	1.2 <i>Key features</i> and functions of each type of drawing are identified.	<p><i>Key features</i> of plans and specifications include:</p> <ul style="list-style-type: none"> • characteristics • compatibility • construction • location • pattern dimension • quantities • sizes • type of product or service. 	<p>Learning experiences for the HSC must address:</p> <p>The function and key features of a range of drawings including:</p> <ul style="list-style-type: none"> • project plan <ul style="list-style-type: none"> - concept drawings - initial planning - time line details - major features of project • site plan <ul style="list-style-type: none"> - orientation - position of structures and ancillary works - boundary dimensions - setback from boundaries - contour lines • construction plans <ul style="list-style-type: none"> - overall dimensions - position of doors and windows - thickness and type of wall structures

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
			<ul style="list-style-type: none"> - position of services/outlets/switches - roofline • longitudinal plans <ul style="list-style-type: none"> - building design - position of doors and windows - floor and ceiling heights - windows sill heights - roof and external wall finishes - ground line • cross-sectional views <ul style="list-style-type: none"> - detail of features at the position of section - wall and floor/sub-floor structure and dimensions - roof structure and dimensions - structural members • detail drawings <ul style="list-style-type: none"> - notes and dimensions - clarify construction/location - improved scale for finer detail • specifications/illustrations and notes <ul style="list-style-type: none"> - details of practices and methods of construction and handling materials - information regarding material and associated properties - list compatibility of products and methods - identifies sources of information and warnings relevant to the product or process.
	1.3 <i>Quality requirements</i> of company operations are recognised and adhered to.	<i>Quality requirements</i> include relevant regulations, <u>including</u> : <ul style="list-style-type: none"> • Australian standards • internal company quality policy and standards • manufacturer specifications, where specified • workplace operations and procedures. 	Learning experiences for the HSC must address: An awareness of the role of employees in quality assurance.
	1.4 <i>Environmental requirements</i> and controls are identified from job plans, specifications and environmental plan.	<i>Environmental requirements</i> <u>include</u> : <ul style="list-style-type: none"> • clean-up management • waste management. 	Learning experiences for the HSC must address: An awareness of workplace/company site environmental policy and project environment management plan.

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
2 Recognise amendments.	2.1 Title panel of <i>project documentation</i> is checked to verify latest amendments to drawing.	<p><i>Project documentation</i> includes:</p> <ul style="list-style-type: none"> • contracts • drawings • schedule of rates • specifications • standard procedures and practices • supplementary specifications • work schedules. 	<p>Learning experiences for the HSC must address:</p> <p>Identification of the components of the title panel including:</p> <ul style="list-style-type: none"> • date/version • drawing number • site location • architect • contractor • client • scale • number of pages.
	2.2 Amendments to <i>specifications</i> are checked to ensure currency of <i>information</i> and conveyed to others where appropriate.	<p><i>Specifications</i> include:</p> <ul style="list-style-type: none"> • detail relating to materials and quality of work, quality assurance, nominated subcontractors, and provision of site access/facilities • details relating to performance, including: <ul style="list-style-type: none"> - characteristics - material types - standards of work - tolerances - treatments and finishes. <p><i>Information</i> includes:</p> <ul style="list-style-type: none"> • diagrams or sketches and graphics • instructions issued by authorised organisational or external personnel • manufacturer specifications and instructions • maps • material safety data sheets (MSDS) • memos • organisation work specifications and requirements. • plans and specifications • regulatory and legislative requirements pertaining to operations and the environment • relevant Australian standards • safe work procedures related to construction site operations 	<p>Learning experiences for the HSC must address:</p> <p>Importance of ensuring all amendments are current.</p> <p>Procedures for confirmation of amendment status on drawings confirmed 'for construction'.</p>

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
		<ul style="list-style-type: none"> • signage • verbal or written and graphical instructions • work bulletins • work schedules. 	
3 Recognise commonly used symbols and abbreviations.	3.1 Construction symbols and abbreviations are recognised.		Learning experiences for the HSC must address: Knowledge of drawing conventions for a range of symbols and abbreviations to indicate: <ul style="list-style-type: none"> • materials identification • services (gas, electricity, plumbing) • scale • projection • dimensions • direction • contours and datum • orientation/direction of north • situation of structures on site • inclusions.
	3.2 Legend is located on project drawings, and symbols and abbreviations are correctly interpreted.		
4 Locate and identify key features on a site plan.	4.1 Orientation of the plan with the site is achieved.		Learning experiences for the HSC must address: Procedures/techniques to orient/confirm the orientation of a plan with the site: <ul style="list-style-type: none"> • location of site with regard to nearest street/ intersection • compass direction • relative position of structures on site • setback from boundaries • key features located in relation to structures.
	4.2 Key features of the site are identified and located.		Learning experiences for the HSC must address: Key features including: <ul style="list-style-type: none"> • boundaries • contours

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
	<p>4.3 Access to site is gained and services, main features, contours and datum are identified.</p>		<ul style="list-style-type: none"> • services • protected areas/easements • access points • datum point. <p>Learning experiences for the HSC must address:</p> <p>Safe work practices and procedures for the construction industry.</p> <p>An awareness of the requirements of visitors to the site with regard to:</p> <ul style="list-style-type: none"> • occupational health and safety (OHS) • rights of access/permission to be on site. <p>Standard symbols/abbreviations/terminology used in plans and drawings to indicate:</p> <ul style="list-style-type: none"> • services • main features • contours • datum • reduced level (rl).
<p>5 Identify project requirements</p>	<p>5.1 Dimensions for project and nominated locations are identified.</p> <p>5.2 Construction types and dimensions for nominated locations are identified.</p> <p>5.3 Environmental controls and locations are identified.</p> <p>5.4 Location, dimensions and tolerances for ancillary works are identified.</p>		<p>Learning experiences for the HSC must address:</p> <p>Appropriate units of measurement and calculations.</p> <p>Importance of accurate measurements from datum point and correct location of boundaries.</p> <p>Learning experiences for the HSC must address:</p> <p>Standard symbols/abbreviations/terminology used in plans and drawings to indicate:</p> <ul style="list-style-type: none"> • construction types • environmental controls. <p>Understanding of levels and contours.</p> <p>Learning experiences for the HSC must address:</p> <p>Standard symbols/abbreviations/terminology used in</p>

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
			plans and drawings to indicate ancillary works. Positioning of ancillary works considering: <ul style="list-style-type: none"> • tolerances <ul style="list-style-type: none"> - drainage falls - boundary setback - distance from services • council requirements.
6 Read and interpret job specifications.	6.1 Job specifications are identified from drawings, notes and descriptions.		
	6.2 Standards of work, finishes and tolerances are identified from the project specifications.		
	6.3 <i>Material attributes</i> are identified from specifications.		

DRAFT for Consultation

Training Package	Construction, Plumbing and Services Integrated Framework (CPC08)		HSC Requirements and Advice
Unit title	Work safely in the construction industry		
Unit code	Competency field	Unit sector	HSC Indicative Hours
CPCCOHS1001A	Common	Construction	15
Unit descriptor	This unit of competency specifies the outcomes required to undertake Occupational Health and Safety (OHS) induction training within the construction industry. It requires the ability to demonstrate personal awareness of OHS legislative requirements, and the basic principles of risk management and prevention of injury and illness in the construction industry. Licensing requirements will apply to this unit of competency depending on the regulatory requirements of each jurisdiction.		
Prerequisite units	Nil		
Co-requisite units	Nil		
Application of the unit	This unit of competency supports the attainment of the basic OHS knowledge required prior to undertaking designated work tasks within any of the sectors within the construction industry. The unit relates directly to the general induction training program specified by the National Code of Practice for Induction Training for Construction Work (ASCC 2006).		
Employability skills	This unit contains employability skills.		

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	Context of and specific resources for assessment	Method of assessment
Nil	<p>Evidence must confirm personal awareness of the following:</p> <ul style="list-style-type: none"> • applicable OHS legislative and safety requirements for construction work including duty of care • the range of common construction hazards and procedures for the assessment of risk and application of the hierarchy of control • OHS communication processes, information and documentation including the role of OHS committees and representatives, the meaning of common safety signs and symbols, and procedures for reporting hazards, incidents and injuries • general procedures for responding to incidents and emergencies including evacuation, first aid, fire safety equipment and PPE. 	<p>Resources must be available to support the program including participant materials and other information or equipment related to the skills and knowledge covered by the program.</p> <p>It is recommended that the assessment tool designed specifically to support this unit of competency will provide consistency in assessment outcomes.</p> <p>Where applicable, physical resources should include equipment modified for people with disabilities.</p> <p>Access must be provided to appropriate assessment support when required.</p> <p>Assessment processes and techniques must be culturally appropriate, and appropriate to the oracy, language and literacy capacity of the assessee and the work being performed.</p> <p>In all cases where practical assessment is used it will be combined with targeted questioning to assess the underpinning knowledge. Questioning will be undertaken in such a manner as is appropriate to the oracy, language and literacy levels of the operator, any cultural issues that may affect responses to the questions, and reflecting the requirements of the competency and the work being performed.</p>	<p>Assessment methods may include more than one of the following:</p> <ul style="list-style-type: none"> • practical assessment • oral questioning • written test • work-based activities • simulated project based activity.

Required Skills and Knowledge		HSC Requirements and Advice
This section describes the skills and knowledge required for this unit.		
<p>Required skills</p> <p>Required skills for this unit are:</p> <ul style="list-style-type: none"> • communication skills to: <ul style="list-style-type: none"> - clarify OHS legislative requirements - verbally report construction hazards and risks - ask effective questions - relay information to others - discuss OHS issues and information • comprehension skills to: <ul style="list-style-type: none"> - explain the basic OHS legislative requirements which will be applicable to own work - explain the meaning of safety signs and symbols - identify common construction hazards - discuss the basic principles of risk management. 	<p>Required knowledge</p> <p>Required knowledge for this unit is:</p> <ul style="list-style-type: none"> • applicable Commonwealth, State or Territory OHS legislation, regulations, standards, codes of practice and industry standards/ guidance notes relevant to own work, role and responsibilities • basic principles of risk management and assessment for construction work • common construction hazards • common construction safety signage and its meanings • general construction emergency response and evacuation procedures • general construction work activities that require licenses, tickets or certificates of competency • general first aid response requirements • general procedures for raising OHS issues • general procedures for reporting OHS hazards, accidents, incidents, emergencies, injuries, near misses and dangerous occurrences • general procedures for responding to hazards, incidents and injuries • general workers' compensation and injury management requirements • OHS hierarchy of controls • OHS responsibilities and rights of duty holders, including: <ul style="list-style-type: none"> - persons in control of construction work/projects - employers and self-employed persons - supervisors - employees - designers - inspectors - manufacturers and suppliers • own responsibilities to comply with safe work practices relating to: <ul style="list-style-type: none"> - housekeeping - identification of hazards - preventing bullying or harassment - smoking - use of amenities - use of drugs and alcohol • role of OHS committees and representatives • types of common personal protective equipment and fire safety equipment • types of OHS information and documentation. 	<p>Key Terms and Concepts</p> <ul style="list-style-type: none"> • construction hazards • duty of care • fire safety equipment • hazards • OHS • OHS legislative requirements • personal protective equipment • responding to incidents and emergencies • risk management • safe work practices • safety signs and symbols

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
1 Identify OHS legislative requirements.	1.1 Applicable <i>OHS legislative requirements</i> relevant to own work, role and responsibilities are identified and explained.	<p>The Range Statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. <i>Bold italicised</i> wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p> <p><i>OHS legislative requirements relate to:</i></p> <ul style="list-style-type: none"> • Australian standards • construction industry OHS standards and guidelines • duty of care • health and safety representatives, committees and supervisors • licences, tickets or certificates of competency • National Code of Practice for Induction Training for Construction Work • national safety standards • OHS and welfare Acts and regulations • safety codes of practice. 	<p>Learning experiences for the HSC must address:</p> <p>An acknowledgement that OHS is everyone's responsibility in the workplace.</p> <p>An awareness of the differences between:</p> <ul style="list-style-type: none"> • an act • a regulation • codes of practice. <p>A basic understanding of OHS legislation and codes of practice including:</p> <ul style="list-style-type: none"> • <i>Occupational Health and Safety Act 2000</i> (NSW) • <i>Occupational Health and Safety Regulations 2001</i> (NSW) • Codes of practice (WorkCover NSW) <ul style="list-style-type: none"> - OHS Consultation - Risk Assessment - OHS Induction Training for Construction - Amenities for Construction Work • <i>Workers Compensation Act 1987</i> (NSW) and amendments • <i>Workplace Injury Management and Workers Compensation Act 1998</i> (NSW). <p>An awareness of the possible consequences of failure to observe OHS policies, procedures and legislative requirements.</p>
	1.2 <i>Duty of care requirements</i> are identified.	<p><i>Duty of care requirements relate to:</i></p> <ul style="list-style-type: none"> • legal responsibility under duty of care to do everything reasonably practicable to protect others from harm • own responsibilities to comply with safe work practices, including activities that require licences, tickets or certificates of competency • relevant state OHS requirements, including employers and self-employed persons, persons in control of the work site, construction supervisors, designers, manufacturers and suppliers, construction workers, subcontractors and inspectors. 	<p>Learning experiences for the HSC must address:</p> <p>Define:</p> <ul style="list-style-type: none"> • duty of care. <p>An awareness of employer responsibilities under the OHS Act including the following:</p> <ul style="list-style-type: none"> • maintaining places of work under their control in a safe condition, and ensuring safe entrances and exits • making arrangements to ensure the safe handling, storage and transport of plant and substances • providing and maintaining systems of work and work environments that are safe and without risks to health

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
			<ul style="list-style-type: none"> • providing information, instruction, training and supervision necessary to ensure the health and safety of employees • providing adequate facilities for the welfare of employees • must not require employees to pay for anything done or provided to meet the requirements of the Act or Regulation • must consult with employees about OHS matters to enable them to contribute to decisions affecting their health, safety and welfare • must ensure the health and safety of visitors or people working who are not employees. <p>An awareness of employee responsibilities under the OHS Act including the following:</p> <ul style="list-style-type: none"> • employees must take reasonable care of the health and safety of themselves and others • employees must cooperate with employers in their efforts to comply with occupational health and safety requirements • employees must not interfere with or misuse things provided for the health, safety or welfare of persons at work • employees must not obstruct attempts to give aid or attempts to prevent serious risk to the health and safety of a person at work • employees must not refuse a reasonable request to assist in giving aid or preventing a risk to health and safety • employees must not disrupt workplace by creating false health or safety fears.
	<p>1.3 Own responsibilities to comply with <i>safe work practices</i> are identified and explained.</p>	<p><i>Safe work practices include:</i></p> <ul style="list-style-type: none"> • access to site amenities, such as drinking water and toilets • drugs and alcohol at work • general requirements for safe use of plant and equipment • general requirements for use of personal protective equipment and clothing • housekeeping to ensure a clean, tidy and 	<p>Learning experiences for the HSC must address:</p> <p>Safe work practices and procedures including:</p> <ul style="list-style-type: none"> • OHS induction training (general, work activity and site-specific) • selection, use and maintenance of personal protective equipment (PPE) • access to appropriate communication devices • selection of appropriate tools for the task

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
		<ul style="list-style-type: none"> • safer work area • preventing bullying and harassment • smoking in designated areas • storage and removal of debris. 	<ul style="list-style-type: none"> • correct use, maintenance and storage of tools equipment and machinery • correct handling, application, labelling, transport and storage of hazardous and non-hazardous materials • safe posture (sitting, standing, bending and lifting) • correct manual handling (lifting and transferring) • location and use of safety alarms and emergency exits • correct use of fire fighting equipment: <ul style="list-style-type: none"> - fire blanket - fire extinguishers <ul style="list-style-type: none"> ▪ class and type of fire ▪ type of extinguisher and identifying colour - fire hydrant and hose • hazard identification and risk control • basic first aid training and access to first aid kits • access to sufficient drinking water • procedures to follow in the event of an emergency • effective communication and teamwork • adherence to work instructions, workplace/ company policies and procedures and standard operating procedures • knowledge of construction activities that require licences or permits • housekeeping/clean-up procedures, including waste disposal, with proper consideration of OHS and the environment.
2 Identify construction hazards and control measures.	2.1 Basic <i>principles of risk management</i> are identified.	<p><i>Risk</i> relates to:</p> <ul style="list-style-type: none"> • likelihood of a hazard causing injury or harm. <p><i>Principles of risk management</i> include:</p> <ul style="list-style-type: none"> • assessing the risks involved • consulting and reporting ensuring the involvement of relevant workers • controlling the hazard • identifying hazards • reviewing to identify change or improvement. 	<p>Learning experiences for the HSC must address:</p> <p>An understanding of risk management:</p> <ul style="list-style-type: none"> • identify hazards • assess associated risks • use appropriate control measures to eliminate or minimise risks • monitor and review the control measures.

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
	<p>2.2 <i>Common construction hazards</i> are identified and discussed.</p>	<p><i>Hazard relates to:</i> anything (including an intrinsic property of a thing) or situation with the potential to cause injury or harm.</p> <p><i>Common construction hazards include:</i></p> <ul style="list-style-type: none"> • confined spaces • electrical safety • excavations, including trenches • falling objects • hazardous substances and dangerous goods • HIV and other infectious diseases • hot and cold working environments • manual handling • noise • plant and equipment • traffic and mobile plant • unplanned collapse • ultraviolet (UV) radiation • working at heights. 	<p>Learning experiences for the HSC must address:</p> <p>Identification of potential hazards to:</p> <ul style="list-style-type: none"> • self • visitors • colleagues • the general public. <p>A range of hazards including:</p> <ul style="list-style-type: none"> • tools, equipment, machinery and plant <ul style="list-style-type: none"> - operation - maintenance • manual handling • materials in use <ul style="list-style-type: none"> - spills - leakages • work processes/practices <ul style="list-style-type: none"> - simultaneous operations - repetitious tasks • work environment <ul style="list-style-type: none"> - poor/inadequate lighting - inadequate amenities - inadequate equipment - poor housekeeping - wet or slippery floors - fire, chemical and electrical hazards - damaged floor coverings - falling objects - noise - dust - temperature variations - ultraviolet (UV) radiation - overhanging beams and protrusions - unplanned collapse - poor ventilation • working <ul style="list-style-type: none"> - alone - with electricity - in confined spaces - in and around excavations - near traffic - near water - at heights

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
			<ul style="list-style-type: none"> - with liquids under pressure - with compressed air • human factors <ul style="list-style-type: none"> - stress - violence/bullying - playing practical jokes - fatigue - failure to follow procedures - lack of training or experience - lack of supervision - carelessness - poor personal health/hygiene - medical/health conditions - using wrong techniques/procedures - ignoring safety rules/signs - taking short cuts - knowingly using unsafe tools/equipment.
	<p>2.3 <i>Measures for controlling</i> hazards and risks are identified.</p>	<p><i>Measures for controlling</i> risk to eliminate or minimise hazards in accordance with the hierarchy of control <u>include</u>:</p> <ul style="list-style-type: none"> • elimination • substitution • isolation • engineering control • administrative control • personal protective equipment. 	<p>Learning experiences for the HSC must address:</p> <p>An understanding of the hierarchy of risk control measures:</p> <ul style="list-style-type: none"> • Level 1 – eliminate the risk (such as discontinue the activity or not use the equipment) • Level 2 – minimise the risk by: <ul style="list-style-type: none"> - substituting the system of work/equipment (with something safer) - modifying the system of work/equipment (to make it safer) - isolating the hazard (such as introducing a restrictive work area) - introducing engineering control (such as guarding, fencing or safety screens) • Level 3 – other controls: <ul style="list-style-type: none"> - adopt administrative controls and safe work practices - use PPE.
<p>3 Identify OHS communication and reporting processes.</p>	<p>3.1 <i>OHS communication processes, information and documentation</i> are identified and discussed.</p>	<p><i>OHS communication processes</i> <u>include</u>:</p> <ul style="list-style-type: none"> • discussions with OHS representatives • OHS meetings • OHS notices, newsletters, bulletins and correspondence 	<p>Learning experiences for the HSC must address:</p> <p>An awareness of sources of information regarding occupational health and safety (OHS) in the workplace including:</p>

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
		<ul style="list-style-type: none"> • OHS participative arrangements • processes for raising OHS issues • toolbox talks • workplace consultation relating to OHS issues and changes. <p><i>OHS information and documentation includes:</i></p> <ul style="list-style-type: none"> • accident and incident reports • Acts and regulations • Australian standards • codes of practice • construction documentation and plans • emergency information contact • evacuation plans • guidance notes • job safety analyses • labels • material safety data sheets (MSDS) • proformas for reporting hazards, incidents and injuries • reports of near misses and dangerous occurrences • risk assessments • safe work method statements • safety meeting minutes • site safety inspection reports. 	<ul style="list-style-type: none"> • construction documentation and plans • safe work method statements • material safety data sheets (MSDS) • job safety analysis (JSA) • accident, incident and injury reports and proforma's • risk assessments. <p>The concept of 'participation' and 'consultation' as it relates to workplace safety and employee rights and responsibilities.</p> <p>An understanding of the election/formation, roles and responsibilities of the OHS representatives or committee in the workplace.</p>
	3.2 Role of <i>designated OHS personnel</i> is identified and explained.	<p><i>Designated OHS personnel includes:</i></p> <ul style="list-style-type: none"> • first aid officers • OHS committee members • OHS representatives • supervisors. 	<p>Learning experiences for the HSC must address:</p> <p>Knowledge of designated personnel in relation to hazard identification and control within the workplace/organisation.</p>
	3.3 <i>Safety signs and symbols</i> are identified and explained.	<p><i>Safety signs and symbols include:</i></p> <ul style="list-style-type: none"> • emergency information signs (e.g. exits, equipment and first aid) • fire signs (e.g. location of fire alarms and firefighting equipment) • hazard signs (e.g. danger and warning) • regulatory signs (e.g. prohibition, 	<p>Learning experiences for the HSC must address:</p> <p>Recognition, selection and use of standard OHS signs and symbols including:</p> <ul style="list-style-type: none"> • legislative requirements • meaning of colour and shape • appropriate placement and positioning.

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
	<p>3.4 Procedures and <i>relevant authorities</i> for reporting hazards, <i>incidents</i> and injuries are identified.</p>	<p>mandatory and limitation or restriction)</p> <ul style="list-style-type: none"> • safety tags and lockout (e.g. danger tags, out of service tags). <p>Relevant authorities include:</p> <ul style="list-style-type: none"> • emergency services (e.g. police, ambulance, fire brigade and emergency rescue) • OHS regulatory authority • supervisor. <p>Incidents include:</p> <ul style="list-style-type: none"> • accidents resulting in personal injury or damage to property • near misses or dangerous occurrences which do not cause injury but may pose an immediate and significant risk to persons or property, and need to be reported so that action can be taken to prevent recurrence, for example: <ul style="list-style-type: none"> • breathing apparatus malfunctioning to the extent that the user's health is in danger • collapse of the floor, wall or ceiling of a building being used as a workplace • collapse or failure of an excavation more than 1.5 metres deep (including any shoring) • collapse or partial collapse of a building or structure • collapse, overturning or failure of the load bearing of any scaffolding, lift, crane, hoist or mine-winding equipment • damage to or malfunction of any other major plant • electric shock • uncontrolled explosion, fire or escape of gas, hazardous substance or steam • any other unintended or uncontrolled incident or event arising from operations carried on at a workplace. 	<p>Learning experiences for the HSC must address:</p> <p>A basic understanding of the roles and functions of key bodies involved in OHS including:</p> <ul style="list-style-type: none"> • WorkCover NSW • ASCC • local councils • unions • professional associations. <p>How and when to report.</p> <p>Monitoring and reporting for OHS including:</p> <ul style="list-style-type: none"> • formal/informal • verbal • written <ul style="list-style-type: none"> - safety inspection reports - checklists - accident and incident reports - WorkCover NSW notification - registers/logs/files. <p>Knowledge of appropriate person(s) for OHS reporting.</p> <p>A definition of:</p> <ul style="list-style-type: none"> • accident • incident. <p>Causes of common workplace injuries including:</p> <ul style="list-style-type: none"> • lack of protection and safety equipment • slips, trips and falls • poor housekeeping • poor maintenance • inadequate lighting • spills • obstructions • faulty or incorrect equipment

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
			<ul style="list-style-type: none"> • poor ergonomics • inadequate instruction, training and supervision • personal factors including stress, tiredness and inappropriate behaviour • medical conditions including epilepsy, diabetes and asthma • unrealistic time frames • negligence • fatigue • exposure to toxic substances. <p>An awareness of a range of potential workplace injuries and conditions including:</p> <ul style="list-style-type: none"> • allergic reactions • dislocations and fractures • puncture wounds and cuts • eye injuries • crushing and amputation • sprains and strains • bites and stings • heat exhaustion • burns • shock.
4 Identify OHS incident response procedures.	4.1 <i>General procedures</i> for responding to incidents and <i>emergencies</i> are identified and explained.	<p><i>General procedures</i> for responding to incidents and emergencies <u>include</u>:</p> <ul style="list-style-type: none"> • basic emergency response (keep calm, raise alarm, obtain help) • evacuation • notification of designated OHS personnel and authorities • notification of emergency services (e.g. when and how) • referring to site emergency plans and documentation. <p><i>Emergencies</i> <u>include</u>:</p> <ul style="list-style-type: none"> • chemical spill • fire • injury to personnel • structural collapse 	<p>Learning experiences for the HSC must address:</p> <p>Types of emergency situations including:</p> <ul style="list-style-type: none"> • bomb threat • accident/serious injury/illness • fire • natural disaster • chemical/fuel spill • gas leak • power failure • unauthorised person(s) on site • robbery • equipment collapse • site specific critical incident. <p>An awareness of the primary role of personnel in an emergency including:</p> <ul style="list-style-type: none"> • first aid officer

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
		<ul style="list-style-type: none"> • toxic and/or flammable vapours emission • vehicle/mobile plant accident. 	<ul style="list-style-type: none"> • security officer • safety officer/safety representative principal contractor • OHS committee member • site/project manager • supervisor/team leader • emergency services • WorkCover NSW • union representative. <p>How and when to seek assistance.</p> <p>Knowledge of emergency services contact numbers:</p> <ul style="list-style-type: none"> • 000 – landline number • 112 – mobile phones. <p>An awareness of information required by emergency services attending the site including:</p> <ul style="list-style-type: none"> • location • nearest cross-street • nature of the incident • number of casualties • nature of injuries • contact name and number. <p>Knowledge of procedures to follow in the event of an emergency including:</p> <ul style="list-style-type: none"> • notification <ul style="list-style-type: none"> - appropriate authorities (emergency services and WorkCover NSW) - colleagues - supervisor • workplace/organisation policies and procedures <ul style="list-style-type: none"> - evacuate - secure building • reporting. <p>The importance of acting within level of authority in terms of:</p> <ul style="list-style-type: none"> • taking initiative • problem-solving • decision-making.

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
	4.2 Procedures for accessing first aid are identified.		
	4.3 Requirements for the selection and use of relevant <i>personal protective equipment</i> are identified and demonstrated.	<p><i>Personal protective equipment</i> includes:</p> <ul style="list-style-type: none"> • aprons • arm guards • eye protection • gloves • hard hat • hearing protection • high visibility retro reflective vests • protective, well fitting clothing • respiratory protection • safety footwear • UV protective clothing and sunscreen. 	<p>Learning experiences for the HSC must address:</p> <p>Use and application of a range of PPE.</p> <p>Selection of PPE:</p> <ul style="list-style-type: none"> • correct for the task • manufacturers' specifications for use • correct fitting • serviceability. <p>Importance of correctly fitting PPE.</p> <p>Maintenance of PPE according to manufacturer's instructions and workplace/organisation policy and procedures:</p> <ul style="list-style-type: none"> • cleaning and decontamination • correct storage • regular checks for damage • repair/replacement of worn, malfunctioning or damaged equipment/parts • disposal of single-use equipment.
	4.4 <i>Fire safety equipment</i> is identified and discussed.	<p><i>Fire safety equipment</i> includes:</p> <ul style="list-style-type: none"> • breathing apparatus • fire blankets • firefighting equipment. 	<p>Learning experiences for the HSC must address:</p> <p>Knowledge of fire fighting equipment:</p> <ul style="list-style-type: none"> • fire blanket • fire extinguishers <ul style="list-style-type: none"> - class and type of fire - type of extinguisher and identifying colour • fire hydrant and hose • breathing apparatus.

Training Package	Construction, Plumbing and Services Integrated Framework (CPC08)		HSC Requirements and Advice
Unit title	Apply OHS requirements, policies and procedures in the construction industry		
Unit code	Competency field	Unit sector	HSC Indicative Hours
CPCCOHS2001A	Common	Construction	10

Unit descriptor	This unit of competency specifies the outcomes required to carry out OHS requirements through safe work practices at any on or off-site construction workplace. It requires the performance of work in a safe manner through awareness of risks and work requirements, and the planning and performance of safe work practices with concern for personal safety and the safety of others.
Prerequisite units	Nil
Co-requisite units	Nil
Application of the unit	<p>This unit of competency covers fundamental OHS necessary to undertake work tasks within any sector in the construction industry. It includes the identification of hazardous materials, including asbestos, and compliance with legislated work safety practices. It does not cover removal of asbestos, which is a licensed activity.</p> <p>The unit relates directly to the general induction training program specified by the National Code of Practice for Induction Training for Construction Work (ASCC 2006) required to enter a construction work site. Completion of unit CPCCOHS1001A covers this requirement.</p>
Employability skills	This unit contains employability skills.

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	Context of and specific resources for assessment	Method of assessment
This unit of competency could be assessed in the workplace or a close simulation of the workplace environment, provided that simulated or project-based assessment techniques fully replicate construction workplace conditions, materials, activities, responsibilities and procedures.	<p>A person who demonstrates competency in this unit must be able to provide evidence of the ability to:</p> <ul style="list-style-type: none"> correctly locate, interpret and apply relevant information, standards and specifications comply with a site safety plan, organisational policies, OHS regulations 	<p>This competency is to be assessed using standard and authorised work practices, safety requirements and environmental constraints.</p> <p>Assessment of essential underpinning knowledge will usually be conducted in an off-site context.</p>	<p>Assessment methods <u>must</u>:</p> <ul style="list-style-type: none"> satisfy the endorsed Assessment Guidelines of the Construction, Plumbing and Services Integrated Framework Training Package include direct observation of tasks in real or simulated work conditions, with questioning to confirm the ability to

	<p>and state and territory legislation applicable to workplace operations, including quality requirements</p> <ul style="list-style-type: none"> • correctly identify ACM and policies and procedures for reporting this to designated personnel • effectively communicate and work safely with others • apply general procedures for responding to incidents and reporting hazards and injuries • select and use firefighting equipment to extinguish a simulated mechanical fire • evacuate a site through simulated response to an emergency, complying with workplace procedures. 	<p>Assessment is to comply with relevant regulatory or Australian standards' requirements.</p> <p>Resource implications for assessment include:</p> <ul style="list-style-type: none"> • an induction procedure and requirement • realistic tasks or simulated tasks covering the mandatory task requirements • relevant specifications and work instructions • tools and equipment appropriate to activity • support materials appropriate to activity • workplace instructions relating to safe work practices and addressing hazards and emergencies • material safety data sheets • research resources, including industry related systems information. <p>Reasonable adjustments for people with disabilities must be made to assessment processes where required. This could include access to modified equipment and other physical resources, and the provision of appropriate assessment support.</p>	<p>consistently identify and correctly interpret the essential underpinning knowledge required for practical application</p> <ul style="list-style-type: none"> • reinforce the integration of employability skills with workplace tasks and job roles • confirm that competency is verified and able to be transferred to other circumstances and environments. <p>Validity and sufficiency of evidence <u>requires</u> that:</p> <ul style="list-style-type: none"> • competency will need to be demonstrated over a period of time reflecting the scope of the role and the practical requirements of the workplace • where the assessment is part of a structured learning experience the evidence collected must related to a number of performance assessment at different points in time and separated by further learning and practice, with a decision on competency only taken at the point when the assessor has complete confidence in the person's demonstrated ability and applied knowledge • all assessment that is part of a structured learning experience must include a combination of direct, indirect and supplementary evidence. <p>Assessment processes and techniques should as far as is practical take into account the language, literacy and numeracy capacity of the candidate in relation to the competency being assessed.</p> <p>Supplementary evidence of competency may be obtained from relevant authenticated documentation from third parties, such as existing supervisors, team leaders or specialist training staff.</p>
--	--	--	--

Required Skills and Knowledge		HSC Requirements and Advice
This section describes the skills and knowledge required for this unit.		
<p>Required skills</p> <p>Required skills for this unit are:</p> <ul style="list-style-type: none"> • ability to accurately recognise OHS hazards, including asbestos and take all opportunities to alleviate safety problems in a variety of construction work sites and environments • capacity to deal calmly and effectively with any potential safety problems and work closely with other team members and supervisors to ensure safe working conditions are maintained • communication skills to: <ul style="list-style-type: none"> – determine and report hazards and risks – enable clear and direct communication, using questioning to identify and confirm requirements, share information, listen and understand – follow instructions – read and interpret: <ul style="list-style-type: none"> ▪ MSDS, JSA and safe work method statements ▪ other relevant documentation – use language and concepts appropriate to cultural differences – use and interpret non-verbal communication, such as hand signals – written skills to contribute to reports • identifying and accurately reporting to appropriate personnel any faults in tools, equipment or materials • organisational skills, including the ability to plan and set out work • teamwork skills to work with others to action tasks and relate to people from a range of cultural and ethnic backgrounds and with varying physical and mental abilities • technological skills to: <ul style="list-style-type: none"> – use a range of mobile technology, such as two-way radio and mobile phones – voice and hand signals to access and understand site-specific instructions. 	<p>Required knowledge</p> <p>Required knowledge for this unit is:</p> <ul style="list-style-type: none"> • asbestos management code prevention of exposure • basic first aid procedures • common construction industry terminology • common workplace safety hazards and risks and procedures for reporting these to designated personnel • construction industry communications equipment and use • construction industry health and safety signage • emergency response and evacuation procedures • JSA and safe work method statements • MSDS • OHS hierarchy of control and role of OHS committees and representatives • relevant legislation, regulations and workplace requirements relating to OHS, including hazard reduction and personal safety, including duty of care responsibilities, workers' compensation and injury management requirements • safe manual handling techniques • safe work practices in normal working environment • safety equipment, policies and requirements for working in confined spaces and at height, including on rooves • tools and equipment prohibited for use near identified asbestos-containing materials (ACM) • types of fires and basic firefighting equipment • types, possible location and risks of ACM, including serpentine and amphibole groups, and their use in common building materials • types, purpose and use of construction industry personal protective equipment and clothing • workplace and equipment safety requirements. 	<p>Key Terms and Concepts</p> <ul style="list-style-type: none"> • asbestos-containing materials • duty of care • emergency response • environmental requirements • equipment • evacuation procedures • fires • fire equipment • hazards • hazardous materials • incidents • manual handling • OHS legislative requirements • personal protective equipment • prohibited tools and equipment • risk management • safe work practices • signs and symbols • tools •

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
1 Identify and assess risks.	1.1 Hazards in the work area are identified, assessed and reported to designated personnel .	<p>The Range Statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. <i>Bold italicised</i> wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p> <p>Hazards include:</p> <ul style="list-style-type: none"> • chemical spills • electrical safety • work in confined spaces • excavations, including trenches • falling objects • fires • gases • hazardous materials • high or very low temperatures • HIV and other infectious diseases • liquids under pressure • manual handling • moving machinery and equipment • noise, dust and vapours • overhanging beams • protrusions • sharp equipment • traffic • ultraviolet (UV) radiation • unplanned collapse • working at heights. <p>Designated personnel to be contacted in case of an emergency, accident, fire or to report a risk such as identification of ACM <u>are</u>:</p> <ul style="list-style-type: none"> • designated safety officers, determined by the enterprise, who have undertaken specific safety response training • managers or other senior personnel 	<p>Learning experiences for the HSC must address:</p> <p>An acknowledgement that OHS is everyone's responsibility in the workplace.</p> <p>The concept of 'participation' and 'consultation' as it relates to workplace safety and employee rights and responsibilities.</p> <p>An understanding of the election/formation, roles and responsibilities of the OHS representatives or committee in the workplace.</p> <p>Knowledge of designated personnel in relation to hazard identification and control within the workplace/organisation.</p> <p>An understanding of risk management:</p> <ul style="list-style-type: none"> • identify hazards • assess associated risks • use appropriate control measures to eliminate or minimise risks • monitor and review the control measures. <p>Identification of potential hazards to:</p> <ul style="list-style-type: none"> • self • visitors • colleagues • the general public. <p>A range of hazards including:</p> <ul style="list-style-type: none"> • tools, equipment, machinery and plant <ul style="list-style-type: none"> - operation - maintenance • manual handling • materials in use <ul style="list-style-type: none"> - spills - leakages • work processes/practices <ul style="list-style-type: none"> - simultaneous operations - repetitious tasks • work environment

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
		<ul style="list-style-type: none"> • personnel competent and/or licensed in the safe handling of asbestos • supervisors. 	<ul style="list-style-type: none"> - poor/inadequate lighting - inadequate amenities - inadequate equipment - poor housekeeping - wet or slippery floors - fire, chemical and electrical hazards - damaged floor coverings - falling objects - noise - dust - temperature variations - ultraviolet (UV) radiation - overhanging beams and protrusions - unplanned collapse - poor ventilation • working <ul style="list-style-type: none"> - alone - with electricity - in confined spaces - in and around excavations - near traffic - near water - at heights - with liquids under pressure - with compressed air • human factors <ul style="list-style-type: none"> - stress - violence/bullying - playing practical jokes - fatigue - failure to follow procedures - lack of training or experience - lack of supervision - carelessness - poor personal health/hygiene - medical/health conditions - using wrong techniques/procedures - ignoring safety rules/signs - taking short cuts - knowingly using unsafe tools/equipment.
	1.2 Safety risks in the work area are identified, assessed and reported to designated personnel.		

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
	<p>1.3 <i>Safe work practices , duty of care</i> requirements and safe work instructions are followed for controlling risks.</p>	<p>Safe work practices :</p> <ul style="list-style-type: none"> • <u>include:</u> <ul style="list-style-type: none"> - day to day observation of OHS policies and procedures - emergency procedures - risk assessment - use of basic firefighting equipment • <u>relate to:</u> <ul style="list-style-type: none"> - access to site amenities, such as drinking water and toilets - drugs and alcohol at work - general requirements for safe use of plant and equipment - general requirements for use of personal protective equipment and clothing - housekeeping to ensure a clean, tidy and safer work area - preventing bullying and harassment - smoking in designated areas - storage and removal of debris. <p>Duty of care requirements:</p> <ul style="list-style-type: none"> • <u>relate to:</u> <ul style="list-style-type: none"> - legal responsibility under duty of care to do everything reasonably practicable to protect others from harm - relevant state and territory OHS requirements and include employers and self-employed persons, persons in control of the work site, construction supervisors, designers, manufacturers and suppliers, construction workers, subcontractors and inspectors • may relate to: <ul style="list-style-type: none"> - own responsibilities to comply with safe work practices, including activities that require licences, tickets or certificates of competency. 	<p>Learning experiences for the HSC must address:</p> <p>An awareness of the cost of workplace injury:</p> <ul style="list-style-type: none"> • human • social • economic • organisational. <p>Define:</p> <ul style="list-style-type: none"> • duty of care. <p>Safe work practices and procedures including:</p> <ul style="list-style-type: none"> • OHS induction training (general, work activity and site-specific) • selection, use and maintenance of personal protective equipment (PPE) • access to appropriate communication devices • selection of appropriate tools for the task • correct use, maintenance and storage of tools, equipment and machinery • correct handling, application, labelling, transport and storage of hazardous and non-hazardous materials • safe posture (sitting, standing, bending and lifting) • correct manual handling (lifting and transferring) • location and use of safety alarms and emergency exits • correct use of fire fighting equipment: <ul style="list-style-type: none"> - fire blanket - fire extinguishers <ul style="list-style-type: none"> ▪ class and type of fire ▪ type of extinguisher and identifying colour - fire hydrant and hose • hazard identification and risk control • basic first aid training and access to first aid kits • access to sufficient drinking water • procedures to follow in the event of an emergency • effective communication and teamwork • adherence to work instructions, workplace/ company policies and procedures and standard operating procedures • knowledge of construction activities that require licences or permits

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
			<ul style="list-style-type: none"> • housekeeping/clean-up procedures, including waste disposal, with proper consideration of OHS and the environment. <p>A knowledge of correct manual handling techniques when:</p> <ul style="list-style-type: none"> • moving • lifting/carrying items <ul style="list-style-type: none"> - individually - in pairs - with a team • using tools/equipment • placing items down • loading/unloading <ul style="list-style-type: none"> - into general storage - in/out of transport - to/from raised work area • working at heights • bending and twisting • using mechanical aids/lifting equipment • transferring hazardous materials • undertaking repetitious tasks. <p>An awareness of legal requirements for weight limits.</p> <p>Acknowledgement of the importance of training in safe work practices and emergency procedures to meet OHS requirements.</p>
	<p>1.4 OHS, hazard, accident or <i>incident</i> reports are contributed to according to workplace procedures and <i>Australian government and state or territory OHS legislation</i> and relevant <i>information</i>.</p>	<p>Incidents include:</p> <ul style="list-style-type: none"> • accidents resulting in personal injury or damage to property • near misses or dangerous occurrences that do not cause injury but may pose an immediate and significant risk to persons or property, and need to be reported so that action can be taken to prevent recurrence, for example: <ul style="list-style-type: none"> - breathing apparatus malfunctioning to the extent that the user's health is in danger - collapse of the floor, wall or ceiling of a building being used as a workplace 	<p>Learning experiences for the HSC must address:</p> <p>A definition of:</p> <ul style="list-style-type: none"> • accident • incident. <p>An awareness of the differences between:</p> <ul style="list-style-type: none"> • an act • a regulation • codes of practice. <p>A basic understanding of OHS legislation and codes of practice including:</p> <ul style="list-style-type: none"> • <i>Occupational Health and Safety Act 2000</i> (NSW)

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
		<ul style="list-style-type: none"> - or collapse or failure of an excavation more than 1.5 metres deep (including any shoring) - collapse or partial collapse of a building structure - collapse, overturning or failure of the load bearing of any scaffolding, lift, crane, hoist or mine-winding equipment - damage to or malfunction of any other major plant - electric shock - electrical short circuit, malfunction or explosion - uncontrolled explosion, fire or escape of gas, hazardous substance or steam - any other unintended or uncontrolled incident or event arising from operations carried on at a workplace. <p>Australian government and state or territory OHS legislative requirements include:</p> <ul style="list-style-type: none"> • Australian standards • construction industry OHS standards and guidelines • duty of care • health and safety representatives, committees and supervisors • JSA and safe work method statements • licences, tickets or certificates of competency • National Code of Practice for Induction Training for Construction Work • national safety standards • OHS and welfare Acts and regulations • safety codes of practice. <p>Information includes:</p> <ul style="list-style-type: none"> • diagrams or sketches • emergency situation contacts • evacuation plans • instructions issued by authorised organisational or external personnel • labels 	<ul style="list-style-type: none"> • <i>Occupational Health and Safety Regulations 2001</i> (NSW) • Codes of practice (WorkCover NSW) <ul style="list-style-type: none"> - OHS Consultation - Risk Assessment - OHS Induction Training for Construction - Amenities for Construction Work • <i>Workers Compensation Act 1987</i> (NSW) and amendments • <i>Workplace Injury Management and Workers Compensation Act 1998</i> (NSW). <p>Regulatory requirements specific to the industry including:</p> <ul style="list-style-type: none"> • compulsory OHS induction training <ul style="list-style-type: none"> - general - work activity - site-specific • compulsory training records • workplace arrangements <ul style="list-style-type: none"> - preparation and provision of OHS management plans and job safety analysis (JSA)/safe work method statements - maintaining a register of all hazardous substances used at the work site - responsibilities of sub-contractor and lines of responsibility for OHS management on a site involving multiple sub-contractors - risk assessment. <p>An awareness of supplier/manufacturer's responsibilities under the OHS Act including:</p> <ul style="list-style-type: none"> • providing access to MSDS • providing access to risk assessment guidelines for equipment supplied. <p>An awareness of employer responsibilities under the OHS Act including the following:</p> <ul style="list-style-type: none"> • maintaining places of work under their control in a safe condition, and ensuring safe entrances and exits • making arrangements to ensure the safe handling, storage and transport of plant and substances

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
		<ul style="list-style-type: none"> • manufacturer specifications and instructions • memos • MSDS • organisation work specifications and requirements • plans and specifications • regulatory and legislative requirements, such as Acts, regulations and codes of practice • relevant Australian standards • reports of near misses or accidents • safe work procedures or equivalent documentation • safety meeting minutes • signage • verbal or written and graphical instructions • work bulletins • work schedules. 	<ul style="list-style-type: none"> • providing and maintaining systems of work and work environments that are safe and without risks to health • providing information, instruction, training and supervision necessary to ensure the health and safety of employees • providing adequate facilities for the welfare of employees • must not require employees to pay for anything done or provided to meet the requirements of the Act or Regulation • must consult with employees about OHS matters to enable them to contribute to decisions affecting their health, safety and welfare • must ensure the health and safety of visitors or people working who are not employees. <p>An awareness of employee responsibilities under the OHS Act including the following:</p> <ul style="list-style-type: none"> • employees must take reasonable care of the health and safety of themselves and others • employees must cooperate with employers in their efforts to comply with occupational health and safety requirements • employees must not interfere with or misuse things provided for the health, safety or welfare of persons at work • employees must not obstruct attempts to give aid or attempts to prevent serious risk to the health and safety of a person at work • employees must not refuse a reasonable request to assist in giving aid or preventing a risk to health and safety • employees must not disrupt workplace by creating false health or safety fears. <p>An awareness of the possible consequences of failure to observe OHS policies, procedures and legislative requirements.</p> <p>An awareness of sources of information regarding occupational health and safety (OHS) in the workplace including:</p>

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
			<ul style="list-style-type: none"> • construction documentation and plans • safe work method statements • material safety data sheets (MSDS) • job safety analysis (JSA) • accident, incident and injury reports and proforma's • risk assessments. <p>How and when to report.</p> <p>Monitoring and reporting for OHS including:</p> <ul style="list-style-type: none"> • formal/informal • verbal • written <ul style="list-style-type: none"> - safety inspection reports - checklists - accident and incident reports - WorkCover NSW notification - registers/logs/files. <p>Knowledge of appropriate person(s) for OHS reporting.</p>
2 Identify hazardous materials and other hazards on work sites.	2.1 Hazardous materials on a work site are correctly identified and, if appropriate, handled and used according to company and legislated procedures.	<p>Hazardous materials include:</p> <ul style="list-style-type: none"> • ACM • cleaning chemicals, including those in pressurised containers • glues • insulation materials • solvents • treated timber products. 	<p>Learning experiences for the HSC must address:</p> <p>Correct handling, application, transport and storage of hazardous materials used in a range of construction projects.</p>
	2.2 Measures for controlling risks and construction hazards are applied effectively and immediately.	<p>Measures for controlling risk or minimising hazards in accordance with the hierarchy of control include:</p> <ul style="list-style-type: none"> • elimination • substitution • isolation • engineering control • administrative control • personal protective equipment. 	<p>Learning experiences for the HSC must address:</p> <p>An understanding of the hierarchy of risk control measures:</p> <ul style="list-style-type: none"> • Level 1 – eliminate the risk (such as discontinue the activity or not use the equipment) • Level 2 – minimise the risk by: <ul style="list-style-type: none"> - substituting the system of work/equipment (with something safer) - modifying the system of work/equipment (to make it safer) - isolating the hazard (such as introducing a restrictive work area)

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
			<ul style="list-style-type: none"> - introducing engineering control (such as guarding, fencing or safety screens) • Level 3 – other controls: <ul style="list-style-type: none"> - adopt administrative controls and safe work practices - use PPE.
	<p>2.3 Hazardous materials that have safety implications for self and other workers are secured immediately they are identified, using appropriate <i>signs and symbols</i>.</p>	<p><i>Signs and symbols</i> include:</p> <ul style="list-style-type: none"> • emergency information signs (exits, equipment, first aid) • fire signs (location of fire alarms and firefighting equipment) • hazard identification, facility or location signs • regulatory signs (e.g. prohibition, mandatory and limitation or restriction), such as hazard signs (danger and warning) • safety tags and lockout (danger tags, out of service tags) • site safety, directional, traffic and warning signs and symbols. 	<p>Learning experiences for the HSC must address: Recognition, selection and use of standard OHS signs and symbols including:</p> <ul style="list-style-type: none"> • legislative requirements • meaning of colour and shape • appropriate placement and positioning.
	<p>2.4 <i>Asbestos-containing materials are identified</i> on a work site and <i>reported</i> to designated personnel.</p>	<p><i>Asbestos-containing materials are identified :</i></p> <ul style="list-style-type: none"> • includes recognising common types of ACM that may be found in construction materials and buildings • covers asbestos rope/fabrics, asbestos cement sheeting, asbestos cement piping and lagging on pipes, bituminous waterproof membrane, fire doors, electrical switchboards, millboard, and sheeting under ceramic or vinyl floor tiles in wet areas. <p>Asbestos-containing materials <i>are reported</i> to:</p> <ul style="list-style-type: none"> • person in control of the workplace as set out in the relevant Asbestos Management Code. 	<p>Learning experiences for the HSC must address: Asbestos containing materials (ACM) including:</p> <ul style="list-style-type: none"> • types <ul style="list-style-type: none"> - serpentine - amphibole • risks • use in common building materials • possible location. <p>Workplace/company policies regarding prevention of exposure to ACM.</p> <p>Knowledge of the asbestos management code.</p>
<p>3 Plan and prepare for safe work practices.</p>	<p>3.1 Correct <i>personal protective equipment</i> and clothing for each area of construction work are identified, worn, correctly fitted, used and stored according to enterprise procedures.</p>	<p><i>Personal protective equipment</i> is to include:</p> <ul style="list-style-type: none"> • aprons • arm guards • caps • dust mask/respirators 	<p>Learning experiences for the HSC must address: Use and application of a range of PPE.</p> <p>Selection of PPE:</p> <ul style="list-style-type: none"> • correct for the task

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
		<ul style="list-style-type: none"> • ear muffs/plugs • gloves • hard hats • high visibility retro reflective vests • jackets • overalls • safety glasses/goggles • steel capped boots • UV protective clothing and sunscreen. 	<ul style="list-style-type: none"> • manufacturers' specifications for use • correct fitting • serviceability. <p>Importance of correctly fitting PPE.</p> <p>Maintenance of PPE according to manufacturer's instructions and workplace/organisation policy and procedures:</p> <ul style="list-style-type: none"> • cleaning and decontamination • correct storage • regular checks for damage • repair/replacement of worn, malfunctioning or damaged equipment/parts • disposal of single-use equipment.
	<p>3.2 Selection of <i>tools, equipment and materials</i> , and organisation of tasks are performed in conjunction with other personnel on site and in accordance with enterprise procedures.</p>	<p>Tools and equipment include:</p> <ul style="list-style-type: none"> • firefighting equipment • first aid kit • ladders and work platforms • personal protective equipment. <p>Materials include:</p> <ul style="list-style-type: none"> • first aid materials suitable for <i>emergency first aid treatment of minor injuries.</i> 	
	<p>3.3 Required barricades and signage are determined and erected at the appropriate site location.</p>		
	<p>3.4 Material safety data sheets (MSDS), and job safety analysis (JSA) and safe work method statements relevant to the work to be carried out are identified and applied.</p>		<p>Learning experiences for the HSC must address:</p> <p>Interpretation of product labels and material safety data sheets (MSDS) for the safe preparation and use of dangerous goods and hazardous substances:</p> <ul style="list-style-type: none"> • directions and precautions for use • recommended dosage and dilution of chemicals • safe handling requirements • first aid • calculating quantity required • disposal methods • suitable storage item/container.

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
			<p>How and where to obtain required MSDS.</p> <p>A basic knowledge of information included in job safety analysis (JSA)/safe work method statements:</p> <ul style="list-style-type: none"> • how work is to be carried out (including step-by-step sequence) • identification of: <ul style="list-style-type: none"> - potential hazards associated with the work - associated safety risks • description of the control to be applied including: <ul style="list-style-type: none"> - control measure - name of person responsible to implement the control measure - description of equipment to be used in the work - compliance with standards or codes - qualifications of personnel doing the work - training required to do the work. <p>Awareness of project/site safety plan.</p>
4 Apply safe work practices.	<p>4.1 Tasks are performed in a manner that is safe for operators, other personnel and the general community in accordance with legislative requirements, and enterprise policies and procedures.</p> <p>4.2 Plant and equipment guards are used in accordance with manufacturer specifications, work site regulations and Australian standards where applicable.</p>		<p>Learning experiences for the HSC must address:</p> <p>An awareness of restrictions placed on the use of equipment and machinery common to the industry.</p> <p>Acknowledgement of:</p> <ul style="list-style-type: none"> • the importance of safety equipment and devices • the reasons for using safety equipment and devices • the importance of pre-operational checks. <p>A knowledge of the use/application, limitations and maintenance of safety equipment and devices including:</p> <ul style="list-style-type: none"> • safety harnesses • screens • barriers and shielding

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
			<ul style="list-style-type: none"> • extraction fans • machine guards • isolation devices. <p>Reporting of serious faults including:</p> <ul style="list-style-type: none"> • verbal notification to appropriate personnel <ul style="list-style-type: none"> - supervisor/manager - supplier/manufacture • recording on job card/maintenance log • safety/lockout tagging where appropriate. <p>An awareness of the importance of:</p> <ul style="list-style-type: none"> • electrical tagging • safety audits. <p>Reasons for safety/lockout tagging including:</p> <ul style="list-style-type: none"> • ease of identification • evidence of serviceability • preventing use until repaired. <p>An awareness of appropriate person/process for removal of safety/lockout tagging.</p>
	<p>4.3 Procedures and relevant authorities for reporting hazards, incidents and injuries are used.</p>		<p>Learning experiences for the HSC must address:</p> <p>A basic understanding of the roles and functions of key bodies involved in OHS including:</p> <ul style="list-style-type: none"> • WorkCover NSW • ASCC • local councils • unions • professional associations.
	<p>4.4 <i>Prohibited tools and equipment</i> in areas with identified asbestos are recognised and not used.</p>	<p><i>Prohibited tools and equipment</i> that cannot be used near identified ACM <u>include</u>:</p> <ul style="list-style-type: none"> • high-speed abrasive power and pneumatic tools, high pressure water cleaners, compressed air or abrasive blasting • any vacuum cleaning equipment not specifically designed for safe work with asbestos. 	

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
	4.5 Work site safety signs and symbols are identified and followed.		
	4.6 Work site area is cleared and maintained to prevent and protect self and others from incidents and accidents and to meet <i>environmental requirements</i> .	<p><i>Environmental requirements</i> are to cover workplace quality management and <u>include</u>:</p> <ul style="list-style-type: none"> • clean-up protection • stormwater protection • waste management. 	<p>Learning experiences for the HSC must address:</p> <p>Clean-up procedures with due consideration to the environment and OHS.</p> <p>An awareness of procedures for minimisation of impact on the environment including:</p> <ul style="list-style-type: none"> • replacing disturbed or removed soil • removal and disposal of non-reusable materials in a responsible manner <ul style="list-style-type: none"> - work materials - plant debris and other organic matter - chemicals • safe storage of reusable materials in accordance with company policy • containment of loose materials on site (such as mud, dust, litter and waste material) • control of run-off. <p>Environmental requirements for dealing with waste including:</p> <ul style="list-style-type: none"> • recycling <ul style="list-style-type: none"> - paper-based products - plastic - worn components - metal components - construction materials - building components • approved disposal of <ul style="list-style-type: none"> - hazardous material - non-hazardous material.
5 Follow emergency procedures.	5.1 Designated personnel are identified in the event of an emergency for communication purposes.		<p>Learning experiences for the HSC must address:</p> <p>Types of emergency situations including:</p> <ul style="list-style-type: none"> • bomb threat • accident/serious injury/illness • fire • natural disaster

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
			<ul style="list-style-type: none"> • chemical/fuel spill • gas leak • power failure • unauthorised person(s) on site • robbery • equipment collapse • site specific critical incident. <p>An awareness of the primary role of personnel in an emergency including:</p> <ul style="list-style-type: none"> • first aid officer • security officer • safety officer/safety representative • principal contractor • OHS committee member • site/project manager • supervisor/team leader • emergency services • WorkCover NSW • union representative. <p>How and when to seek assistance.</p> <p>Knowledge of emergency services contact numbers:</p> <ul style="list-style-type: none"> • 000 – landline number • 112 – mobile phones. <p>An awareness of information required by emergency services attending the site including:</p> <ul style="list-style-type: none"> • location • nearest cross-street • nature of the incident • number of casualties • nature of injuries • contact name and number.
	<p>5.2 Safe workplace procedures for dealing with accidents, various <i>types of fire</i> and other emergencies are followed, including identification or use, if appropriate, of <i>fire equipment</i> within scope of responsibilities.</p>	<p><i>Types of fire</i> includes:</p> <ul style="list-style-type: none"> • electrical, chemical, gas, mechanical, paper, wood or natural fire. <p><i>Fire equipment</i> includes:</p> <ul style="list-style-type: none"> • breathing apparatus • fire extinguishers • fire hydrant and hoses 	

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
		<ul style="list-style-type: none"> • fire reel • fire truck • manual fire fighting instruments, such as fire blankets. 	
	<p>5.3 <i>Emergency response and evacuation procedures</i> are known, practised and carried out effectively when required.</p>	<p><i>Emergency response and evacuation procedures</i> include:</p> <ul style="list-style-type: none"> • emergencies, such as fire, toxic and/or flammable vapours emission, vehicle/mobile plant accident, structural collapse, chemical spill and injury to personnel • extinguishing fires, organisational first aid requirements and evacuation. 	<p>Learning experiences for the HSC must address:</p> <p>Knowledge of procedures to follow in the event of an emergency including:</p> <ul style="list-style-type: none"> • notification <ul style="list-style-type: none"> - appropriate authorities (emergency services and WorkCover NSW) - colleagues - supervisor • workplace/organisation policies and procedures <ul style="list-style-type: none"> - evacuate - secure building • reporting. <p>The importance of acting within level of authority in terms of:</p> <ul style="list-style-type: none"> • taking initiative • problem-solving • decision-making.
	<p>5.4 Emergency first aid treatment of minor injuries is carried out correctly and details of any treatment administered are reported accurately to designated personnel as soon as possible.</p>		<p>Learning experiences for the HSC must address:</p> <p>Causes of common workplace injuries including:</p> <ul style="list-style-type: none"> • lack of protection and safety equipment • slips, trips and falls • poor housekeeping • poor maintenance • inadequate lighting • spills • obstructions • faulty or incorrect equipment • poor ergonomics • inadequate instruction, training and supervision • personal factors including stress, tiredness and inappropriate behaviour • medical conditions including epilepsy, diabetes and asthma • unrealistic time frames

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
			<ul style="list-style-type: none"> • negligence • fatigue • exposure to toxic substances. <p>An awareness of a range of potential workplace injuries and conditions including:</p> <ul style="list-style-type: none"> • allergic reactions • dislocations and fractures • puncture wounds and cuts • eye injuries • crushing and amputation • sprains and strains • bites and stings • heat exhaustion • burns • shock. <p>A basic knowledge of:</p> <ul style="list-style-type: none"> • established first aid principles <ul style="list-style-type: none"> - DRABCD – danger, response, airway, breathing, CPR and defibrillator (if available) • generalised principles of first aid management <ul style="list-style-type: none"> - assessing location and nature of the work environment and emergency situation - minimising the risk of further injury or injury to others - minimising movement of the casualty - assessment of injuries - seeking assistance appropriate to situation including raising the alarm with emergency services and/or health professionals - locating and using available first aid equipment or other suitable alternative resources - providing essential first aid - providing basic life support measures (CPR) - reassuring casualty in a caring and calm manner - making casualty as comfortable as possible using available resources - monitoring patient’s signs of life such as: conscious, responsive, breathing normally, moving - monitoring unresolved dangers of the area where the injury occurred.

Training Package	Construction, Plumbing and Services Integrated Framework (CPC08)		HSC Requirements and Advice
Unit title	Use construction tools and equipment		
Unit code	Competency field	Unit sector	HSC Indicative Hours
CPCCCM2005A	Common	Construction	25

Unit descriptor	This unit of competency specifies the outcomes required to safely select and use construction tools and equipment. It includes hand tools, power tools, pneumatic tools, and plant and equipment.
Prerequisite units	CPCCOHS2001A - Apply OHS requirements, policies and procedures in the construction industry
Co-requisite units	Nil
Application of the unit	This unit of competency supports achievement of use of basic hand and power tools commonly used in the construction industry.
Employability skills	This unit contains employability skills.

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	Context of and specific resources for assessment	Method of assessment
This unit of competency could be assessed in the workplace or a close simulation of the workplace environment, provided that simulated or project-based assessment techniques fully replicate construction workplace conditions, materials, activities, responsibilities and procedures.	A person who demonstrates competency in this unit <u>must</u> be able to provide evidence of the ability to: <ul style="list-style-type: none"> locate, interpret and apply relevant information, standards and specifications comply with site safety plan and OHS legislation, regulations and codes of practice applicable to workplace operations comply with organisational policies and procedures, including quality requirements safely and effectively use tools, plant and equipment communicate and work effectively and safely with others 	This competency is to be assessed using standard and authorised work practices, safety requirements and environmental constraints. <p>Assessment of essential underpinning knowledge will usually be conducted in an off-site context.</p> <p>Assessment is to comply with relevant regulatory or Australian standards' requirements.</p> <p>Resource implications for assessment <u>include</u>:</p>	Assessment methods <u>must</u> : <ul style="list-style-type: none"> satisfy the endorsed Assessment Guidelines of the Construction, Plumbing and Services Integrated Framework Training Package include direct observation of tasks in real or simulated work conditions, with questioning to confirm the ability to consistently identify and correctly interpret the essential underpinning knowledge required for practical application reinforce the integration of employability skills with workplace tasks and job roles confirm that competency is verified and

	Critical aspects for assessment and evidence required to demonstrate competency in this unit cont/d	Context of and specific resources for assessment cont/d	Method of assessment cont/d
	<ul style="list-style-type: none"> • <i>identify and select hand tools for given tasks</i> • <i>safely use and maintain a minimum of rule, tape, square, hammer, hand saw, hand plane, chisel, shovel, wheelbarrow, sledge hammer, pick, mattock, crow bar and pinch bar for given tasks</i> • <i>identify power and pneumatic tools, including electrical and compressed air safety, for a given task</i> • <i>safely use and maintain a minimum of a:</i> <ul style="list-style-type: none"> - <i>power saw</i> - <i>electric plane</i> - <i>impact power drill</i> - <i>nail gun</i> - <i>impact hammer</i> - <i>generator</i> - <i>compressor.</i> 	<ul style="list-style-type: none"> • an induction procedure and requirement • realistic tasks or simulated tasks covering the mandatory task requirements • relevant specifications and work instructions • tools and equipment appropriate to activity • support materials appropriate to activity • workplace instructions relating to safe work practices and addressing hazards and emergencies • material safety data sheets • research resources, including industry related systems information. <p>Reasonable adjustments for people with disabilities must be made to assessment processes where required. This could include access to modified equipment and other physical resources, and the provision of appropriate assessment support.</p>	<p>able to be transferred to other circumstances and environments.</p> <p>Validity and sufficiency of evidence <u>requires</u> that:</p> <ul style="list-style-type: none"> • competency will need to be demonstrated over a period of time reflecting the scope of the role and the practical requirements of the workplace • where the assessment is part of a structured learning experience the evidence collected must related to a number of performance assessment at different points in time and separated by further learning and practice, with a decision on competency only taken at the point when the assessor has complete confidence in the person's demonstrated ability and applied knowledge • all assessment that is part of a structured learning experience must include a combination of direct, indirect and supplementary evidence. <p>Assessment processes and techniques should as far as is practical take into account the language, literacy and numeracy capacity of the candidate in relation to the competency being assessed.</p> <p>Supplementary evidence of competency may be obtained from relevant authenticated documentation from third parties, such as existing supervisors, team leaders or specialist training staff.</p>

Required Skills and Knowledge		HSC Requirements and Advice
This section describes the skills and knowledge required for this unit.		
<p>Required skills</p> <p>Required skills for this unit are:</p> <ul style="list-style-type: none"> • communication skills to: <ul style="list-style-type: none"> – determine requirements – enable clear and direct communication, using questioning to identify and confirm requirements, share information, listen and understand – follow instructions – read and interpret: <ul style="list-style-type: none"> ▪ documentation from a variety of sources ▪ drawings and specifications – report faults – use language and concepts appropriate to cultural differences – use and interpret non-verbal communication, such as hand signals • identifying and accurately reporting to appropriate personnel any faults in tools, equipment or materials • organisational skills, including the ability to plan and set out work • teamwork skills to work with others to action tasks and relate to people from a range of cultural and ethnic backgrounds and with varying physical and mental abilities • technological skills to: <ul style="list-style-type: none"> – use a range of mobile technology, such as two-way radio and mobile phones – voice and hand signals to access and understand site-specific instructions. 	<p>Required knowledge</p> <p>Required knowledge for this unit is:</p> <ul style="list-style-type: none"> • construction terminology • construction tool use techniques • job safety analysis (JSA) and safe work method statements • plans, specifications and drawings • quality requirements • relevant Acts, regulations and codes of practice • safety manuals and instructions of tools and equipment • types, characteristics, uses and limitations of plant, tools and equipment • workplace and equipment safety requirements. 	<p>Key Terms and Concepts</p> <ul style="list-style-type: none"> • construction tool use • environmental requirements • equipment safety requirements • hand tools • plant and equipment • pneumatic tools • power tools • regulatory authorities • safety/instruction manuals • statutory authorities

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
1 Plan and prepare.	1.1 Work instructions and operational details are obtained, confirmed and applied from relevant <i>information</i> for <i>planning and preparation</i> .	<p>The Range Statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. <i>Bold italicised</i> wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p> <p><i>Information includes:</i></p> <ul style="list-style-type: none"> • diagrams or sketches • instructions issued by authorised organisational or external personnel • manufacturer specifications and instructions where specified • material safety data sheets (MSDS) • memos • organisation work specifications and requirements • plans and specifications • regulatory and legislative requirements pertaining to using construction tools and equipment • relevant Australian standards • safe work procedures related to using construction tools and equipment • signage • verbal or written and graphical instructions • work bulletins • work schedules. <p><i>Planning and preparation include:</i></p> <ul style="list-style-type: none"> • work site inspection • equipment defect identification • assessment of conditions and hazards • determination of work requirements. 	<p>Learning experiences for the HSC must address:</p> <p>A range of sources for work instructions and procedures including:</p> <ul style="list-style-type: none"> • work schedule • plans/specifications • diagrams/sketches • job card/job sheet • job safety analysis (JSA)/safe work method statement • standard operating procedures (SOP) • material safety data sheets (MSDS) • regulations/legislation/codes of practice • Australian Standards • workplace/company/site policies and procedures • workplace/company bulletins/memos • manufacturer specifications and instructions • client requirements. <p>An awareness of various modes of communication to receive work instructions including:</p> <ul style="list-style-type: none"> • verbal <ul style="list-style-type: none"> - face-to-face (supervisor to employee) - telephone/mobile phone/pager - two-way radio - on-site meeting - voice signals • written communication <ul style="list-style-type: none"> - work plan/job card - memo/message - job description/statement - workplace form - roster - facsimile - email - intranet • non-verbal <ul style="list-style-type: none"> - gestures - signals - signage - diagrams.

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
			<p>Strategies for obtaining, understanding and clarifying instructions/procedures including:</p> <ul style="list-style-type: none"> • correct sourcing and selection of information • consulting appropriate personnel • active listening • open and closed questions. <p>Planning and preparation for a range of tasks/activities applicable to the construction industry.</p> <p>A basic overview of the role of employees in quality assurance.</p>
	<p>1.2 Safety (OHS) requirements are followed in accordance with safety plans and policies.</p>	<p>Safety (OHS) is to be in accordance with legislation, regulations, codes of practice, organisational safety policies and procedures, and project safety plan and may include:</p> <ul style="list-style-type: none"> • emergency procedures related to equipment operation, including emergency shutdown and stopping, extinguishing fires, organisational first aid requirements and evacuation • handling of materials • hazard control • hazardous materials and substances • safe operating procedures, including the conduct of operational risk assessment and treatments associated with: <ul style="list-style-type: none"> - earth leakage boxes - lighting - power cables, including overhead service trays, cables and conduits - restricted access barriers - surrounding structures - traffic control - trip hazards - work site visitors and the public - working at heights - working in confined spaces - working in proximity to others - working with dangerous materials • organisational first aid 	<p>Learning experiences for the HSC must address:</p> <p>Safe work practices and procedures for the construction industry.</p> <p>Project/site safety plan.</p>

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
		<ul style="list-style-type: none"> • personal protective clothing and equipment prescribed under legislation, regulations and workplace policies and practices • use of firefighting equipment • use of tools and equipment • workplace environment and safety. 	
	<p>1.3 Signage and barricade requirements are identified and implemented.</p>		<p>Learning experiences for the HSC must address: Selection and use of standard signage and barricades common to the construction industry:</p> <ul style="list-style-type: none"> • legislative requirements • meaning of colour and shape • appropriate placement and positioning.
	<p>1.4 Plant, tools and equipment selected to carry out tasks are consistent with job requirements, checked for serviceability, and any faults are rectified or reported prior to commencement.</p>		<p>Learning experiences for the HSC must address: General features, purpose, maintenance and working knowledge of a range of plant, tools and equipment common across the various sectors of the construction industry.</p> <p>Procedures and documentation for identifying faulty plant, tools and equipment including those with:</p> <ul style="list-style-type: none"> • malfunctions • worn, broken or missing components • broken or missing safety guards. <p>An awareness of the signs of poor performance and inefficiency including:</p> <ul style="list-style-type: none"> • noise • quality of end product • appearance • vibration • rough running • failure to start • presence of smoke and odours • consumption of fuel and other consumables • blockages • amount of maintenance required • time taken to complete the job.

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
			<p>The importance of acting within level of authority in terms of:</p> <ul style="list-style-type: none"> • taking initiative • problem-solving • decision-making. <p>Solutions to a range of potential faults.</p> <p>Personnel to whom problems should be reported:</p> <ul style="list-style-type: none"> • supervisor/manager • supplier/manufacturer. <p>Reporting of serious faults including:</p> <ul style="list-style-type: none"> • verbal notification to appropriate personnel • recording on job card/maintenance log • safety/lockout tagging where appropriate. <p>Reasons for safety/lockout tagging including:</p> <ul style="list-style-type: none"> • ease of identification • evidence of serviceability • preventing use until repaired.
	<p>1.5 <i>Environmental requirements</i> are identified in accordance with environmental plans and <i>statutory and regulatory authority</i> obligations and are applied.</p>	<p><i>Environmental requirements</i> include:</p> <ul style="list-style-type: none"> • clean-up protection • noise and dust • vibration • waste management. <p><i>Statutory and regulatory authorities</i> include:</p> <ul style="list-style-type: none"> • federal, state and local authorities administering applicable Acts, regulations and codes of practice. 	<p>Learning experiences for the HSC must address:</p> <p>Environmental hazards/threats including:</p> <ul style="list-style-type: none"> • chemical/gas spillage/leakage • faulty tools, equipment and machinery • flood • fire • wildlife habitat destruction • discharge into waterways • pollution • soil erosion. <p>Consequences of poor environmental planning for the following:</p> <ul style="list-style-type: none"> • waterways • wildlife habitats • neighbouring properties • roads and amenities.

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
			<p>An understanding of environmental responsibilities of employees in accordance with workplace/company policy and procedures including:</p> <ul style="list-style-type: none"> • following work instructions, SOPs and inspection processes • communicating and reporting environmental hazards/issues • maintaining environmental records • completing reports <ul style="list-style-type: none"> - incident and accident - inspection. <p>An awareness of workplace/company site environmental policy and project environment management plan.</p> <p>Strategies and procedures for minimisation of potential negative environmental impacts including:</p> <ul style="list-style-type: none"> • environmental hazard and risk identification and reporting • environmental monitoring • avoidance or minimisation strategies <ul style="list-style-type: none"> - regular maintenance of machinery and equipment - identifying, reporting and rectifying machinery faults and material defects - use of biodegradable/non-toxic materials - silt control - habitat protection • revegetation and stabilisation • waste minimisation <ul style="list-style-type: none"> - accurate measurements and calculations - recycling - using recyclable products - resource efficiency • emergency procedures. <p>A basic understanding of the main features of relevant environmental legislation and their amendments including:</p> <ul style="list-style-type: none"> • <i>Protection of the Environment Operations Act 1997 (NSW)</i> • <i>Protection of the Environment Operations Amendment Act 2005 (NSW).</i>

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
			<p>A basic awareness of the roles and responsibilities of:</p> <ul style="list-style-type: none"> • the NSW Department of Environment and Conservation [incorporating Environment Protection Authority (EPA)] • local government.
<p>2 Identify and select hand, power and pneumatic tools.</p>	<p>2.1 <i>Hand tools and power and pneumatic tools</i>, their functions, operations and limitations are identified and selected.</p>	<p><i>Hand tools</i> include:</p> <ul style="list-style-type: none"> • cutting, planing, boring, shaping, fixing, fastening and percussion tools • material shifting and holding tools • setting out, marking out and levelling tools. <p><i>Power and pneumatic tools</i> include:</p> <ul style="list-style-type: none"> • portable, electrical, pneumatic and gas driven tools, including their leads and hoses. 	<p>Learning experiences for the HSC must address:</p> <p>An understanding of the difference between hand, power and pneumatic tools.</p> <p>A basic knowledge of a range of hand, power and pneumatic tools and equipment common across the various sectors of the construction industry including:</p> <ul style="list-style-type: none"> • name • characteristics • use • limitations • hazard controls • maintenance. <p>Hand tools include:</p> <ul style="list-style-type: none"> • rule • tape • square • chisel • hand saw • hand plane • shovel • wheel barrow • hammer • sledge hammer • pick • mattock • crow bar • pinch bar. <p>Power and pneumatic tools including:</p> <ul style="list-style-type: none"> • power saw • electric plane • impact power drill • nail gun • impact hammer.

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
	2.2 OHS requirements for using hand, power and pneumatic tools are recognised and adhered to.		<p>Considerations for the selection of hand, power and pneumatic tools including:</p> <ul style="list-style-type: none"> • skills/training • licensing requirements • time • cost • OHS requirements <ul style="list-style-type: none"> - JSA/safe work method statement - risk assessment • appropriateness for purpose. <p>Learning experiences for the HSC must address:</p> <p>Hazards associated with the use of:</p> <ul style="list-style-type: none"> • electricity • compressed air. <p>Importance of safe work practices for the operation of hand, power and pneumatic tools.</p> <p>Safe work practices including:</p> <ul style="list-style-type: none"> • use of power supply <ul style="list-style-type: none"> - cut-out switches and/or earth leakage core balance device (ELCB) - tagging of leads - temporary power boards - correct use and placement of power leads - selection of personal protective equipment (PPE) • use of compressed air <ul style="list-style-type: none"> - safety inspections - checking pressure tanks - lines and connections - overload pressure valves to compressor - purge procedures. <p>A range of PPE for the use of hand, power and pneumatic tools including:</p> <ul style="list-style-type: none"> • footwear • head protection • hearing protection • gloves

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
	2.3 Pre-operational checks, including lubricants, hydraulic fluid and water, are completed according to manufacturer recommendations.		<ul style="list-style-type: none"> • masks/respirators • eye protection • clothing • sunscreen. <p>Acknowledgement of the importance of securing work pieces when working with power/pneumatic tools.</p> <p>Learning experiences for the HSC must address:</p> <p>Pre-operational checks including:</p> <ul style="list-style-type: none"> • safety • consumables • adjustment/alignment for job task.
3 Use tools.	<p>3.1 Hand tools used are appropriate to the task and materials, and are in accordance with OHS requirements.</p> <p>3.2 Power and pneumatic tools are safely and effectively used in accordance with manufacturer recommendations and state or territory OHS requirements.</p> <p>3.3 Tools are sharpened and maintained.</p>		
4 Identify, select and use plant and equipment.	4.1 Plant and equipment are selected and used consistent with OHS requirements and the needs of the job.	<p>Plant and equipment include:</p> <ul style="list-style-type: none"> • 240v power supplied • compressors • generators • hand held or small single person operated equipment • pneumatic driven. 	<p>Learning experiences for the HSC must address:</p> <p>A basic knowledge of a range of plant and equipment including:</p> <ul style="list-style-type: none"> • name • characteristics • use • limitations • hazard controls • maintenance. <p>Plant and equipment including:</p> <ul style="list-style-type: none"> • generator • compressor.

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
			<p>Considerations for the selection of plant and equipment including:</p> <ul style="list-style-type: none"> • skills/training • licensing requirements • time • cost • OHS requirements <ul style="list-style-type: none"> - job safety analysis (JSA) /safe work method statement - risk assessment - emergency procedures • environmental factors <ul style="list-style-type: none"> - confined space - noise restrictions - pollution.
	4.2 Pre-operational checks, including lubricants, hydraulic fluid and water, are completed according to manufacturer recommendations.		
	4.3 Plant and equipment are maintained in accordance with manufacturer recommendations and standard work practices.		
5 Clean up.	5.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation, regulations, codes of practice and job specification.		<p>Learning experiences for the HSC must address:</p> <p>An awareness of procedures for minimisation of impact on the environment including:</p> <ul style="list-style-type: none"> • replacing disturbed or removed soil • removal and disposal of non-reusable materials in a responsible manner <ul style="list-style-type: none"> - work materials - plant debris and other organic matter - chemicals • safe storage of reusable materials in accordance with workplace/company policy • containment of loose materials on site (such as mud, dust, litter and waste material) • control of run-off.

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
	<p>5.2 Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturer recommendations and standard work practices.</p>		<p>Environmental requirements for dealing with waste including:</p> <ul style="list-style-type: none"> • recycling <ul style="list-style-type: none"> - paper-based products - plastic - worn components - metal components - construction materials - building components • approved disposal of <ul style="list-style-type: none"> - hazardous material - non-hazardous material. <p>Learning experiences for the HSC must address:</p> <p>Clean-up procedures with proper consideration of the environment and OHS.</p> <p>A range of cleaning techniques including:</p> <ul style="list-style-type: none"> • wiping • washing • brushing • sweeping • scraping • use of cleaning agents (chemicals, solvents and detergents). <p>A range of cleaning equipment including:</p> <ul style="list-style-type: none"> • high pressure water cleaner • wet/dry vacuum • brooms and brushes • scrapers. <p>Plant, tools and equipment cleaning/maintenance requirements as necessary including:</p> <ul style="list-style-type: none"> • removal of dirt, dust, grease and oil • sharpening • anti-rust treatments • repair and/or replacement of missing/damaged parts • scheduled servicing • refuel and top-up consumables.

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
			<p>An awareness of issues relating to storage of tools and equipment including:</p> <ul style="list-style-type: none"> • climatic effects • OHS considerations • stability • security • ease of access. <p>Knowledge of methods by which tools and equipment are stored and accessed.</p> <p>Security of workplace plant and equipment including:</p> <ul style="list-style-type: none"> • guards • storage racks • protective covers • lock-up procedures.

DRAFT for consultation