ERECT AND DISMANTLE
RESTRICTED HEIGHT SCAFFOLDING
CERTIFICATE II IN BUILDING AND CONSTRUCTION
(PATHWAY – TRADES)
CPCCCM2008B
LEARNER’S GUIDE
BUILDING AND CONSTRUCTION
Erect and dismantle restricted height scaffolding

CPCCCM2008B

Learner’s guide
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Erect and dismantle restricted height scaffolding

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Welcome

Welcome to the learner’s guide for CPCCCM2008A Erect and dismantle restricted height scaffolding.

This guide will take you through the process of learning how to erect, inspect, alter and dismantle restricted height scaffolding.

Areas of explanation include:
• planning and preparing for work tasks
• identifying scaffolding quantity and material requirements
• erecting scaffolding to required safety standards
• inspecting, repairing and altering scaffolding
• dismantling scaffolding and cleaning up work area.

Skills and knowledge will also be developed in teamwork and communication.

Qualification overview

This unit of competency, CPCCCM2008B Erect and dismantle restricted height scaffolding, forms part of Certificate II in Building and Construction (Pathway – Trades), a pre-vocational course for learners seeking to gain an apprenticeship in the building and construction industry. The focus of this course is on developing relevant technical, vocational and interpersonal competencies as well as skills, knowledge and experiences that may be transferable to other industry areas. You will also gain employability skills relevant to an entry level employee of the industry.

The first component of the course consists of seven core units of competency (common to 11 construction trades) and a period of work placement. This component, which would typically be delivered over a one-year period, is designed to provide learners with a tradesperson’s introduction to the building and construction industry.

In the second component of the course, typically undertaken in the second year of study, you will choose from 10 trade-specific streams of units of competency that enable you to focus your learning on a particular trade such as bricklaying, painting or carpentry.

To progress further in the industry, beyond this introductory level, you will then need to gain an apprenticeship in your chosen trades area, or pursue further training within the building and construction field.

Note: If you are completing this unit as part of a different qualification, your lecturer will give you the relevant information.
Unit overview

This unit describes the performance outcomes, skills and knowledge required to erect and dismantle restricted height scaffolding.

Some basic information for this unit of competency is provided here. You can find the full unit details at Annex A at the back of this guide.

<table>
<thead>
<tr>
<th>Unit title</th>
<th>Erect and dismantle restricted height scaffolding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Descriptor</td>
<td>This unit of competency specifies the outcomes required to erect and dismantle restricted height scaffolding to provide work platforms for various occupational applications. It includes placement of safety barriers and only involves modular scaffolding restricted to a height of 4 metres.</td>
</tr>
<tr>
<td>National code</td>
<td>CPCCCM2008B</td>
</tr>
<tr>
<td>Employability skills</td>
<td>This unit contains employability skills.</td>
</tr>
<tr>
<td>Prerequisite unit</td>
<td>CPCCOHS2001A Apply OHS requirements, policies and procedures in the construction industry</td>
</tr>
<tr>
<td>Application</td>
<td>This unit of competency supports achievement of skills to handle, erect and dismantle a range of restricted height scaffolding systems, which may include working with others and as a member of a team.</td>
</tr>
</tbody>
</table>
### Element 1 Plan and prepare

1.1 Work instructions, including plans, specifications, quality requirements and operational details, are obtained from relevant sources of information, confirmed and applied for planning and preparation purposes.

1.2 **Workplace health and safety (WHS)** requirements are followed in accordance with safety plans and policies.

1.3 Signage and barricade requirements are identified and implemented.

1.4 Plant, **tools and equipment** are selected to carry out tasks consistent with job requirements, are checked for serviceability, and any faults are rectified or reported prior to commencement.

1.5 **Scaffolding** quantity requirements are calculated in accordance with plans, specifications and quality requirements.

1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use.

1.7 **Environmental requirements** are identified for the project in accordance with environmental plans and statutory and regulatory authority obligations, and are applied.

### Element 2 Erect scaffolding

2.1 **Purpose for scaffolding** is confirmed and associated work tasks are identified.

2.2 Expected loading on scaffold and supporting structure is determined using load tables.

2.3 Site access and egress routes are identified.

2.4 Scaffolding and components are selected and inspected with damaged components labelled and rejected or repaired.

2.5 Adequate footing is established in accordance with Australian standard for scaffolding.

2.6 Scaffolding is erected in accordance with regulations, planned hazard prevention and control measures, acceptable safe work practices and manufacturer requirements.

### Element 3 Inspect, repair and alter scaffolding

3.1 Critical structural and safety areas of scaffolding are inspected for damage, corrosion and wear.

3.2 Current use of scaffolding is checked for compliance with type of scaffolding equipment.

3.3 Inspection log and handover are completed.

3.4 Scaffolding is reviewed to determine if changes or modifications were scheduled as per original planning.

3.5 Alteration or repair is carried out where specified.
### Element 4 Dismantle scaffolding

4.1 Scaffolding is dismantled using reverse procedure as for erection.

### Element 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.

5.2 Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturer recommendations and standard work practices.
Skills recognition and recognition of prior learning (RPL)

You are encouraged to discuss with your lecturer any previous courses or work experience in which you have participated so that it can be recognised. Evidence must be provided.

Resources

Your lecturer will provide you with:

• personal protective equipment (PPE), as required.

Required

You will need to provide:

• steel cap/safety boots
• an A4 notepad
• an A4 file for notes, handouts and printed documents
• pens, pencils, eraser and highlighters.
Self-checklist

As you work through this guide you should return to this checklist and record your progress. Where you understand something and think that you can perform it ‘easily’, congratulations. Where your response is ‘with help’ – revise the material in that section.

<table>
<thead>
<tr>
<th>CPCCCM2008B Erect and dismantle restricted height scaffolding</th>
<th>I understand</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Element 1 Plan and prepare</strong></td>
<td>Easily</td>
</tr>
<tr>
<td>1.1 Work instructions, including plans, specifications,</td>
<td></td>
</tr>
<tr>
<td>quality requirements and operational details, are</td>
<td></td>
</tr>
<tr>
<td>obtained from relevant sources of information,</td>
<td></td>
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<tr>
<td>confirmed and applied for planning and preparation</td>
<td></td>
</tr>
<tr>
<td>purposes.</td>
<td></td>
</tr>
<tr>
<td>1.2 <em>Workplace health and safety (WHS)</em> requirements</td>
<td></td>
</tr>
<tr>
<td>are followed in accordance with safety plans and policies.</td>
<td></td>
</tr>
<tr>
<td>1.3 Signage and barricade requirements are identified and</td>
<td></td>
</tr>
<tr>
<td>implemented.</td>
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</tr>
<tr>
<td>1.4 Plant, <em>tools and equipment</em> are selected to carry out</td>
<td></td>
</tr>
<tr>
<td>tasks consistent with job requirements, are checked for</td>
<td></td>
</tr>
<tr>
<td>serviceability, and any faults are rectified or reported</td>
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<tr>
<td>prior to commencement.</td>
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<tr>
<td>1.5 <em>Scaffolding</em> quantity requirements are calculated in</td>
<td></td>
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<tr>
<td>accordance with plans, specifications and *quality</td>
<td></td>
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<tr>
<td>requirements*.</td>
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<tr>
<td>1.6 Materials appropriate to the work application are</td>
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<tr>
<td>identified, obtained, prepared, safely handled and</td>
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<tr>
<td>located ready for use.</td>
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</tr>
<tr>
<td>1.7 <em>Environmental requirements</em> are identified for the</td>
<td></td>
</tr>
<tr>
<td>project in accordance with environmental plans and</td>
<td></td>
</tr>
<tr>
<td>statutory and regulatory authority obligations, and are</td>
<td></td>
</tr>
<tr>
<td>applied.</td>
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</tr>
<tr>
<td>Element 2 Erect scaffolding</td>
<td>Easily</td>
</tr>
<tr>
<td>-----------------------------</td>
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</tr>
<tr>
<td>2.1 <em>Purpose for scaffolding</em> is confirmed and associated work tasks are identified.</td>
<td></td>
</tr>
<tr>
<td>2.2 Expected loading on scaffold and supporting structure is determined using load tables.</td>
<td></td>
</tr>
<tr>
<td>2.3 Site access and egress routes are identified.</td>
<td></td>
</tr>
<tr>
<td>2.4 Scaffolding and components are selected and inspected with damaged components labelled and rejected or repaired.</td>
<td></td>
</tr>
<tr>
<td>2.5 Adequate footing is established in accordance with Australian standard for scaffolding.</td>
<td></td>
</tr>
<tr>
<td>2.6 Scaffolding is erected in accordance with regulations, planned hazard prevention and control measures, acceptable safe work practices and manufacturer requirements.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Element 3</th>
<th>Easily</th>
<th>With help</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 Critical structural and safety areas of scaffolding are inspected for damage, corrosion and wear.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.2 Current use of scaffolding is checked for compliance with type of scaffolding equipment.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.3 Inspection log and handover are completed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.4 Scaffolding is reviewed to determine if changes or modifications were scheduled as per original planning.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.5 Alteration or repair is carried out where specified.</td>
<td></td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Element 4 Dismantle scaffolding</th>
<th>Easily</th>
<th>With help</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1 Scaffolding is dismantled using reverse procedure as for erection.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Element 5 Clean up</th>
<th>Easily</th>
<th>With help</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation, regulations, codes of practice and job specification.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.2 Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturer recommendations and standard work practices.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
About the icons

Note that not all icons may appear in this guide.

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance criteria</td>
<td>This icon indicates the performance criteria covered in a section. The performance criteria contribute to the elements of competency that you must demonstrate in your assessment.</td>
</tr>
<tr>
<td>Activity</td>
<td>This icon indicates that there is an activity for you to do.</td>
</tr>
<tr>
<td>Group activity</td>
<td>This icon indicates that there is an activity for you to do with a partner or in a group.</td>
</tr>
<tr>
<td>Workshop activity</td>
<td>This icon indicates that there is a practical activity for you to do in a workshop, outside location or on a worksite.</td>
</tr>
<tr>
<td>Discussion</td>
<td>This icon indicates that there will be a discussion, which could be with a partner, a group or the whole class.</td>
</tr>
<tr>
<td>Research</td>
<td>This icon indicates that you are to do a research activity using the internet, texts, journals or other relevant sources to find out about something.</td>
</tr>
<tr>
<td>Think</td>
<td>This icon indicates that you should stop and think for a moment about the point being made or the question being asked.</td>
</tr>
</tbody>
</table>

You will also see the following characters used throughout this guide, where there’s a case study or activity that’s specific to a particular trade:

- **Dave**
  - A carpenter

- **Emma**
  - A painter

- **Liam**
  - A tiler

- **Katherine**
  - A carpenter

- **Jim**
  - A supervisor

- **Christine**
  - An apprentice

- **Jeremy**
  - An apprentice

- **Dave**
  - A bricklayer
Section 1 – Scaffolding rules and requirements

Introduction

Scaffolding is used in the construction industry in many different ways by a wide range of trades. It provides a temporary and stable above-ground platform for workers and their tools and materials, so that construction tasks can be carried out safely and effectively.

As a tradesperson on a construction site, you may be required to erect and dismantle restricted height scaffolding to complete some of your work tasks.

Restricted height means scaffolding with a working platform up to four metres high, which is usually sufficient for building a single-storey house. This restricted height scaffolding can be set up by anyone – as long as they have been trained to do the job properly and safely; no licence or ticket is required.

This unit covers restricted height scaffolding only.

Scaffolding more than four metres high must be erected, altered and dismantled by a person with a licence or certificate of the appropriate class. There are also specialist scaffolding licences that can be obtained for work on more complex or higher risk scaffolding, such as that used on multistorey buildings or on mine sites.

Performance criteria

1.1 Work instructions, including plans, specifications, quality requirements and operational details, are obtained from relevant sources of information, confirmed and applied for planning and preparation purposes.

1.2 Workplace health and safety (WHS) requirements are followed in accordance with safety plans and policies.

1.3 Signage and barricade requirements are identified and implemented.

1.7 Environmental requirements are identified for the project in accordance with environmental plans and statutory and regulatory authority obligations, and are applied.
Rules, Regulations and requirements

Every job on a construction site requires a strong understanding of the rules, Regulations and requirements. Failure to follow these can lead to serious consequences for employers and/or workers.

Scaffolding work can present many hazards, not only with erecting and working on the scaffold itself, but also from the site or area where the scaffold is located. Before you pick up your first piece of scaffold, you need to be familiar with:

- the Australian Standards® for scaffolding
- work health and safety (WHS) Regulations
- codes of practice
- environmental requirements
- company policies and procedures
- manufacturers’ instructions
- site-specific rules and requirements.

All these can change over time, and new rules can be created; so you’ll need to make sure you keep up-to-date.

Australian Standards®

Several Australian Standards® apply to restricted height scaffolding, including:

- AS 1576.1:2010 Scaffolded – General requirements
- AS 4576:1995 Guidelines for scaffolding
- AS 1577 Scaffold decking components.

Together these Standards provide guidance on different aspects of scaffolding, including their design and manufacture, and how scaffolding installations should be designed, erected, managed and used. Many other scaffolding guidelines, such as manufacturers’ instructions, are based on or refer to these Standards. While you don’t need to know them by heart, it’s important that you know they exist and consult them when you need them.
Work health and safety Regulations

There are both national (whole country) and state and territory WHS Regulations in place currently, although we are moving towards a universal ‘harmonised’ way of managing WHS in Australia.

WorkSafe WA, part of the Western Australian Department of Commerce, is the agency responsible for the administration of the *Occupational Safety and Health Act 1984*, which promotes the safety and health of people in the workplace. Their WorkSafe website <www.commerce.wa.gov.au/worksafe> is a good source of educational resources on WHS and includes podcasts and videos.

Scaffolding codes of practice

Codes of practice are created by states, territories and industry bodies. They set out industry standards of conduct and give detailed practical guidance on how to comply with the requirements of legislation, including things like the preferred method or course of action to be taken to manage hazards. They are not law, but should be followed.

Safe Work Australia – a Commonwealth Government agency responsible for the development of national policy to improve WHS across Australia – is developing a code of practice for scaffolding and scaffolding work, which will have a specific focus on the WHS Regulations relating to scaffolding.

Environmental requirements

Construction projects often have an impact on the environment – from the clearing of land through to the materials that are used and the waste created. There are rules and Regulations covering environmental requirements. Some of these are laws; others are local government or council requirements.

You have a responsibility to minimise the impact you make on the environment as you go about your work tasks. Although erecting and using scaffolding does not consume materials, scaffolding can affect the environment by damaging the area where it is set up, eg ground and plants, through dust and debris generated by work done on the scaffold, and through waste left by workers using the scaffold.

The scaffolding you erect is your responsibility, so make sure you check the area around the scaffold for damage and waste on a regular basis.
Company policies and procedures

Most companies, especially larger ones, have company policies and procedures that set out how the company expects certain tasks to be carried out. They cover aspects of work such as the use of company vehicles as well as quality of work and safety.

Job safety analysis

A job safety analysis (JSA) involves looking at a work task and figuring out the safest way to do it. It's a way of making sure that you've thought about the hazards involved in doing particular tasks and that you act to prevent injury, and considered areas such as what personal protective equipment (PPE) you should use.

A JSA should be completed before the erection of scaffolding during the planning stage. The JSA needs to include:

- an assessment of the site, including identification of any potential hazards or safety issues
- the steps required to complete the erection
- the possible hazards for each step
- the safety controls to be applied to manage the hazard.

Both you, as the person erecting the scaffolding, and your supervisor must sign off the JSA. Many companies and worksites will have existing JSAs for specific work or tasks. You must follow these when erecting scaffolding.

An example JSA is presented on the following page.
## Job safety analysis

### Activity: Erecting single-lift, single-bay, framed scaffold

#### JSA number: 3

<table>
<thead>
<tr>
<th>Location of work: 16 Newberry Dr, Edgewater</th>
<th>Date: 17/01/2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity: Erecting single-lift, single-bay, framed scaffold</td>
<td>Approved by (Supervisor): Rob Jones</td>
</tr>
<tr>
<td>Completed by: Bruce Wayne</td>
<td></td>
</tr>
</tbody>
</table>

| Signed: Bruce Wayne | Date: 17/01/2015 | Signed: Rob Jones | Date: 17/01/2015 |

<table>
<thead>
<tr>
<th>Activity</th>
<th>Hazards</th>
<th>Risk control measures</th>
<th>Who is responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>List the tasks in the order they will be carried out.</td>
<td>List the hazards associated with each task.</td>
<td>List the control measures required to minimise the hazard.</td>
<td>Name the person responsible for minimising the hazard.</td>
</tr>
<tr>
<td>Preparation</td>
<td>Electrocution, Collisions with other workers, vehicles and machinery, Falling/tripping</td>
<td>Person responsible for erecting the scaffold must hold a basic scaffolding ticket. Check for obvious hazards in the vicinity, including other work, overhead tree branches and powerlines. Set up any required signs and/or barricades and use a flagman and/or spotter if needed. Ensure location for erection and access to it is clear and clean.</td>
<td>Bruce</td>
</tr>
<tr>
<td>Erection</td>
<td>Strains, Falling, Falling tools/scaffold</td>
<td>Wear PPE. Bend knees when lifting. Use shared lifting.</td>
<td>Bruce</td>
</tr>
<tr>
<td>Activity</td>
<td>Hazards</td>
<td>Risk control measures</td>
<td>Who is responsible</td>
</tr>
<tr>
<td>---------------------------------------------------</td>
<td>----------------------------------------------</td>
<td>-------------------------------------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Carrying scaffold to the set-up area</td>
<td>Potential to hurt back</td>
<td>Bend knees when lifting.</td>
<td>Bruce</td>
</tr>
<tr>
<td>Levelling ground using a shovel</td>
<td>Rolling ankle, trip hazards</td>
<td>Wear high top boots with appropriate ankle support.</td>
<td>Bruce</td>
</tr>
<tr>
<td>Placing the sole boards on the ground spaced roughly at the width of the frames</td>
<td>Potential for splinters or hurting back</td>
<td>Wear gloves and bend knees.</td>
<td>Bruce</td>
</tr>
<tr>
<td>Placing base plates on sole boards</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Sliding frames over the base plates</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Fitting braces to frames</td>
<td>Hurting back, cuts to hands. Dropping frame</td>
<td>Bend knees and wear gloves. Have someone help to hold the frames upright.</td>
<td>Bruce</td>
</tr>
<tr>
<td>Placing boards on top of the frame ensuring there is no gap between the boards</td>
<td>Hurting back Dropping boards on head</td>
<td>Use correct lifting techniques. Use shared lifting to lift the boards. Wear a hard hat.</td>
<td>Bruce</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Conduct a pre-work inspection of the scaffold to ensure adequate access, work platforms and hand railing is in place. If in doubt, do not use the scaffold.</td>
<td>Bruce</td>
</tr>
</tbody>
</table>
Safe work method statement

A safe work method statement (SWMS) is similar to a JSA, but is specifically for high-risk construction work. Working at heights of more than two metres is considered high risk, so an SWMS would be required for the erection of, and working on, most scaffolding.

It is a document that:
- lists the type(s) of high-risk work being done
- lists the safety and health risks of that work
- describes how the risks will be controlled
- describes how the risk control measures will be implemented.

An SWMS should be developed by a supervisor with input from relevant employees and the contractors involved in the work. Before work begins, each team member should be briefed on the SWMS and what to do if it’s not being followed. All work must be done in accordance with the SWMS.

Manufacturers’ instructions

There’s a huge variety of scaffolding equipment available from a range of manufacturers. This can result in differences in areas such as how the scaffolding is put together or the load that it can support, so it’s important that you’re familiar with the manufacturer’s instructions for the particular scaffolding you’re erecting, especially if you’ve not used it before.

Manufacturers’ instructions can be found on the company’s website or may be delivered to site with the scaffold. These instructions will cover aspects such as identifying the parts, planning and preparation, and the scaffold construction sequence. They also cover the safe use of the scaffold. All manufacturers’ instructions are based on Australian Standards.

Safety data sheets

Previously known as a material safety data sheet (MSDS), the safety data sheet (SDS) is a document that provides information on the properties of hazardous chemicals and/or dangerous goods and how they affect health and safety in the workplace. For example, an SDS for a material containing chemicals could include information such as:
- the identity of the chemical
- the health and physicochemical hazards
• safe handling and storage procedures
• emergency procedures
• disposal considerations.

Always read the SDS if one is available for any tools, plant, materials or equipment you’re using.

**Site-specific rules and requirements**

Different worksites have their own rules and requirements and these vary depending on things like the location, size and type of project, and company/employer policies. For example, a project on a small residential site in a busy inner city area is likely to have to manage site traffic and deliveries very carefully and this could have significant impact on scaffolding management.

Waste management, noise rules and signage are examples of other requirements that will vary from site to site.

There will often also be work practices – the way things are done – which aren’t necessarily a specific policy or procedure, but expected ways of working.

**Site-specific environmental requirements**

Some projects may have an environmental plan that you’ll need to follow when designing and erecting scaffolding. This could include things like protection of the site, including the flora and fauna within it, as well as noise, dust and water monitoring and management.

You’ll generally be expected to inspect your work and storage areas daily to ensure that they comply with site environmental requirements; you may have to record this in a log.

**Communication and teamwork**

It takes a lot of individuals working together as a team to complete a construction project.

A good team knows how to communicate well with each other, whether it’s giving instructions or asking questions.

The following tips will help make sure that you communicate effectively and professionally with your team mates and colleagues.
• When you’re giving instructions, always check that the person receiving them has got all the information they need. You can check this by asking, ‘Is there anything else you need to know?’

• When you’re receiving instructions, take notes if you can; this will help you to remember things. If something isn’t clear, or you need more information, always ask.

• In today’s multicultural society, some people on your worksite may come from a different country, or may have grown up with different ethnic or cultural beliefs and values from you. There are some simple things you can do to improve communication with them.
  ◦ Speak a little more slowly and clearly than usual.
  ◦ Don’t speak more loudly; they aren’t hard of hearing.
  ◦ Use hand gestures or symbols or even do a drawing to help explain things.
  ◦ Be patient. It may take them a bit longer to understand you. You may need to repeat yourself a couple of times.
  ◦ Be respectful. They’re no less intelligent or capable than you are; they’re simply fluent in another language.

Other sources of information

Becoming familiar with the rules is important, but there will also be situations where you’ll have to find out a particular piece of information exactly when you need it. No-one can memorise everything in the rule books!

On-site sources of information include:

• safety signs, site notices or bulletins
• plans, drawings and specifications
• fellow workers
• your supervisor.

This kind of information should be covered during your site induction or WHS induction, when you first start work on a new site; however, if you’re given a task you’re not clear about, or you’re unsure about something, always ask your supervisor.
Interpreting information

When you receive information, make sure you’ve understood and interpreted it correctly, as misunderstandings can lead to serious problems on a building site. The same applies to any instructions you’re given.

Before undertaking any construction project or task, you need to know exactly what you are to do and how to do it effectively and safely, so don’t be scared to ask.

Activity 1.1 Finding information

List the source(s) where information about the following rules and Regulations can be found. Make sure they are relevant to your location and/or worksite.

If you can’t find a website, suggest another source for the information or check with your lecturer.

<table>
<thead>
<tr>
<th>Regulation/rule</th>
<th>Website address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australian Standards®</td>
<td></td>
</tr>
<tr>
<td>WHS Regulations</td>
<td></td>
</tr>
<tr>
<td>Environmental requirements</td>
<td></td>
</tr>
<tr>
<td>Company policies and procedures</td>
<td></td>
</tr>
</tbody>
</table>
Work health and safety

It’s the responsibility of every worker to take every possible measure to keep themselves and their fellow workers safe in the workplace.

There are a range of rules to be followed and actions to be taken to support this.

Hazards and risks

There are hazards and risks in any workplace, but construction sites are among the most dangerous. Knowing some of the things to watch out for, ways to minimise risk and what to do if something goes wrong are important things to learn as soon as you can, if you want a long, successful and accident-free career.

If you have an accident, a near-miss or see any potential hazards on site, you should let your employer or supervisor know immediately.

Activity 1.2 Hazard reporting procedures

What is the procedure for reporting a hazard on your worksite? Write your answer below.
The hierarchy of hazard control

The hierarchy of hazard control is a systematic approach to managing safety and is standard practice in many workplaces. It provides a structure to help workers select the most effective ways to eliminate or reduce the risk of hazards.

The most effective measure – elimination, ie removal of the hazard completely – is at the top of the hierarchy. The least effective measure is at the bottom. The idea is you choose a measure from as close to the top as possible to control the hazard you’re dealing with.

Take a look at the following diagram, which shows the hierarchy of hazard control.

<table>
<thead>
<tr>
<th>Type of control</th>
<th>Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Elimination</strong> of the hazard altogether, for example:</td>
<td>Most effective</td>
</tr>
<tr>
<td>• use lifting devices for heavy items</td>
<td></td>
</tr>
<tr>
<td>• remove noisy machinery from an otherwise quiet area.</td>
<td></td>
</tr>
<tr>
<td><strong>Substitution</strong> of the hazard or hazardous work procedure for something safer, for example:</td>
<td></td>
</tr>
<tr>
<td>• use a non-flammable solvent in place of a flammable one</td>
<td></td>
</tr>
<tr>
<td>• use pneumatic instead of electric tools.</td>
<td></td>
</tr>
<tr>
<td><strong>Isolation</strong> of the hazard or hazardous work procedure from workers, for example:</td>
<td></td>
</tr>
<tr>
<td>• install screens, barriers and guards to fence off hazardous areas.</td>
<td></td>
</tr>
<tr>
<td><strong>Engineering</strong> control, for example:</td>
<td></td>
</tr>
<tr>
<td>• modify tools, equipment or machinery</td>
<td></td>
</tr>
<tr>
<td>• install exhaust equipment or cooling fans.</td>
<td></td>
</tr>
<tr>
<td><strong>Administration</strong> control, for example:</td>
<td></td>
</tr>
<tr>
<td>• make adjustments to work practices</td>
<td></td>
</tr>
<tr>
<td>• create shorter shifts to reduce periods of exposure to hazards such as noise or sun</td>
<td></td>
</tr>
<tr>
<td>• put up signs.</td>
<td></td>
</tr>
<tr>
<td><strong>PPE</strong></td>
<td></td>
</tr>
<tr>
<td>• use personal protective equipment, eg gloves, earmuffs, dust mask and eye protection.</td>
<td></td>
</tr>
<tr>
<td>Least effective</td>
<td></td>
</tr>
</tbody>
</table>
Site hazard assessment

You need to assess a site for hazards before the erection of scaffolding, as well as continuously monitor the area while the scaffold is in use to ensure that nothing has changed to make the site unsafe.

When you conduct an initial site assessment, you should look for the following:

• surfaces that may be affected by weather, e.g., asphalt may become soft in hot weather; ground may become boggy in wet weather
• soft or uneven ground surfaces
• the possibility of scaffolders or tradespeople falling or dropping equipment on others below
• the proximity of powerlines to the intended scaffold location
• the movement of vehicles, forklifts, cranes and other plant or equipment; open trenches or areas that have been trenched and backfilled
• areas likely to be excavated while the scaffold is still in place.

You can include the information you gain from this site assessment in your JSA.

In WA, the minimum distance required between scaffolding and powerlines is three metres for a powerline less than 33 kv; six metres for over 33 kv and eight metres for over 133 kv. These requirements differ across Australia.

Activity 1.3 Hazards

Think about your worksite or places where you have seen scaffolding erected. Discuss any hazards you have seen or can think of that might impact on workers erecting scaffolding.

Write three hazards below, then compare your list with others in the class.
Signs and barricades

Signs and barricades should be used on or near scaffolding to help keep everyone in the vicinity safe. They provide warning of any potential danger, give direction as to what to do and direct both pedestrians and vehicles safely around scaffolding work areas. Signs should be positioned at eye level so they’re easily seen.

When you’re planning to erect scaffolding, you need to determine which signs to use and whether barricades will be required – both during erection of the scaffold and while it’s in use.

You can get this information from a site inspection, by looking at the project plans (particularly site and location plans) and talking with supervisors.

If you’re erecting scaffolding near roads or any other area where vehicles are moving close by, you may need a spotter or flagman to control the traffic and keep people in the area safe during the erection process.

- A spotter’s job is to be the eyes and ears of the workers. They will direct them, eg to stop or wait if a vehicle’s approaching.
- A flagman directs traffic, eg stops traffic so that scaffolding can be carried safely across a road.

Spotters and flagmen may use mobile phones, two-way radios and hand signals to communicate with workers.

Activity 1.4 Using safety signs and barricades

Which sign is needed in which situation? Read each of the scenarios and match the sign(s) that should be used next to each work situation. Note whether barricades are required.

<table>
<thead>
<tr>
<th>Sign</th>
<th>Scenario</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DANGER WORKERS ABOVE</strong></td>
<td>Jeremy’s erecting a scaffold for the brickies, but discovers he’s missing a few pieces. He has to wait for the pieces to be delivered, so he goes off site to have lunch.</td>
</tr>
<tr>
<td><strong>PEDESTRIANS USE OTHER FOOTPATH</strong></td>
<td>Katherine and Dave are erecting a scaffold alongside a footpath. Katherine needs to stand on the footpath to pass the scaffold up to Jim.</td>
</tr>
<tr>
<td><strong>DANGER SCAFFOLD INCOMPLETE DO NOT USE</strong></td>
<td>Jim and Christine are erecting a scaffold against the façade of a building near the entrance where office workers walk in and out each day.</td>
</tr>
</tbody>
</table>
Personal protective equipment

You must wear PPE at all times when you’re erecting and dismantling scaffold. This includes:

• steel cap boots
• hard hat
• safety glasses
• gloves.

As scaffolding is predominantly an outside job, it’s also a good idea to wear a long-sleeved, collared shirt and sunscreen.

On noisy worksites, remember to use hearing protection. If site conditions are dusty, wear a dust mask.

Activity 1.5 PPE

Jeremy, an apprentice, wears the following items of PPE when he’s erecting or dismantling scaffolding. What hazard(s) do you think the different pieces of PPE protect him from during these tasks?

Discuss with a partner then note your answers here.

<table>
<thead>
<tr>
<th>PPE</th>
<th>Hazard(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel cap boots</td>
<td></td>
</tr>
<tr>
<td>Hard hat</td>
<td></td>
</tr>
<tr>
<td>Safety glasses</td>
<td></td>
</tr>
<tr>
<td>Gloves</td>
<td></td>
</tr>
</tbody>
</table>
Erecting and dismantling scaffolding is a physically demanding job which requires a lot of lifting, reaching and climbing. It’s a really good idea to do a bit of stretching and warming up before you start, just like you would with other physical or sporting activity.

Some components are long and heavy, which makes them awkward to lift and carry safely. Remember to use correct lifting techniques and always ask for help when you need it. Scaffolding is one of those tasks that is much easier with two people or a team.

The following are some points to consider before you attempt any lifting or handling operation.

• Be mindful of your own strength and limitations; know your limits.

• Decide if it’s a one-person job or whether you need help from your workmates to lift and carry the load.

• Always use mechanical equipment or aids if they’re available.

• Check the weight of the item before you try to lift it.

• Wear gloves to protect your hands, and safety boots to protect your feet.

• Check that the surrounding area is clear and safe.

• Be aware of where you have to put the load down, and the distance you’ll have to carry it.

Let’s look at two of the key elements of correct manual handling – lifting and carrying.
Lifting

When you’re lifting, you want to use the strength in your legs – not your back, which is at far more risk of injury.

• Before you do anything:
  ◦ check the weight of the load
  ◦ check where you’re going; look out for obstacles or hazards.

• Once you’ve decided that it’s safe to lift manually, squat in front of the load with your feet apart.

• Get a firm grip with both hands. Lift with your leg muscles – not your back.

• Keep your back straight at all times.

• Keep your neck straight and your head up.

Carrying

Never carry a load that’s so big that it blocks your view of what’s in front of you and where you’re going; this is how injuries happen – through tripping, falling or walking into things.

• Keep your arms close to your body.

• Maintain a firm, stable hold of the load.

• When you’re putting the load back down, keep your back straight and crouch down using your leg muscles.

• Avoid trapping your fingers when you put the load down.
Carrying a load on your back or shoulder

This isn’t really a preferred method of carrying, as it can put strain on your neck, back and shoulders, but it can be a safe manual handling method for lighter loads.

- Use the strength in your arms to hoist the load up on to your shoulder or back.
- If the load feels uncomfortable or unstable, stop right away and find another way to lift it.
- Always keep your back straight.

Team lifting

If a load is too heavy or awkward for you to lift on your own, team lifting – also called shared lifting or buddy lifting – with one other person, can be a good way to deal with it.

- Follow the same basic manual lifting techniques, but make sure that each person is putting in the same effort when they lift, otherwise the weight load won’t be distributed evenly and one of you could be injured.
- Appoint a team leader and follow their instructions.

Objects or loads that are heavy and/or awkwardly shaped should be moved or carried with specialist lifting gear. It’s simply not worth the risk to your health and safety trying to handle it manually.
Section 2 – Types of scaffolding and their components

Introduction

There are several types or systems of scaffolding used in Australia. Some are pictured here and explained in this section.

This guide focuses on modular scaffolding, as this is the type most often used for restricted height work.

Performance criteria

2.1 *Purpose for scaffolding* is confirmed and associated work tasks are identified.
2.2 Expected loading on scaffold and supporting structure is determined using load tables.
Modular scaffolding

Modular scaffolds are lightweight systems assembled from prefabricated components, including frames, braces and accessories. They include A-frame and H-frame systems, mobile scaffold and a range of proprietary systems. Scaffolding components are described in more detail later in this section.

Modular systems are simpler and faster to set up than other types of scaffold, which is why they’re the most common scaffolds used on residential building sites. They’re used by many trades, including:

• bricklayers and carpenters constructing walls
• plasterers applying render to external walls
• roof tilers requiring a safe structure and path around the edge of a roof
• painters painting gables or eaves.

Modular scaffolding components are most often made from aluminium, which makes them light and easy to lift. It can be erected up to a height equal to three times the width of the base. So, for example, if the width of the base is 1.5 m, the maximum height the scaffold can be is 4.5 m.

Let’s look at some types of modular scaffold you may use.

Framed scaffolding

A framed scaffold is by far the quickest system to set up but it does have limitations; the main ones being that it’s a set shape and size and can be used only on sites that are fairly level.

There are two main types of framed scaffold.

- A-frame
  - A-frames are in the shape of an A. Taller A-frames are often called ‘walkthroughs’, because there is room to walk through them.

- H-frame
  - H-frames are in the shape of an H.
Section 2 – Types of scaffolding and their components

- Toe board/kickboard
- Frame
- Brace
- Base plate/screw jack
- Sole board
- Platform
- Handrail
- Mid-rail
- Guardrail post

Framed scaffolding
Mobile scaffolding

Mobile scaffolding is another type of modular scaffolding. It’s built using frames, lockable wheels (casters) and platforms rather than planks. The wheels mean that this scaffold can be used safely only on level, firm ground, so it’s not often used outdoors on construction sites.

A mobile scaffold might be used by:

- ceiling fixers fixing ceiling sheets
- painters painting cornices and ceilings
- plasterers plastering upper walls and ceilings
- sign-writers installing signs or applying artwork to walls.

Ladders on mobile scaffolding should be inside the scaffolding and not touch the ground, so that the scaffold can be moved without the ladder being dragged along the ground or dislodged. They may be built into the platform or have hooks at the top and bottom that attach to the frame.
Proprietary modular scaffold

There are a lot of different modular scaffold systems available from a range of manufacturers. They generally have similar components; the main differences are in the connections and how the parts join together.

All prefabricated scaffolding systems must be design-registered with a state, territory or Commonwealth regulatory authority.

Tube-and-coupler scaffold

Tube-and-coupler, as its name suggests, is scaffolding that is made up of tubes and couplers (connectors).

The main advantage of the tube-and-coupler over other types of scaffold is that it’s very flexible; you can join pieces together in a limitless range of configurations to suit any size or shape of job. But this is also its weakness – the strength and stability of the scaffold are only as good as the skill of the person putting it together.

Modular systems can only be put together in specific ways and it’s easy to see if any connections haven’t been made properly; this is not the case with the tube-and-coupler.

Small amounts of tube-and-coupler are often used in conjunction with modular systems, eg to provide a location for ladders to be attached to.

Suspended scaffold

A suspended scaffold is a platform suspended by ropes that can be raised or lowered when in use. A swing-stage scaffold is an example of a suspended scaffold.

Suspended scaffold is fixed or anchored at the top and a scaffolding hoist is used to raise and lower it. Suspended scaffolds are often used for construction or maintenance of high-rise buildings, bridges and other large structures.
Classes of scaffold

Scaffolding is classified by the amount of weight or load each working platform or bay can support. Rather than the workers using the scaffold, it’s actually the materials, plant and equipment, plus the weight of the scaffold itself, which contribute the greatest load on a scaffold.

The three classes of scaffold are light duty, medium duty and heavy duty.

Light-duty scaffold

Light-duty scaffold can support only lightweight tools and materials. It’s used by trades such as electricians, painters and sign-writers.

Medium-duty scaffold

Medium-duty scaffold is used by trades such as carpenters, tilers and roof tilers who have a range of tasks, equipment and materials. It is wider than light-duty scaffold and can support a greater load.

Heavy-duty scaffold

Heavy-duty scaffold (pictured here) is most often used by trades such as bricklayers, concreters and plasterers who use heavy materials, or those whose work generates impact forces, such as demolition workers.

There are rules regarding the maximum size and spacing of the bays or platforms in each class as well as the load they can carry. These are listed in the following load table.

<table>
<thead>
<tr>
<th>Duty</th>
<th>Load limit per bay</th>
<th>Minimum bay width</th>
<th>Maximum bay width</th>
<th>Maximum length</th>
<th>Maximum lift height</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light duty</td>
<td>225 kg</td>
<td>450 mm (2 boards)</td>
<td>2400 mm (10 boards)</td>
<td>3 m</td>
<td>2.0 m</td>
</tr>
<tr>
<td>Medium duty</td>
<td>450 kg</td>
<td>675 mm (3 boards)</td>
<td>1800 mm (8 boards)</td>
<td>2.4 m</td>
<td>2.0 m</td>
</tr>
<tr>
<td>Heavy duty</td>
<td>675 kg</td>
<td>900 mm (4 boards)</td>
<td>1275 mm (5 boards)</td>
<td>1.8 m</td>
<td>2.0 m</td>
</tr>
</tbody>
</table>

Materials are not permitted on platforms 450 mm wide or less. All other scaffolds must have a clear platform width of at least 450 mm.
The following diagram shows you what the terms used in the load table refer to.

![Diagram of scaffolding with labels for Bay width, Bay length, and Lift height]

### Activity 2.1 Choosing scaffold

Which type and class of scaffold would you choose for the following tasks and why? Discuss with a partner then write your responses below.

<table>
<thead>
<tr>
<th>Task</th>
<th>Type of scaffold</th>
<th>Class of scaffold</th>
<th>Reason for choice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sign-writing on the front of a building</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Installing a timber gable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Installing a ceiling rose</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rendering an external wall</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Painting a cathedral ceiling</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building a brick arch above a doorway</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Scaffold components

The information that follows details the most common scaffold components you’re likely to use when constructing restricted height scaffolding.

You need to be able to recognise each component, know what it’s used for and how the parts go together, if you want to design and build effective and safe scaffold structures.

Framing components

Frame

Frames are the main components of framed and mobile scaffolding. They form the ends of the bays and hold the scaffold parallel to help create a stable structure. They may have a toggle on them so that you can connect a brace.

Frames come in different widths to suit the different classes of scaffolding.

Standard

Standards are the metal tubes that create the vertical height of the scaffold in some modular systems.

Other components then connect to the standards to make up the scaffold. Proprietary modular systems have varied connections, such as a wedge connector, to enable this.

Brace

In mobile scaffolding, a brace is an aluminium pole with clips on each end that fix onto the frames to stabilise the scaffold.

Different length braces are used to brace vertically and horizontally (plan brace). The lengths are often indicated by different coloured clips.
Section 2 – Types of scaffolding and their components

**Face brace**

The face brace consists of two metal poles joined in the centre which move at that point like a pair of scissors. It’s sometimes called a scissor brace for this reason.

Face braces are fixed across the long side or vertical face of framed and tube-and-coupler scaffold to link pairs of standards or frames.

**Tube**

Tubes, generally made of galvanised metal, come in varying lengths and are usually 48 mm in diameter. They’re used in tube-and-coupler scaffold for vertical and horizontal applications.

Tubes are also used with couplers in framed scaffold to tie bays together and as a fixing location for ladders.

**Coupler**

Couplers are used to clamp down on the tubes and join the scaffold together in tube-and-coupler systems. The main types you’ll use are either right angle or swivel.

They’re also used with tubes in framed scaffold to tie bays together and as a fixing location for ladders.

**Ledger**

Ledgers are horizontal tubes used in tube-and-coupler scaffolding to connect standards along their length.
Erect and dismantle restricted height scaffolding

Transom

A horizontal member used to connect standards across their width.

Joining pin

Joining pins are used to join two frames or two standards together in tube-and-coupler or framed scaffold systems to increase the height of the scaffolding.

They are square or round elongated pins with a ridge around the centre.
**Footing components**

The lowest section of a scaffolding structure, ie the part in contact with the ground, is called the footing.

Footings support the standards or frames and help spread the load of the scaffold. They’re made up of several components, depending on the design and location of the scaffold.

**Sole board**

Sole boards are part of the footing. They distribute the weight of the scaffold and can be used with all types of scaffold.

A sole board is usually a piece of hardwood timber or metal plank at least 220 mm wide.

**Screw jack**

A screw jack is a square metal base plate with an adjustable metal threaded rod attached to the top. The frame or standard then fits over the metal rod.

Sometimes base plates and jacks are supplied as two separate components, rather than combined into one.

**Caster**

Heavy-duty wheels or casters are fitted onto the bottom of a mobile scaffold frame, allowing it to be moved.

They have a brake that can be applied to stop the scaffolding from moving about when in use, and an adjustable threaded rod at the top that allows the mobile scaffold to be levelled.
Working platforms

The working platform (usually referred to as simply the platform) is the surface created to support workers, their tools and materials.

Plank/board

Planks can be used to form a working platform. They should be aluminium or hardwood, between 225–300 mm wide, and of a length to suit the bay width. They’re used in all types of scaffold except mobile.

Planks should only be lapped (overlapped on top of each other) where scaffold goes around corners, not on straight runs.

Platform

Platforms are a prefabricated component, most often an aluminium board with a non-slip cover. They’re used mainly in mobile scaffolding.

They come in various sizes and have hooks on each end to fit over the scaffold. They may have a built-in ladder and/or a built-in trapdoor to provide access to the platform.

There are specific requirements for working platforms in the Australian Standards®; however, some general guidelines are that they should:

• have a slip-resistant surface
• not be cracked or split
• be of uniform thickness
• not be able to be kicked off, uplifted or displaced during normal use
• be positioned so that no single gap between them exceeds 25 mm.
Edge protection

Edge protection prevents workers and their tools or materials from falling off the scaffold. As per clause 1.3.13 of Part 1 of Australian Standard® 1576.1:2010 Scaffold – General Requirements, edge protection is required whenever the working platform is two or more metres above the ground.

The following components together form edge protection.

Guardrail post

Guardrail posts are vertical posts that provide fixing points for all the other edge protection components. They may have a toggle on them for a brace to be connected to.

Handrail

Handrails are attached to standards or frames at a height of between 900–1000 mm above the working platform to prevent people or materials from falling over the edge. They're made of rigid (non-flexible) material such as metal.
Erect and dismantle restricted height scaffolding

**Mid-rail**

Mid-rails are attached to standards or frames at no more than 500 mm below the handrail, between the handrail and the working platform. They prevent people or materials from falling through below the handrail.

They are made of rigid (non-flexible) material such as metal.

**Toe board/kickboard**

Toe boards (also known as kickboards) are made from aluminium or timber. They can be either purpose made or the same planks as for the working platform.

The boards are attached to the standards and must extend at least 150 mm above the working platform.

**Mesh guardrail**

This is a prefabricated mesh guard that has a built-in toe board and handrail. It's used in framed scaffold and some proprietary modular scaffold systems to prevent materials, tools or people from falling from the scaffold onto others below.

The mesh guardrail is like an all-in-one handrail, mid-rail and toe board.
Section 2 – Types of scaffolding and their components

Ladder

Ladders used to access scaffold should be:

- industrial duty
- made of metal
- in good order
- not painted.

Ladders should be secured to the scaffold at the base and at the top using rope. Ropes used to secure ladders must be steel wire or fibre with a minimum diameter of 12 mm.

The pitch or slope of the ladder must be no less than one in four (1 in 4). This means that for every four metres of height, the ladder must be no less than one metre away from the base of the scaffold it’s attached to.

The top of the ladder must extend at least one metre past the working platform height to make accessing it safe and easy. The ground or base under the feet of the ladder must be firm and stable.

Ladders used within a mobile scaffold structure must be attached inside the scaffold structure. They have hooks on the top so they can easily be hooked over the frame, and folding arms at the bottom so they can be hooked onto the scaffold frame rather than resting on the ground.
Tools for erecting scaffolding

Tools used to erect scaffolding need to be small, light and able to be carried easily. They can be kept in a special scaffolder’s belt to keep them handy when moving around and working above the ground. As with all tools, the tools used for scaffolding need to be well maintained and checked for damage before and after use.

The following provides some information about the basic tools used for erecting scaffolding.

Tape measure

You use a tape measure to measure distances when you’re setting up the base and constructing the scaffold.

Claw hammer

You use a claw hammer to hammer down joining pins to make sure they’re fixed securely.
**Adjustable wrench**

Also referred to as a shifter or an adjustable spanner, you use a wrench to loosen and tighten the nuts of couplers.

The head of the wrench is adjustable to suit different size nuts.

**Scaffold belt with frogs**

This is a scaffolder’s belt worn around the waist to keep tools in order and at hand while the scaffolder’s climbing and building the scaffold at height.

Frogs are the leather pouches the tools sit in.

**Spirit level**

You use the spirit level during scaffold erection to check that the frames and standards are level and plumb (vertically straight).

A small (300 mm) level that fits into the scaffolder’s tool belt is the easiest size to use when you’re climbing about on scaffolding.
Erect and dismantle restricted height scaffolding

CPCCCM2008B
Section 3 – Planning and preparing for scaffolding work

Introduction

We’ve already looked at rules and Regulations, some different types and classes of scaffold, and the components of modular scaffold.

Now it’s time to look at the other factors you have to think about when you’re planning and preparing to erect modular scaffold.

Planning and preparing before you start scaffolding work will not only ensure that your scaffold meets the requirements of the job, but also help to eliminate or minimise health and safety risks when you’re erecting, dismantling, maintaining and altering the scaffold and protect those who are:

• using the scaffolding
• near the scaffolding, e.g. other workers and members of the public.

Whenever scaffolding is required, a scaffolding plan should be prepared by a competent person who has the required training, or someone under the direct supervision of a trained person.

Performance criteria

1.5 Scaffolding quantity requirements are calculated in accordance with plans, specifications and quality requirements.

2.1 Purpose for scaffolding is confirmed and associated work tasks are identified.

2.2 Expected loading on scaffold and supporting structure is determined using load tables.

2.3 Site access and egress routes are identified.

2.5 Adequate footing is established in accordance with Australian standard for scaffolding.
Design considerations

The most important considerations when you're designing a scaffold are:

• what the scaffold will be used for
• the loads it needs to support.

You'll need to ask the following questions.

• What tasks will be carried out on the scaffold?
• Who will be working on the scaffold?
• What materials and equipment will be needed on the scaffold?

You also need to take into account the location and conditions where the scaffold will be set up and anything else that may affect the design of your scaffold, such as:

• limited site access
• proximity of powerlines
• site conditions.

The safety of the workers involved in erecting the scaffold and those in the vicinity of the scaffold are also essential elements to cover in the scaffolding plan.

All these factors will have a bearing on the type, class and size of scaffold selected, as well as its placement and the detailed design of its structure.

The design of the scaffold should comply with Parts 2 and 4 of AS 1576 Scaffolding and Parts 1, 2 and 3 of AS/NZS 1576 Scaffolding – General requirements.

Site access and egress

Site access and egress (getting in and getting out) are important considerations when you're designing scaffolding to be used on a site. Some of the factors you'll need to consider include the following:

• vehicle access – How will the scaffold arrive at site? Where and how will it be unloaded?
• storage – Where will the scaffold be stored until it’s ready to be erected?
• safety – Does the management of other vehicles need to be considered? Are there trees or powerlines that could be dangerous if a crane is used to unload scaffold?
• job site – Is there room to get the scaffold to where it’s needed? (This is particularly important for inside work where door openings may limit access.)

Always check the site plan as well as any site-specific rules and requirements during the planning stage to make yourself familiar with all these factors.
Activity 3.1 Site access

Discuss with a partner then list three possible challenges related to site access for scaffold on a small, inner urban job site.

Challenge 1

Challenge 2

Challenge 3

Loads

A load is a force that is applied to a structure. When we talk about loads in scaffolding, we mean anything the scaffolding has to support or withstand.

There are different types of loads which must all be calculated and included in your decision-making when you’re designing a safe scaffold.

Load tables

The load table you saw in Section 2 shows what load can be supported by a platform or bay within a scaffold structure. For example, a platform that can support a 225 kg load is classed as lightweight scaffold. The width and length of the working platforms also regulate what load they can support.

You should always refer to the load tables when you’re designing scaffold.
Live loads

Live loads vary from moment to moment while the scaffold is being used. They include:

- the weight of people on the scaffold
- the weight of materials, tools and equipment
- impact forces.

Dead loads

Dead loads are the weight of the scaffold structure itself and components such as access platforms and ladders. This is often called the self-weight of the scaffold; that is, what the scaffold weighs on its own, ie with nothing or no-one on it. A scaffold’s dead load remains constant throughout the lifetime of its structure.

Environmental loads

Environmental loads include the effects of wind and rain, which can vary from day to day or even minute to minute. Environmental loads can be increased if screens or signs are attached to the scaffold.

Why do you think signs and screens such as shadecloth increase environmental load?

Case study – Loads

Christine has a job coming up, installing fretwork on a gable with her supervisor, Dave. Because of the height they’ll be working at, Christine and Dave will need to set up a scaffold for this job. The gable is on the protected side of the house alongside a garden bed.

To get things organised, Dave has asked Christine to start planning the scaffolding design.
Activity 3.2 Loads

What items or forces will contribute to the load on the scaffold that Christine is going to start planning? What type of load is each of these?

Write the items or forces next to the type of load they are.

<table>
<thead>
<tr>
<th>Load type</th>
<th>Items/forces contributing to load</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dead</td>
<td></td>
</tr>
<tr>
<td>Live</td>
<td></td>
</tr>
<tr>
<td>Environmental</td>
<td></td>
</tr>
</tbody>
</table>

Footings

The term ‘footings’ is used for the base of scaffolding. Effective footings are a crucial component of a safe scaffolding system, as they spread the load of the scaffold by providing a strong, stable foundation for the standards or frames.

Heavier loads require larger footings to provide a greater area for the load to be distributed over.

Specific requirements for the foundation of the scaffold, which includes the footings, are covered in Australian Standards® such as AS/NZS 4576:1995 Guidelines for scaffolding and AS/NZS 1576.1:2010 Scaffolding – General requirements.

Depending on the ground conditions or surface the scaffold is being erected on, footings comprise some or all of the following.

Sole boards

Sole boards are usually used outdoors as part of the footing system. They should be set up level; some digging may be required to achieve a level surface.

Unstable or soft ground requires longer sole boards than firm, stable ground. Sole boards are not required on concrete.
Base plates

The base plate sits on the centre of the sole board to ensure that the loads are distributed evenly. Adjustable base plates are used on uneven surfaces to enable the scaffold to be levelled. Casters used for mobile scaffold require a firm, level surface with a slope of no more than 5°.

Screw jacks

Screw jacks are adjustable threaded legs that are either part of the base plate or inserted into a sleeve on the base plate. They’re adjusted up or down to level the scaffold.

Casters

Casters are used instead of base plates in mobile scaffolding. They usually have an integral screw jack to level the scaffold. Sole boards can be used under casters if required.

The following diagram shows footings with screw jacks adjusted for uneven ground.
Load-bearing capacity

Scaffold can be erected inside or outside and on a range of surfaces from soft, uneven sand through to solid, flat concrete. This presents a challenge for your scaffold design, because different ground conditions have different load-bearing capacities, ie the kind of load the ground can bear safely.

You can find out about the ground conditions, including the terrain of the site and the soil type from the site plan or engineer’s report. Ideally, you should also carry out an inspection of the site as part of your own design planning process.

Ground conditions ranging from minimum to maximum load-bearing capacity are shown in the following table. As you can see, the softer (less solid) the ground, the less its load-bearing capacity.

<table>
<thead>
<tr>
<th>Ground type</th>
<th>Load-bearing capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gravel (road base)</td>
<td>Greatest</td>
</tr>
<tr>
<td>Shale (sedimentary rock)</td>
<td></td>
</tr>
<tr>
<td>Granite</td>
<td></td>
</tr>
<tr>
<td>Dry sand</td>
<td></td>
</tr>
<tr>
<td>Stiff clay</td>
<td></td>
</tr>
<tr>
<td>Soft clay</td>
<td>Least</td>
</tr>
</tbody>
</table>
Activity 3.3 Sole boards

Match each of the different sized sole boards with the ground conditions they would be used on by drawing a line to join them together.

<table>
<thead>
<tr>
<th>Sole board</th>
<th>Ground conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Sole board" /></td>
<td>Dry, uneven sand</td>
</tr>
<tr>
<td><img src="image" alt="Sole board" /></td>
<td>Gravel</td>
</tr>
<tr>
<td><img src="image" alt="Sole board" /></td>
<td>Soft clay</td>
</tr>
</tbody>
</table>

**Quantity requirements**

Once you’ve calculated the load the scaffold has to be able to support, where it will be located and any site limitations, then it’s time to work out the design in detail. This includes its size and shape, and the type and quantity of components required to construct it.
Planning and designing a scaffold

To see the planning and design process in action, let’s take a look at the steps involved.

Case study – Jeremy plans a scaffold

Dave and his apprentice, Jeremy, are cladding the exterior of a house. They’ve done as much as they can from the ground, and they will need to set up a scaffold tomorrow so they can continue working higher up the wall.

Dave has asked Jeremy to plan and design the scaffold and get all the components ready to load on to the truck.

In the following table, you can see the process in six specific steps. Breaking it up like this makes it easier to focus on each step and make sure everything’s covered.

<table>
<thead>
<tr>
<th>Step 1 – Type of scaffold</th>
<th>Jeremy first thinks about the type of scaffold needed.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• The work they will be doing is in just the one area, so they won’t need a mobile scaffold.</td>
</tr>
<tr>
<td></td>
<td>• The scaffold will need to be long enough to allow them to complete the entire wall.</td>
</tr>
<tr>
<td></td>
<td>• There will be two workers on the scaffold, plus their tools, equipment and cladding materials, so it will need to be a medium-duty scaffold.</td>
</tr>
<tr>
<td></td>
<td>• A framed scaffold will be simplest and quickest to erect.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step 2 – Footings</th>
<th>Next, Jeremy checks out the ground the scaffold will be set up on and discovers that it’s soft sand. He will need to use sole plates to provide a stable footing, and screw jacks to adjust the scaffold to level.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>To provide access to the scaffold, he’ll need a ladder that’s tied up to the scaffold and enough space near the bottom of the ladder to use it easily.</td>
</tr>
</tbody>
</table>
Jeremy runs a tape measure over the area where they’ll be working to see how long and how high the scaffold needs to be. It must allow them to easily reach to fix the cladding to the wall frame and to check how much room they have to erect the scaffold in – it’s no good if the scaffold he designs won’t fit into the space available.

**Width**  
He consults the plans to double-check his measurements. The wall will be 5.4 m long and 3.0 m high. Medium-duty scaffold bays are at least 675 mm wide and no more than 2.4 m long, so to allow enough room for two workers and their gear, Jeremy decides that 1.2 m wide would be a better width.

**Length**  
The scaffold must extend past each end of the wall, enough to allow the chippies to finish the ends of the wall safely. So the total scaffold length will be 5.4 m + 0.9 m + 0.9 m = 7.2 m.

**Bays**  
To work out how many bays that requires, Jeremy divides the total length required (7.2 m) by the length of a bay (2.4 m), which gives him a total of 3. This means that three bays of scaffold will be needed.

**Height**  
Frames are about 1.5 m high, depending on the brand, so the scaffold will need to be one frame or lift high. To reach the top of the wall frame comfortably and safely to do the cladding, a working platform height of about 1.5 m will be enough.
To work out the design, Jeremy uses all the measurements and other information he has to draw a quick sketch. So he can see the design clearly, he does a perspective sketch (3D) and a simple elevation (front view).

To work out how many individual pieces are needed to build this scaffold, Jeremy uses his sketch to identify each component, make a list and count them.

<table>
<thead>
<tr>
<th>Component</th>
<th>Quantity</th>
<th>Component</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frames</td>
<td>4</td>
<td>Mid-rail</td>
<td>4</td>
</tr>
<tr>
<td>Braces</td>
<td>6</td>
<td>Base plates</td>
<td>8</td>
</tr>
<tr>
<td>Mesh guardrail</td>
<td>4</td>
<td>Handrail/guardrail</td>
<td>4</td>
</tr>
<tr>
<td>Kickboards/toe boards</td>
<td>5</td>
<td>Boards/working platform</td>
<td>12</td>
</tr>
<tr>
<td>Ladder</td>
<td>1</td>
<td>Sole boards</td>
<td>8</td>
</tr>
<tr>
<td>Joining pins</td>
<td>8</td>
<td>Access mesh guardrail</td>
<td>1</td>
</tr>
<tr>
<td>Guardrail posts</td>
<td>8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Jeremy takes his sketch and component list to Dave for checking. Dave’s happy with the calculations and quantities, but reminds Jeremy he still has some other things to think about before he can complete his plan.
Activity 3.4 Jeremy’s plan

What has Jeremy missed out of his planning? Review the steps he’s completed so far, then discuss in a small group and list three more important elements that need to be considered. Next to each element, suggest what Jeremy should include in his plan. One has been done for you. See if you can work out the other three.

<table>
<thead>
<tr>
<th>Missing elements</th>
<th>Jeremy should include the following information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site access</td>
<td>Check that there’s enough room to get the scaffold to where it’s needed, and maybe somewhere to store it if it doesn’t get erected straight away.</td>
</tr>
</tbody>
</table>

Jeremy’s scaffold was for outside use but you can follow a very similar process when you’re designing scaffolding for inside tasks.
Section 3 – Planning and preparing for scaffolding work

Activity 3.5 Scaffolding plan for ceiling fixing

Your task is to design a scaffold to be used by ceiling fixers who are installing plasterboard throughout a living area.

It’s a pretty big room – 10 m long, 5 m wide and 3 m high, so it will be much easier for them to do their work from a scaffold but they can’t fill the whole room with scaffold as they need space for their materials. Plasterboard sheets can be pretty large!

With a partner or in a small group, work through the planning process to produce a scaffolding plan including a sketch, list of components with quantities, and a completed JSA for the ceiling fixers.

<table>
<thead>
<tr>
<th>Step 1 – Type of scaffold</th>
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<tbody>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Step 2 – Footings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
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<table>
<thead>
<tr>
<th>Step 3 – Size</th>
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<tbody>
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<tr>
<td></td>
</tr>
</tbody>
</table>

| Step 4 – Design, including sketch |
Step 5 – Components

<table>
<thead>
<tr>
<th>Component</th>
<th>Quantity</th>
<th>Component</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tbody>
</table>

Step 6 – Access

Step 7 – Safety requirements

______________________________________________________________

______________________________________________________________

______________________________________________________________

______________________________________________________________

______________________________________________________________
## Section 3 – Planning and preparing for scaffolding work

### Job safety analysis

<table>
<thead>
<tr>
<th>Date:</th>
<th>Location of work:</th>
<th>Activity:</th>
<th>Name:</th>
<th>Approved by (name):</th>
<th>Who is responsible</th>
<th>Risk control measures</th>
<th>Hazards</th>
<th>Activity Hazards Risk control measures Who is responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>List the activities in the order they will be carried out.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>List the tasks in the order they will be carried out.</td>
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<td></td>
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<td></td>
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<td></td>
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<td></td>
<td>List the hazards associated with each task.</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>List the control measures required to minimise the hazard.</td>
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<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Name the person responsible for minimising the hazard.</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Activity</th>
<th>Hazards</th>
<th>Risk control measures</th>
<th>Who is responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>List the tasks in the order they will be carried out.</td>
<td>List the hazards associated with each task.</td>
<td>Name the person responsible for minimising the hazard.</td>
</tr>
</tbody>
</table>
Section 4 – Erecting scaffold

Introduction

Once you’ve completed your design plan and had it checked by your supervisor, you’ll be able to get on with selecting the components, tools and equipment you need to start erecting the scaffold.

In this section, we’ll look at the materials, tools and equipment required, and the process involved for erecting different types of scaffold.

Performance criteria

1.4 Plant, tools and equipment are selected to carry out tasks consistent with job requirements, are checked for serviceability, and any faults are rectified or reported prior to commencement.

1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use.

2.4 Scaffolding and components are selected and inspected with damaged components labelled and rejected or repaired.

2.6 Scaffolding is erected in accordance with regulations, planned hazard prevention and control measures, acceptable safe work practices and manufacturer requirements.

3.3 Inspection log and handover are completed.
Selecting materials, tools and equipment

Different projects and tasks have different scaffolding requirements. Depending on the type and size of the scaffolding you need, there can be quite a lot of pieces to collect. This is where your sketch and plan come in really handy – you can use them as a reference for all the items you need, and then as a checklist to mark off items as you collect them. You’ll also need different tools depending on the type and design of scaffolding you’re erecting.

As you gain more experience in the industry, you’ll start to recognise where particular types of scaffold will work better and be able to make decisions more easily about what’s required.

Obtaining the scaffold

Scaffolding components are quite bulky and take up a lot of storage space. Your company or work team may have a scaffold set sufficient for smaller scaffolding tasks, but on bigger projects scaffolding will probably need to be obtained from a third party such as a construction hire company or specialised scaffolding hire business.

Any scaffolding supplied by a third party, such as a hire company, should come with a set of instructions for the safe erection and use of the scaffold. On larger jobs, the scaffold design will be planned and constructed by qualified workers with the correct licences.

Selecting and inspecting components

Once you have a stock of scaffold available to work with, you need to carefully select the pieces you require.

Make sure that:

- the components match those on your list
- you have the correct quantity of each
- you inspect each piece to make sure it’s fully functional.

You can’t mix and match pieces from different types of modular scaffold without approval from the manufacturer, an engineer or other qualified designer.
Inspecting components

Scaffolding components and tools need to be in good working order or they won’t operate the way they should and could be dangerous, so you need to inspect each component carefully before you use it. If anything appears to be in poor condition, stop using it immediately.

Defects or damage to look for include:

- rust or cracking around weld areas of frames
- dented tubes
- bent standards or frames
- bent or twisted ladders
- split or warped planks or sole boards
- seized couplers
- broken toggles
- loose parts, eg heads of hammers.

Out-of-service tags

You need to tag then report tools or components that are damaged or in any way not fit or safe for use, so that other workers know not to use them. This is often called ‘tagging out’.

This process involves the following steps:

1. identifying items that have faults or are damaged
2. completing an out-of-service tag, including a description of what’s wrong with the item, the date and a signature
3. removing the item from service
4. reporting the item to your supervisor or the person in charge of maintenance.
Case study – Checking carefully

Liam and Christine were loading the ute ready to go and start a job tiling the front of a balcony. Liam went to organise the tiles, leaving Christine to collect the scaffolding they needed.

‘Get it loaded quickly Chris. We’re running late already. Just get what we need, or there won’t be enough room for the tiles,’ called Liam as he walked off to get the tiles.

Christine quickly counted up enough of each piece of scaffold that they needed and loaded it all into the ute, finishing just as Liam got back with the tiles. Then they headed off to the job site.

On site they started to set up the scaffold and discovered that one of the frames was dented and had a broken toggle, and one of the couplers was seized and couldn’t be adjusted.

Activity 4.1 Consequences

Discuss with a partner what could happen next and write your ideas below.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

What might the consequences for the job be if this is what Christine and Liam do?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

What should Christine and Liam have done to avoid this situation before they set off to start the job?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
Scaffold located ready for use

Scaffold needs to be delivered to (or stored on) site in a location where it can be accessed easily when it’s needed. It shouldn’t take up valuable space that’s necessary for access or for tradespeople to work in.

Suitable locations will vary from site to site; however, scaffolding should be kept sorted and stacked neatly so that it’s easy for workers to lay their hands on pieces as they’re needed.
Erecting procedure

Now it’s time to erect the scaffold. Remember to follow your plan, as well as the rules and Regulations that apply in your location.

Pay particular attention to the hazard prevention and safety elements of all these documents throughout the entire erection process, and always check with your supervisor if there’s anything you’re not sure of.

Activity 4.2 Rules, Regulations and documents

Think back to Section 1. Which rules, Regulations and documents do you need to follow or refer to?

List them below.

Safe handling

Don’t forget your manual handling technique to ensure you’re lifting safely.

- When you’re carrying scaffold, it’s a good idea to distribute the weight evenly on both sides of your body.
- Carry frames so that the centre of the frame is in line with the centre of your body.
- When you’re carrying a piece of scaffold in one hand, carry another piece in the other.

When you’re erecting and handling scaffold, there’s a high possibility of you pinching your hands or fingers between the parts. Care, gloves and good communication with your workmates can help to prevent this.

Remember to set up barricades if you need to carry scaffold through potentially hazardous areas, eg along vehicle access ways.

Frames and standards can get filled with mortar or plaster when they’re used by the wet trades. Check their weight before you lift them up; they may be heavier than you expect.
## Erecting framed scaffold

Let’s look at this process step-by-step.

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Image" /></td>
<td><img src="image2.png" alt="Image" /></td>
<td><img src="image3.png" alt="Image" /></td>
</tr>
<tr>
<td>Check that you have all the parts and equipment as per your scaffolding plan, and that nothing has changed on site since you drew up your plan that might affect it.</td>
<td>Put the first sole board down no more than 200 mm away from the working surface and make sure it’s level. Dig the ground out if required. Place the next sole boards on the ground, ensuring they are the correct distance apart (width and length) to support the frame or standards.</td>
<td>Place a screw jack on the centre of each sole board.</td>
</tr>
</tbody>
</table>
### Step 4
If you’re working on a firm, stable surface that doesn’t require sole boards, such as concrete, the first components to be positioned are the base plates, which often come with screw jacks attached.

### Step 5
Measure the distance between the screw jacks to ensure the frames can be placed on top of them easily.

### Step 6
Place the frames on the screw jacks.

### Step 7
Attach braces to both frames, making sure that they lock over the pins correctly.

### Step 8
Check that the base is square by measuring the diagonals. Adjust if necessary.

### Step 9
Use a spirit level to level the frames by adjusting the screw jacks up or down until the bubble rests in the centre of the lines.
### Section 4 – Erecting scaffold

<table>
<thead>
<tr>
<th>Step 10</th>
<th>Step 11</th>
<th>Step 12</th>
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<tbody>
<tr>
<td><img src="image1.png" alt="Image" /></td>
<td><img src="image2.png" alt="Image" /></td>
<td><img src="image3.png" alt="Image" /></td>
</tr>
<tr>
<td><strong>Place the first boards that will form the working platform on top of the frames. Check that the platform is level.</strong> The rest of the platforms will follow the first one, so if the first one is not level, the others won’t be either.</td>
<td><strong>Add the remaining boards to complete the working platform, making sure that the maximum gap between the boards is 10 mm.</strong></td>
<td><strong>Fit edge protection to the exposed sides of the platform (those that won’t be connected to the next bay).</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step 13</th>
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<tbody>
<tr>
<td><img src="image4.png" alt="Image" /></td>
<td><img src="image5.png" alt="Image" /></td>
<td><img src="image6.png" alt="Image" /></td>
</tr>
<tr>
<td><strong>A gate panel will be needed at the ladder.</strong></td>
<td><strong>At the best position for access, and according to the plan, attach tubes to the frame at the top and the bottom for the ladder to be tied to. The slope or pitch of the ladder needs to be not less than 1:4. The slope must be no more than 1:6.</strong></td>
<td><strong>Securely lash the ladder to the tubes. If space is tight, the ladder can be positioned against the end of the scaffold and tied off to one of the standards.</strong></td>
</tr>
<tr>
<td>Step 16</td>
<td>Step 17</td>
<td>Step 18</td>
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</tr>
<tr>
<td>Erect the second bay in the same way as the first. Check and adjust for level across both bays.</td>
<td>Continue the same process for the remaining bays.</td>
<td>When the erection process is complete, carry out a full inspection of the scaffold, paying particular attention to connections between components.</td>
</tr>
</tbody>
</table>

If erection isn’t complete by the end of the day, which means that the scaffolding will be left unsafe and unattended, remove the ladder to prevent access and attach a tag stating that the scaffold is incomplete.
Erecting mobile scaffold

The erection of mobile scaffold is very similar to that of framed scaffold. The same principles apply. Start at the bottom and work up using a spirit level to check that everything is level as you go.

Before you begin to erect the mobile scaffold, make sure that the supporting surface is level and stable.

Safety rules for mobile scaffold

- Be very careful when moving mobile scaffold. Look up and watch for overhead hazards; look down for obstructions or potholes.
- Don’t move the scaffold if there are tools, materials or workers on it.
- Keep the trapdoor closed at all times unless someone’s coming through it.
- Brakes must be applied at all times when the scaffold is in use.
Let’s look at the erection process step-by-step.

<table>
<thead>
<tr>
<th>Step 1</th>
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<td><img src="image3.png" alt="Image" /></td>
</tr>
<tr>
<td>Check that the casters are locked so the scaffold doesn’t move unexpectedly as it’s being erected.</td>
<td>Attach a horizontal brace to the vertical tube of the base frame. This helps hold the frame up while you work.</td>
<td>Attach the other end of the brace to the end of the second base frame.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step 4</th>
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<th>Step 6</th>
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<tbody>
<tr>
<td><img src="image4.png" alt="Image" /></td>
<td><img src="image5.png" alt="Image" /></td>
<td><img src="image6.png" alt="Image" /></td>
</tr>
<tr>
<td>Attach the plan braces diagonally to the vertical tube as low down as possible.</td>
<td>Attach diagonal braces to the base of the unit between the frames. Use the adjustable legs to level the base.</td>
<td>Fit the plain platform first, then the walk-through platform, making sure the hinges on the trapdoor are on the outside edge.</td>
</tr>
</tbody>
</table>
### Section 4 – Erecting scaffold

<table>
<thead>
<tr>
<th>Step 7</th>
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</tbody>
</table>
| **Install the two end frames for the second lift.** | **Attach guardrails and toe boards, making sure the trapdoor still works. Fit diagonal braces to give rigidity to the edge protection.** | **Attach the ladder through the access platform to the frame and attach the stand-off hooks on the lower part of the ladder to a suitable rung on the frame.**  
  **Do a completion check of the scaffold. Pay particular attention to the connections and make sure that all casters are locked and the ladder is secure.** |

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BC2200
Erecting proprietary modular scaffold

Proprietary modular scaffold refers to the wide range of modular scaffolding systems designed and produced by a range of manufacturers. It includes systems like Kwikstage, RapidStage™, Layher Allround Scaffolding® and QuickAlly among others.

Each system has its own erection procedure and instructions for use. However, the same basic principles, such as creating a stable footing, checking for level, and working safely at all times still apply.

Remember that parts from different systems should not be used together unless this has been approved in writing by someone authorised to do so, such as a certified scaffold designer, engineer or manufacturer.

If you’re unsure about how to erect or use a proprietary scaffold system, check with the supplier or manufacturer for instructions and advice.

Erecting tube-and-coupler scaffold

Because it has no prefabricated components, tube-and-coupler scaffold is a little more complex to erect than other systems, and is covered in detail in another unit CPCCSC3001A Erect and dismantle intermediate scaffolding. However, pieces of tube-and-coupler scaffold are sometimes used with modular systems, so it’s important that you know some of the basics.

Footings for tube-and-coupler scaffolding are created the same way as for modular scaffold. From there on, the scaffold is created by connecting tubes that are assembled in a grid system and connected by brackets called couplers which are tightened using a wrench.

Two pairs of hands are often needed to hold the tubes and connect the couplers. Hand-tighten fixings first and then use a wrench to finish off.
**Inspection log and handover**

The worker who builds the scaffold will do what’s called a ‘handover’ to the work or site supervisor once it’s complete. In simple terms, this means advising the supervisor that the scaffold’s ready for use.

Sometimes a scaffolding inspection log needs to be completed as part of the handover. This log is a record showing:

- who built the scaffold
- any changes made to the scaffold
- when the scaffold was last inspected
- who carried out the inspection(s).

The log is usually filled in and signed by the person who builds the scaffold; it’s sometimes also signed by a second worker, such as a supervisor.

A scaffolding log is more likely to be found on larger, commercial sites than small residential projects. A log is a requirement for scaffolding above four metres high. This is not covered by this unit.

There isn’t a standard document used for an inspection log; your supervisor will provide you with one if you’re required to complete one.
Erect and dismantle restricted height scaffolding

CPCCCM2008B
Section 5 – Inspecting, repairing and altering scaffolding

Introduction

Once scaffolding has been erected and is in use, there are still important procedures to follow to ensure it remains in a safe condition and is used correctly. The inspection of scaffolding on site is particularly important when the scaffold is in place for a prolonged period of time.

Erected scaffolding must:

• be checked for compliant use
• be inspected regularly (at least every 30 days)
• have any scheduled changes made according to the scaffolding plan
• have all repairs carried out safely.

There will also be repairs and alterations required during the life of the scaffold on the worksite.

Performance criteria

3.1 Critical structural and safety areas of scaffolding are inspected for damage, corrosion and wear.
3.2 Current use of scaffolding is checked for compliance with type of scaffolding equipment.
3.4 Scaffolding is reviewed to determine if changes or modifications were scheduled as per original planning.
3.5 Alteration or repair is carried out where specified.
Compliant use of scaffold

When the scaffolding was originally designed, it was to suit particular purposes or work tasks. It’s important to check that this is still how the scaffold is being used, as non-compliant use could prove dangerous.

If the use has changed, it’s up to the person responsible for the scaffold (this will usually be the job or site supervisor) to check that it’s suitable for the new use.

Reasons for changes of use could be that additional work has to be carried out or different materials or additional workers are needed to complete the scheduled task.

If the scaffold is no longer suitable for the new use, a plan needs to be drawn up detailing the alterations required to suit the new use.

If an inspection log exists for the scaffolding, it should be filled in when an inspection is carried out or when any changes, including repairs, are made.

Inspecting scaffold

When scaffolding is in use, it’s essential to inspect it regularly to make sure that nothing has changed since it was erected that could make it unsafe.

The frequency of inspections may vary depending on:

- weather and site conditions
- the type and size of the scaffold
- the risks associated with scaffold collapse.

The person inspecting the scaffold must be capable of determining areas that have been incorrectly altered and identifying faults in the scaffolding.
There are many issues or events that can affect the integrity and safety of scaffolding. The main ones are listed here.

- **Knocked** – Although the scaffold should have been designed and erected in such a way that the day-to-day knocks it will receive on a construction site won’t affect it, damage can still occur. Knocks are a particular issue if the scaffold’s located close to vehicle access points or loading bays where it gets knocked and bumped regularly. To avoid knocks, try to erect the scaffold in areas where this can’t happen, or manage the risk by using barricades and signs to restrict traffic.

- **Damaged** – Although scaffolding is pretty tough, heavy equipment, materials and vehicles on construction sites can damage it.

- **Wear** – Scaffold components can corrode over time and some parts wear away faster than others. Particular areas to examine for corrosion and wear include all connections and areas where water or debris collects. This is even more important for scaffold that has been in place for long periods.

- **Worked loose** – Over time and use, connections can work loose and the scaffold will become unstable. It’s important to check all connections regularly.

- **Out of level** – If the ground conditions have changed, eg there’s been heavy rain and the ground’s turned to mud, the scaffold may become out of level and therefore unsafe. It’s important to check regularly for level, and adjust the footings if required.

- **Removed/changed by users** – Sometimes a tradesperson might decide to remove part of the scaffold to make their task easier, eg to remove a frame so that a large item can get through.

While it might seem to make sense at the time, the scaffold is designed and constructed with safety in mind first and foremost, and each component works with the others to keep the structure of the scaffold safe, so it’s important that it remains complete and intact.

If the inspection reveals any safety issues with the scaffolding, these should be rectified before the scaffolding is used. If the issues can’t be rectified, an ‘out-of-service’ tag should be attached, so that other workers know not to use it. You would then report the scaffolding to your supervisor.
Repairing scaffolding

Sometimes the scaffold will need to be repaired. In most cases, you’ll need to safely remove the damaged part and either fix or replace it. If this requires the scaffold to be partially dismantled, follow safe dismantling procedures which are covered in the next section of this guide.

If you have to leave the scaffold area to repair a component or find a replacement, hang an ‘out-of-service’ or ‘scaffolding incomplete’ tag so that no-one uses the scaffold until it’s been repaired.

Repairs other than very basic ones, like straightening a bent tube, should be carried out only by someone with the appropriate training.
Scheduled alterations

Sometimes a scaffolding plan may include a requirement for changes to be made to the scaffolding at a particular point in time, to suit a different trade, task or stage in the project. It’s the responsibility of the scaffold erector or supervisor to review the scaffolding plan, carry out the required change(s) and reinspect the scaffold.

The following pictures show the steps taken for an alteration. In this example, an extra lift is being added, which means some components need to be removed from the scaffold.

<table>
<thead>
<tr>
<th>Step 1</th>
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<th>Step 3</th>
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<tbody>
<tr>
<td><img src="image1" alt="Step 1" /></td>
<td><img src="image2" alt="Step 2" /></td>
<td><img src="image3" alt="Step 3" /></td>
</tr>
<tr>
<td>Remove the components and carefully pass them down to a worker on the ground.</td>
<td>Insert joining pins to support the frames ready for the next lift.</td>
<td>Carefully place a frame on to the joining pins to form the ends of the new bay.</td>
</tr>
<tr>
<td>Step 4</td>
<td>Step 5</td>
<td>Step 6</td>
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<td><img src="image3.jpg" alt="Image" /></td>
</tr>
<tr>
<td>Add a brace to each face of the scaffold to join the two new frames together.</td>
<td>Pass up planks and form the new working platform.</td>
<td>With the platform in place, add the edge protection. As the platform is now above 2 m, all sides – except the one against the building – require handrails, mid-rails and toe boards.</td>
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</table>

<table>
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<tr>
<th>Step 7</th>
<th>Step 8</th>
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<tbody>
<tr>
<td><img src="image4.jpg" alt="Image" /></td>
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</tr>
<tr>
<td>Add a ladder in a suitable position to access the new platform, ensuring that it: • is securely attached • extends at least a metre beyond the platform • is the correct slope.</td>
<td>Perform another full check of the structure before you hand the scaffold over to the supervisor for checking.</td>
</tr>
</tbody>
</table>
Section 6 – Closing procedures

Introduction

When the scaffold is no longer required, it can be dismantled and packed up. This often needs to happen quite quickly to allow access for trades and materials for the next stage of construction.

Proper procedures should be followed to ensure that the scaffold is dismantled safely and readied for its next use, and the location is left as you found it.

You will need to dismantle, clean, inspect and organise the scaffolding then clean up the area, according to requirements of the worksite, your employer or supervisor and the Regulations applicable in your area.

Performance criteria

4.1 Scaffolding is dismantled using reverse procedure as for erection.

5.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation, regulations, codes of practice and job specification.

5.2 Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturer recommendations and standard work practices.
Dismantling scaffolding

Scaffold is dismantled in the reverse order to how it was erected, so the last component attached is the first one removed. The most important things to remember when dismantling scaffold are to loosen or remove pieces only one at a time; don’t get ahead of yourself; pass components down carefully and don’t throw them.

Begin by clearing everything from the working platform(s) and making sure that there’s space close by to stack the pieces as they’re being removed. Ensure all braces are still in their original positions – the scaffold needs to be safe to work on for the dismantling process.

- Watch out for any parts or sections that have been damaged or removed during work or any changes from the original design.
- Leave any safety signs and barricades in place until the dismantling process is finished.

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<thead>
<tr>
<th>Step 1</th>
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<tbody>
<tr>
<td><img src="image1.png" alt="Step 1" /></td>
<td><img src="image2.png" alt="Step 2" /></td>
<td><img src="image3.png" alt="Step 3" /></td>
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</tbody>
</table>

- Remove the parts one level at a time, starting with the edge protection from the highest platform.
- Create a platform to work from at least two planks wide at the next level down, while removing the planks from the upper platform.
- Remove the frames from the upper lift and carefully pass them down to the person on the ground.
## Section 6 – Closing procedures

<table>
<thead>
<tr>
<th>Step 4</th>
<th>Step 5</th>
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<tbody>
<tr>
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<td><img src="image3.png" alt="Image" /></td>
</tr>
<tr>
<td>Remove the tubes and untie the ladder.</td>
<td>Remove the edge protection from the upper lift and pass it down to the person on the ground.</td>
<td>Working from the ground, remove all the planks.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step 7</th>
<th>Step 8</th>
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<td><img src="image6.png" alt="Image" /></td>
</tr>
<tr>
<td>Starting from one end, progressively remove the braces and frames, so that the remaining bays remain stable as you work.</td>
<td>Collect all screw jacks, base plates and sole boards. Check the area for any dropped parts.</td>
<td>When you have finished dismantling, all scaffolding should be in a tidy stack.</td>
</tr>
</tbody>
</table>
Clean-up

Because scaffolding is reused over and over again, it’s important that it’s looked after properly.

As with all aspects of building and construction, clean-up procedures apply to scaffold components and tools, and the work area.

Your company or the site you’re working on will have clean-up procedures to follow, so make sure you’re familiar with them. There are also local, state and national Regulations that must be followed. For example, the approving authority, such as the local council, will include clean-up requirements in the building licence for the project.

Try to minimise water use and suppress dust as much as possible during clean-up to protect the environment.

These are some of the ways you can do this.

- Use fittings such as spray nozzles on hoses to direct water accurately.
- Don’t leave hoses running when they’re not being used.
- Sweep dust, dirt and rubbish into containers nearby so that they’re disposed of quickly.
- If dust needs to be swept up on a windy day, wet the area lightly before you sweep to prevent the dust from becoming airborne.
- Cover bins or skips or put heavier items on top of lighter items to prevent rubbish from blowing out.

Erecting and dismantling scaffolding doesn’t usually involve any hazardous materials or produce any hazardous waste that needs specific handling or clean-up procedures.

A load of well-used scaffolding like this (pictured left) may look like rubbish that needs to go in the skip, but pieces of scaffold that are too damaged or worn out to be repaired and/or reused may be able to be recycled.

All waste from on or near the scaffolding needs to put in the correct collection area, skip or bin. Check recycling practices in your local area.

Remember that throwing out into the skip should always be the last resort, and only when something can’t be recycled or reused.
Clean-up procedure

1. Clean down all pieces of plant and equipment, and all tools. This might involve brushing, scraping or hosing.
2. Check all parts for any damage. Place any damaged parts aside to be repaired or tagged and reported.
3. Sort and stack all parts neatly so they’re easy to find when needed next.
4. Look over the entire area for any remaining parts, materials, tools, equipment or rubbish.

The area where the scaffolding has been must be left in the same condition it was in before the work began. Requirements related to this are part of various rules and Regulations, including local council building and development policies and environmental controls. Some of these vary depending on location. Check with a supervisor to find out what clean-up rules you need to follow on your worksite.
Maintenance and storage

All plant, tools and equipment need to be cleaned, inspected and stored neatly so that they’re easy to identify when the next person needs them. Your supervisor is likely to have a set of standard work practices you can follow for this stage of work.

Scaffold

All scaffolding needs to be stacked in neat, separate piles to make their next use or transport easier. Any damaged pieces of scaffold need to be tagged, reported and put aside for repair.

| Sort components into piles according to their type, eg all planks go together; all braces go together. Avoid leaving sharp edges sticking out that could hurt someone or be tripped over. | Some components come in more than one size. Stack those that are the same size together. | Stacks or piles need to be even and stable to minimise the chance of them falling over – not like this one. |

Tools

Look after your tools so that they’re ready for use the next time you need them. They need to be cleaned then stored correctly. Check the manufacturer’s instructions for specific information regarding the cleaning requirements for each tool you use.

Once tools are clean, remove any moisture by wiping them over with a clean, dry cloth then store them in a dry, secure place. This extends their working life and ensures that they’ll work properly the next time you need them.
### Annex A – Unit details

<table>
<thead>
<tr>
<th>Unit title</th>
<th>Erect and dismantle restricted height scaffolding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Descriptor</td>
<td>This unit of competency specifies the outcomes required to erect and dismantle restricted height scaffolding to provide work platforms for various occupational applications. It includes placement of safety barriers and only involves modular scaffolding restricted to a height of 4 metres.</td>
</tr>
<tr>
<td>National code</td>
<td>CPCCCM2008B</td>
</tr>
<tr>
<td>Employability skills</td>
<td>This unit contains employability skills.</td>
</tr>
<tr>
<td>Prerequisite unit</td>
<td>CPCCOHS2001A Apply OHS requirements, policies and procedures in the construction industry</td>
</tr>
<tr>
<td>Application</td>
<td>This unit of competency supports achievement of skills to handle, erect and dismantle a range of restricted height scaffolding systems, which may include working with others and as a member of a team.</td>
</tr>
</tbody>
</table>

#### Element 1 Plan and prepare

1.1 Work instructions, including plans, specifications, quality requirements and operational details, are obtained from relevant sources of *information*, confirmed and applied for *planning and preparation* purposes.

1.2 *Workplace health and safety (WHS)* requirements are followed in accordance with safety plans and policies.

1.3 Signage and barricade requirements are identified and implemented.

1.4 Plant, *tools and equipment* are selected to carry out tasks consistent with job requirements, are checked for serviceability, and any faults are rectified or reported prior to commencement.

1.5 *Scaffolding* quantity requirements are calculated in accordance with plans, specifications and *quality requirements*.

1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use.

1.7 *Environmental requirements* are identified for the project in accordance with environmental plans and *statutory and regulatory authority* obligations, and are applied.
### Element 2 Erect scaffolding

2.1 *Purpose for scaffolding* is confirmed and associated work tasks are identified.

2.2 Expected loading on scaffold and supporting structure is determined using load tables.

2.3 Site access and egress routes are identified.

2.4 Scaffolding and components are selected and inspected with damaged components labelled and rejected or repaired.

2.5 Adequate footing is established in accordance with Australian standard for scaffolding.

2.6 Scaffolding is erected in accordance with regulations, planned hazard prevention and control measures, acceptable safe work practices and manufacturer requirements.

### Element 3 Inspect, repair and alter scaffolding

3.1 Critical structural and safety areas of scaffolding are inspected for damage, corrosion and wear.

3.2 Current use of scaffolding is checked for compliance with type of scaffolding equipment.

3.3 Inspection log and handover are completed.

3.4 Scaffolding is reviewed to determine if changes or modifications were scheduled as per original planning.

3.5 Alteration or repair is carried out where specified.

### Element 4 Dismantle scaffolding

4.1 Scaffolding is dismantled using reverse procedure as for erection.

### Element 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.

5.2 Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturer recommendations and standard work practices.
Required skills and knowledge

Required skills

- communication skills to:
  - determine requirements
  - enable clear and direct communication, using questioning to identify and confirm requirements, share information, listen and understand
  - follow instructions
  - read and interpret:
    - 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
  - written skills to record maintenance in logbooks
- 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 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.
Required knowledge

- general construction terminology
- job safety analysis (JSA) and safe work method statements
- material safety data sheets (MSDS)
- materials storage and environmentally friendly waste management
- plans, specifications and drawings
- processes for the calculation of material requirements
- quality requirements
- relevant Acts, regulations and codes of practice
- scaffolding equipment
- scaffolding techniques
- shifting devices
- types, characteristics, uses and limitations of plant, tools and equipment
- workplace and equipment safety requirements.
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.

<table>
<thead>
<tr>
<th>Overview of assessment</th>
<th>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.</th>
</tr>
</thead>
</table>
| Critical aspects for assessment and evidence required to demonstrate competency in this unit | A person who demonstrates competency in this unit must be able to provide evidence of the ability to:  
  • 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  
  • complete planning, erection and dismantling of a modular scaffolding system, in accordance with JSA and safe work method statements and regulations, including a minimum of:  
    ◦ three bays (one with a return)  
    ◦ one lift with ladder  
    ◦ fall and edge protection. |
| Context of and specific resources for assessment | This competency is to be assessed using standard and authorised work practices, safety requirements and environmental constraints. Assessment of essential underpinning knowledge will usually be conducted in an off-site context. Assessment is to comply with relevant regulatory or Australian standards' requirements. Resource implications for assessment include:  
• 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. 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. |

### Method of assessment

Assessment methods must:
- satisfy the endorsed Assessment Guidelines of the Construction, Plumbing and Services 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 able to be transferred to other circumstances and environments.

Validity and sufficiency of evidence requires that:
- 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 relate to a number of performances assessed 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.

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.

Supplementary evidence of competency may be obtained from relevant authenticated documentation from third parties, such as existing supervisors, team leaders or specialist training staff.
## Range statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised 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.

<table>
<thead>
<tr>
<th>Information includes:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• diagrams or sketches</td>
<td></td>
</tr>
<tr>
<td>• engineers’ design specifications and manufacturer specifications and instructions, where specified</td>
<td></td>
</tr>
<tr>
<td>• instructions issued by authorised organisational or external personnel</td>
<td></td>
</tr>
<tr>
<td>• memos</td>
<td></td>
</tr>
<tr>
<td>• MSDS</td>
<td></td>
</tr>
<tr>
<td>• regulatory and legislative requirements pertaining to erecting and dismantling restricted height scaffolding</td>
<td></td>
</tr>
<tr>
<td>• relevant Australian standards</td>
<td></td>
</tr>
<tr>
<td>• safe work procedures related to erecting and dismantling restricted height scaffolding</td>
<td></td>
</tr>
<tr>
<td>• signage</td>
<td></td>
</tr>
<tr>
<td>• verbal or written and graphical instructions</td>
<td></td>
</tr>
<tr>
<td>• work bulletins</td>
<td></td>
</tr>
<tr>
<td>• work schedules, plans and specifications.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Planning and preparation include:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• work site inspection, equipment defect identification, assessment of conditions and hazards, and determination of work requirements</td>
<td></td>
</tr>
<tr>
<td>• erection of scaffolding to a maximum height of 4 metres, including placement, sequencing, squaring, levelling and the reverse for dismantling</td>
<td></td>
</tr>
<tr>
<td>• establishment of footings, including review of JSAs to determine bearing capacity of ground or working surfaces</td>
<td></td>
</tr>
<tr>
<td>• alteration and repair, which may be required due to storm damage, accidents, misuse and process changes.</td>
<td></td>
</tr>
</tbody>
</table>
**Workplace health and safety** is to be in accordance with legislation, regulations, codes of practice, organisational safety policies and procedures, and project safety plan and may include:

- 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 conduct of operational risk assessment and treatments associated with:
  - earth leakage boxes
  - lighting
  - photovoltaic (solar) panels
  - 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
- 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.

**Tools and equipment** include:

- aluminium modular scaffolding equipment
- hammers
- ladders
- scaffolding planks
- shovels and spanners
- spirit levels
- steel box spanners
- tape measures.
| **Scaffolding type and quantity requirements:** | • types of restricted height scaffolding may include systems scaffolding, A frame, H frame, tube and coupler, and aluminium (and modular to a maximum height of 4 metres). |
| **Quality requirements** include relevant regulations, including: | • Australian standards |
| | • internal company quality policy and standards |
| | • manufacturer specifications, where specified |
| | • workplace operations and procedures. |
| **Environmental requirements include:** | • clean-up protection |
| | • noise and dust |
| | • waste management. |
| **Statutory and regulatory authorities include:** | • federal, state and local authorities administering applicable Acts, regulations and codes of practice. |
| **Purpose for scaffolding includes:** | • work platforms for various occupational applications. |
Annex B – Assessments

Assessment plan

The assessments suggested here for this unit are designed to assess your competency in the elements as listed in the unit details at Annex A to this guide. There are three components to the assessment.

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment 1 – Scaffolding rules, requirements, types, classes and components</td>
<td>1, 2, 3, 5</td>
</tr>
<tr>
<td>This is a written, open-book assessment. You will answer a range of questions which will constitute evidence for assessment.</td>
<td></td>
</tr>
<tr>
<td>Assessment 2 – Working with scaffold</td>
<td>1, 2, 3, 4</td>
</tr>
<tr>
<td>This is a written, open-book assessment. You will answer a range of written questions which will constitute evidence for assessment.</td>
<td></td>
</tr>
<tr>
<td>Assessment 3 – Planning, erecting, inspecting, altering and dismantling scaffolding</td>
<td>All</td>
</tr>
<tr>
<td>This contains five discrete activities to be completed in a simulated work environment, on the job or during work placement. It is supported by an observation checklist.</td>
<td></td>
</tr>
</tbody>
</table>

Note: Your lecturer may provide you with alternative assessments.

Individual learning and assessment needs

Learners have different learning styles and needs. Please let your lecturer know if there is anything that may have an effect on your learning.

Results and appeals

There is a process to be followed should you wish to appeal the result of your assessment. Please ask your lecturer for more information about this.
Erect and dismantle restricted height scaffolding

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Assessment 1 – Scaffolding rules, requirements, types, classes and components

Introduction
For this assessment, you will respond to a series of written questions. These questions check your knowledge of scaffolding rules and requirements, types and classes of scaffold and their components.

Requirements
This is an open-book assessment. You may refer to your learner’s guide if you need to.
Write your responses to the questions in the spaces provided. Your lecturer may provide you with additional instructions.

Materials and equipment
The following assessment worksheet is provided in this guide:
• Assessment 1 – Scaffolding rules, requirements, types, classes and components.
You will need:
• pens, pencils, eraser, ruler
• your learner’s guide.
Erect and dismantle restricted height scaffolding

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CPCCCM2008B

Erect and dismantle restricted height scaffolding

Assessment 1 – Scaffolding rules, requirements, types, classes and components

Name ____________________________ Date ______________

I have received feedback on this assessment.

Signature _________________________ Date ______________

Assessor’s initials
Erect and dismantle restricted height scaffolding

CPCCCM2008B
### Assessment 1 – Scaffolding rules, requirements, types, classes and components

1. List three items of PPE you should wear when erecting scaffolding.

   __________________________________________________________
   __________________________________________________________
   __________________________________________________________

2. At what height should scaffold safety signs be positioned so that they can be seen easily?

   __________________________________________________________

3. When should a job safety analysis (JSA) be filled out?

   __________________________________________________________
   __________________________________________________________

4. Several Australian Standards® apply to restricted height scaffolding. List two of them.

   __________________________________________________________
   __________________________________________________________

5. What is the maximum height of a working platform in restricted height scaffolding?

   __________________________________________________________
   __________________________________________________________

6. Describe two actions you can take to minimise environmental impact related to the erection and use of scaffolding.

   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
7. List two types of site hazards you need to look for when you’re conducting an initial site hazard assessment as part of your planning.

<table>
<thead>
<tr>
<th>Hazard Type 1</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard Type 2</td>
<td>Description</td>
</tr>
</tbody>
</table>

8. What could you do to protect pedestrians and other workers in the vicinity from the risk of being hurt while scaffolding is being erected?

<table>
<thead>
<tr>
<th>Protection Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. Name two types of scaffold and describe a work task each one would be suitable for.

<table>
<thead>
<tr>
<th>Scaffold Type 1</th>
<th>Work Task 1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Scaffold Type 2</td>
<td>Work Task 2</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. Name and describe the three classes of scaffold.

<table>
<thead>
<tr>
<th>Class 1</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Class 2</td>
<td>Description</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Class 3</td>
<td>Description</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
11. What is the maximum load allowed in one bay of a heavy-duty working platform?

12. How wide does the platform need to be for medium-duty scaffold?

13. Describe a ladder suitable for accessing scaffolding.

14. What is the correct angle/slope for a ladder used to access scaffolding?

15. When is edge protection required on a scaffold?

16. When you’re planning or designing scaffold, where would you find information about the site, the building project and the requirements of the scaffold?
   List three sources of information you could use.

17. You’re on site and go to grab a hammer to knock some toggles over on the scaffold and you discover that the head of the hammer is loose.
   What action should you take to deal with this situation?
18. When would you need to check a scaffolding safety data sheet (SDS)?

________________________________________________________

19. On a noisy worksite, list two ways of communicating with workmates who are a distance away.

________________________________________________________

20. A new tradesperson on your project has English as their second language and does not speak it fluently.
List two things you could do to communicate clearly with them in a way that they can easily understand.

________________________________________________________

21. Which tool would you use to loosen or tighten nuts on tube-and-coupler scaffolding?

________________________________________________________

22. Label each of the components on this scaffold diagram.
Assessment 2 – Working with scaffold

Introduction

For this assessment, you will respond to a series of written questions. These questions check your knowledge of planning and preparation, erecting, inspecting, repairing, altering and dismantling scaffold, and clean-up.

Requirements

This is an open-book assessment. You may refer to your learner’s guide if you need to. Write your responses to the questions in the spaces provided. Your lecturer may provide you with additional instructions.

Materials and equipment

The following assessment worksheet is provided in this guide:

• Assessment 2 – Working with scaffold.

You will need:

• pens, pencils, eraser, ruler
• your learner’s guide.
Erect and dismantle restricted height scaffolding

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Erect and dismantle restricted height scaffolding

Assessment 2 – Working with scaffold

Name _______________________________ Date ______________

I have received feedback on this assessment.

Signature ___________________________ Date ______________

Assessor’s initials
Erect and dismantle restricted height scaffolding

CPCCCM2008B
Assessment 2 – Working with scaffold

1. There are several design considerations you have to make when you’re planning the design of a scaffold. List three of them.

   - 
   - 
   - 

2. List three things you have to consider when you’re deciding access and egress routes to the site where the scaffold will be erected.

   - 
   - 
   - 

3. List three things that contribute to the live load on a scaffold.

   - 
   - 
   - 

4. List three scaffolding components that can be part of the footings.

   - 
   - 
   - 

5. Which of these foundations requires use of a longer sole board – dry sand or soft clay?

   - 

6. Several documents can be created when planning a scaffold. List three of them.

   - 
   - 
   - 
7. During the scaffolding planning process, you need to work out how many of each component you will need to build the scaffold. Describe one way you can do this.


8. Which document provides a record of who built the scaffold and whether it has been inspected?


9. What should you do with a damaged or defective scaffold component?


10. How should scaffold components be stored?


11. If a scaffold is incomplete, what two things should be done?


12. Describe the type of ground (foundations) required for mobile scaffolding.


13. What must be applied/on at all times when a mobile scaffold is in use?


### Assessments

**14. Why should an existing scaffold be checked for compliant use?**

- [ ]
- [ ]
- [ ]

**15. When might a scaffold need to be altered?**

- [ ]
- [ ]
- [ ]

**16. How can you find out if changes or modifications have been scheduled for a scaffold?**

- [ ]
- [ ]
- [ ]

**17. Scaffold needs to be dismantled safely. Describe three ways you can do this.**

- [ ]
- [ ]
- [ ]

**18. List three things you should do during clean-up of scaffold, tools and work area.**

- [ ]
- [ ]
- [ ]
Erect and dismantle restricted height scaffolding

CPCCCM2008B
Assessment 3 – Planning, erecting, inspecting, altering and dismantling scaffolding

Introduction

For this assessment, you will complete a series of documents to plan a scaffold and then erect, inspect, alter and dismantle a scaffold, with a partner or in a small group. Your lecturer may choose to split the assessment into parts.

You will be assessed on your demonstration of the skills and knowledge required to:

• plan and prepare the work tasks
• erect a single-lift, three-bay scaffold
• inspect and alter scaffolding
• dismantle scaffold and clean up the site
• communicate effectively with others, and work as part of a team.

Your work practices will be observed by your lecturer, assessor or work placement supervisor.

Requirements

The observation checklist will be used for observation purposes during this assessment. The checklist must be completed and signed by your lecturer, assessor or supervisor.

All other instructions for this assessment, which contains six assessment activities for you to complete, are provided in this guide. Your lecturer will provide you with any additional instructions regarding the practical component of the assessment, which may vary depending on the resources.

Materials and equipment

The following assessment activity worksheets are provided in this guide:

• Assessment activity 3.1 Planning and preparation
• Assessment activity 3.2 Safety checklist and job safety analysis
• Assessment activity 3.3 Inspection checklist
• Assessment activity 3.4 Alterations
• Assessment activity 3.5 Dismantling and cleaning up
• Assessment activity 3.6 Observation checklist (to be completed by your lecturer, assessor or workplace supervisor).

Your lecturer will provide information about access to the tools, equipment and materials you’ll need for this assessment.
Erect and dismantle restricted height scaffolding

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CPCCCM2008B

Erect and dismantle restricted height scaffolding

Assessment 3 – Planning, erecting, inspecting, altering and dismantling scaffolding

Name ___________________________ Date ______________

I have received feedback on this assessment.

Signature ___________________________ Date ______________

Assessor’s initials
Erect and dismantle restricted height scaffolding

CPCCCM2008B
Assessment activity 3.1 Planning and preparation

You are required to plan, design and erect a single-lift, three-bay scaffold. Your lecturer will provide you with a job description for the scaffold, which you can use to complete the following planning steps.

1. What is the purpose for the scaffold?
   
   ____________________________________________
   ____________________________________________
   ____________________________________________

2. What work tasks will be carried out from the scaffold?
   
   ____________________________________________
   ____________________________________________
   ____________________________________________
   ____________________________________________

3. List all the items that will contribute to the load on the scaffold.
   
   ____________________________________________
   ____________________________________________
   ____________________________________________
   ____________________________________________
   ____________________________________________

4. What duty (class) of scaffold is required?
   
   ____________________________________________

5. Describe the footings required to carry this load.
   
   ____________________________________________
   ____________________________________________
   ____________________________________________
6. Describe site access and egress routes.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

7. What environmental requirements need to be met?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
8. Draw a sketch of a single-lift, three-bay scaffold that meets the job requirements provided to you by your lecturer.
9. **List the components required to erect this scaffold and the quantity of each.**

<table>
<thead>
<tr>
<th>Components</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
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</tbody>
</table>

10. **Give details of the signs and barricades that will be required on/near the completed scaffold.**

- 
- 
- 
- 
-
Assessment activity 3.2 Safety checklist

Tick the boxes next to any safety requirements or hazards that may apply to this task. Add any issues not listed in the spaces provided.

Make notes in the right-hand column about the steps you’ll take to ensure you’re working safely.

When you have completed the checklist, use the information to complete the JSA.

### Training

<table>
<thead>
<tr>
<th>Training</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Safe use of tools or equipment</td>
<td></td>
</tr>
<tr>
<td>Manual handling</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Site conditions

<table>
<thead>
<tr>
<th>Site conditions</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Site/workshop access</td>
<td></td>
</tr>
<tr>
<td>Access to work areas</td>
<td></td>
</tr>
<tr>
<td>Toilets/amenities access</td>
<td></td>
</tr>
<tr>
<td>Signage and barricades</td>
<td></td>
</tr>
<tr>
<td>Environment</td>
<td></td>
</tr>
<tr>
<td>Hazardous materials</td>
<td></td>
</tr>
<tr>
<td>Public safety</td>
<td></td>
</tr>
<tr>
<td>Traffic control</td>
<td></td>
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<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### PPE

<table>
<thead>
<tr>
<th>PPE</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye protection</td>
<td></td>
</tr>
<tr>
<td>Hearing protection</td>
<td></td>
</tr>
<tr>
<td>Respiratory protection</td>
<td></td>
</tr>
<tr>
<td>Foot protection</td>
<td></td>
</tr>
<tr>
<td>Hand protection</td>
<td></td>
</tr>
<tr>
<td>Head protection</td>
<td></td>
</tr>
<tr>
<td>Sun safety</td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Tools and equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant and equipment</td>
</tr>
<tr>
<td>Hand tools</td>
</tr>
<tr>
<td>Electrical and pneumatic tools</td>
</tr>
<tr>
<td>Cables and leads</td>
</tr>
<tr>
<td>Scaffolding</td>
</tr>
<tr>
<td>Working at heights</td>
</tr>
<tr>
<td>Welding</td>
</tr>
<tr>
<td>Excavations</td>
</tr>
<tr>
<td>Overhead wires</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>High risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scaffolding</td>
</tr>
<tr>
<td>Working at heights</td>
</tr>
<tr>
<td>Welding</td>
</tr>
<tr>
<td>Excavations</td>
</tr>
<tr>
<td>Overhead wires</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Emergency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency plan</td>
</tr>
<tr>
<td>First aid plan</td>
</tr>
</tbody>
</table>

---

Erect and dismantle restricted height scaffolding

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Tools and equipment

- Plant and equipment
- Hand tools
- Electrical and pneumatic tools
- Cables and leads
- Scaffolding
- Working at heights
- Welding
- Excavations
- Overhead wires

High risk

- Scaffolding
- Working at heights
- Welding
- Excavations
- Overhead wires

Emergency

- Emergency plan
- First aid plan

---

Annex B

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# Job safety analysis

<table>
<thead>
<tr>
<th>Activity</th>
<th>Hazards</th>
<th>Risk control measures</th>
<th>Who is responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>List the tasks in the order they will be carried out.</td>
<td>List the hazards associated with each task.</td>
<td>List the control measures required to minimise the hazard.</td>
<td>Name the person responsible for minimising the hazard.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date:</th>
<th>JSA number:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location of work:</td>
<td></td>
</tr>
<tr>
<td>Activity:</td>
<td>Approved by (name):</td>
</tr>
<tr>
<td>Name:</td>
<td></td>
</tr>
</tbody>
</table>

Assessments

Job safety analysis

Date: JSA number:

Location of work:

Activity:

Name: Approved by (name):

<table>
<thead>
<tr>
<th>Activity Hazards Risk control measures Who is responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>List the tasks in the order they will be carried out. List the hazards associated with each task. List the control measures required to minimise the hazard.</td>
</tr>
</tbody>
</table>
Erect the scaffold according to your planning.

Remember to follow:

- work health and safety requirements
- site-specific procedures
- other relevant Regulations.

Your lecturer, assessor or workplace supervisor will observe you doing this part of the assessment. They will then complete Assessment activity 3.6 Observation checklist to check that you have demonstrated the required skills and knowledge for this unit.
### Assessment activity 3.3 Inspection checklist

Complete this checklist during your inspection of the scaffolding, and indicate ‘yes’ or ‘no’ against each item in the right-hand column.

Use the space at the end of the checklist to describe any issues and actions that need to be taken.

<table>
<thead>
<tr>
<th>Inspection point</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Have any unauthorised changes been made to the scaffolding?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Is there a system in place to prevent scaffold from being struck by vehicles or other work?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Are appropriate signs and barricades in place?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Are sole boards and the ground around them in good condition, eg no excavation in the vicinity?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Are base plates positioned centrally on the sole boards?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Are frames or standards sitting plumb and firm on the base plates?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Are the frames or standards plumb through the full height?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Are frames and ledgers level?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Is all bracing in place and properly attached?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Are all platforms complete?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Is edge protection complete and properly attached for any working platform above 2 m?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Are ladders fitted correctly?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. If mobile scaffold, is the supporting surface hard, flat, stable and free of hazards?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Are the caster wheel locks in working order and kept locked when workers are on the scaffold?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Issues**

_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
Assessment activity 3.4 Alterations

You have been asked to make an alteration to an existing scaffold, shown in the sketch below. You need to add a return to enable work to be carried out on an adjoining wall. Answer the following questions about this task.

Sketch the scaffold you will be erecting including the return.

1. What needs to be removed from the existing scaffold?
2. What must be done when the alteration is complete?

________________________________________
________________________________________
________________________________________

3. List the additional components required to erect this scaffold and the quantity of each.

<table>
<thead>
<tr>
<th>Components</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
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<td></td>
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<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. Give details of the signs and barricades that will be required on/near the completed scaffold.

________________________________________
________________________________________
________________________________________

Make the change according to your planning.

Remember to follow:

- work health and safety requirements
- site-specific procedures
- other relevant Regulations.

Your lecturer, assessor or workplace supervisor will observe you doing this part of the assessment. They will then complete **Assessment activity 3.6 Observation checklist** to check that you have demonstrated the required skills and knowledge for this unit.
### Assessment activity 3.5 Dismantling and cleaning up

Before you begin to dismantle the scaffold, you need to plan where you will put all the pieces as you remove them so that you don't create a hazard for yourself or workers around you.

Answer the following questions to form a plan for dismantling.

1. Describe where you will put the scaffold.

   __________________________________________
   __________________________________________
   __________________________________________
   __________________________________________

2. Give reasons for your choice of location.

   __________________________________________
   __________________________________________
   __________________________________________
   __________________________________________

Dismantle the scaffolding following the appropriate procedures and requirements.

When the scaffold is fully dismantled, carry out the following clean-up requirements:

- clean and inspect all scaffold components
- tag out and set aside defective/damaged components
- sort and stack all components
- clean, inspect and store all tools.

Your lecturer, assessor or workplace supervisor will observe you completing this part of the assessment. They will then complete Assessment activity 3.6 Observation checklist to check that you have demonstrated the required skills and knowledge for this unit.
## Assessment activity 3.6 Observation checklist

During the assessment activity, did you observe the learner: | Yes | No | N/A |
--- | --- | --- |

### Part 1 – Plan and prepare to erect and dismantle restricted height scaffolding

| a) | obtain, confirm and apply work instructions, including plans, specifications, quality requirements and operational details, for planning and preparation purposes? |
| b) | follow workplace health and safety (WHS) requirements in accordance with safety plans and policies? |
| c) | identify and implement signage and barricade requirements? |
| d) | check for serviceability any plant, tools and equipment selected to carry out tasks consistent with job requirements, and rectify or report any faults prior to commencement? |
| e) | calculate scaffolding quantity requirements in accordance with plans, specifications and quality requirements? |
| f) | identify, obtain, prepare, safely handle and locate ready for use materials appropriate to the work application? |
| g) | identify and apply environmental requirements for the project in accordance with environmental plans and statutory and regulatory authority obligations? |

### Part 2 – Erect scaffolding

| a) | confirm purpose for scaffolding and identify associated work tasks? |
| b) | determine expected loading on scaffold and supporting structure using load tables? |
| c) | identify site access and egress routes? |
| d) | select and inspect scaffolding and components and label, reject or repair damaged components? |
| e) | establish adequate footing in accordance with the Australian Standard® for scaffolding? |
| f) | erect scaffolding in accordance with regulations, planned hazard prevention and control measures, acceptable safe work practices and manufacturer requirements? |

### Part 3 – Inspect, repair and alter scaffolding

| a) | inspect critical structural and safety areas of scaffolding for damage, corrosion and wear? |
| b) | check current use of scaffolding for compliance with type of scaffolding equipment? |
| c) | complete inspection log and handover? |
| d) | review scaffolding to determine if changes or modifications were scheduled as per original planning? |
| e) | carry out alteration or repair where specified? |
### Part 4 – Dismantle scaffolding

a) dismantle scaffolding using reverse procedure as for erection?

### Part 5 – Clean-up

a) clear work area and dispose of, reuse or recycle materials in accordance with legislation, regulations, codes of practice and job specification?

b) clean, check, maintain and store plant, tools and equipment in accordance with manufacturer recommendations and standard work practices?

### During the assessment activity, did you observe the learner demonstrate the following required skills?

- Communication skills to:
  - determine requirements?
  - enable clear and direct communication, using questions to identify and confirm requirements, share information, listen and understand?
  - follow instructions?
  - read and interpret documentation from a variety of sources?
  - read and interpret drawings and specifications?
  - report faults?
  - use language and concepts appropriate to cultural differences?
  - use and interpret non-verbal communication, such as hand signals?
  - record maintenance in writing in logbooks?

- 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 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?
<table>
<thead>
<tr>
<th>During the assessment activity, did you observe the learner demonstrate knowledge of the following?</th>
</tr>
</thead>
<tbody>
<tr>
<td>• general construction terminology?</td>
</tr>
<tr>
<td>• job safety analysis (JSA) and safe work method statements?</td>
</tr>
<tr>
<td>• material safety data sheets (MSDS)?</td>
</tr>
<tr>
<td>• materials storage and environmentally friendly waste management?</td>
</tr>
<tr>
<td>• plans, specifications and drawings?</td>
</tr>
<tr>
<td>• processes for the calculation of material requirements?</td>
</tr>
<tr>
<td>• quality requirements?</td>
</tr>
<tr>
<td>• relevant Acts, regulations and codes of practice?</td>
</tr>
<tr>
<td>• scaffolding equipment?</td>
</tr>
<tr>
<td>• scaffolding techniques?</td>
</tr>
<tr>
<td>• shifting devices?</td>
</tr>
<tr>
<td>• types, characteristics, uses and limitations of plant, tools and equipment?</td>
</tr>
<tr>
<td>• workplace and equipment safety requirements?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>During the assessment activity, did you observe the learner demonstrate the following critical aspects for assessment?</th>
</tr>
</thead>
<tbody>
<tr>
<td>• locate, interpret and apply relevant information, standards and specifications?</td>
</tr>
<tr>
<td>• comply with site safety plan and OHS legislation, regulations and codes of practice applicable to workplace operations?</td>
</tr>
<tr>
<td>• comply with organisational policies and procedures, including quality requirements?</td>
</tr>
<tr>
<td>• safely and effectively use tools, plant and equipment?</td>
</tr>
<tr>
<td>• communicate and work effectively and safely with others?</td>
</tr>
<tr>
<td>• complete planning, erection and dismantling of a modular scaffolding system, in accordance with JSA and safe work method statements and regulations, including a minimum of:</td>
</tr>
<tr>
<td>• three bays (one with a return)</td>
</tr>
<tr>
<td>• one lift with ladder</td>
</tr>
<tr>
<td>• fall and edge protection</td>
</tr>
</tbody>
</table>

Feedback to learner

Learner’s name: ____________________________  Assessor’s name: ____________________________
Learner’s signature: ______________________  Assessor’s signature: ______________________
Date: ____________________________  Date: ____________________________
Annex C – Workshop activities

These activities have been designed to provide you with the opportunity to apply your scaffolding knowledge and practise your scaffolding skills as you progress through the unit.

Your lecturer will advise you when to complete these activities and may also provide you with additional details and instructions.

The following workshop activity worksheets are provided in this guide:

- Workshop activity 1 – Identifying scaffold components and equipment
- Workshop activity 2 – Manual handling
- Workshop activity 3 – Erecting a single-lift, three-bay, framed scaffold with return
- Workshop activity 4 – Erecting a single-lift, single-bay, mobile scaffold
- Workshop activity 5 – Inspecting a single-lift, three-bay scaffold
- Workshop activity 6 – Making changes
- Workshop activity 7 – Part 1: Dismantling scaffold
- Workshop activity 7 – Part 2: Clean-up.
Erect and dismantle restricted height scaffolding

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### Workshop activity 1 – Identifying scaffold components and equipment

Scaffolding needs to be erected for a lot of different construction tasks. It's important that you can do this efficiently. You need to know all the components and equipment so that you can identify them quickly.

Your task is to identify the components, tools and PPE used to construct framed scaffold and mobile scaffold. From the selection provided by your lecturer, identify the following items. Tick each one off as you find it.

<table>
<thead>
<tr>
<th>Components – Framed scaffold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frame</td>
</tr>
<tr>
<td>Platform planks</td>
</tr>
<tr>
<td>Brace</td>
</tr>
<tr>
<td>Handrail</td>
</tr>
<tr>
<td>Base plate</td>
</tr>
<tr>
<td>Mid-rail</td>
</tr>
<tr>
<td>Sole board</td>
</tr>
<tr>
<td>Toe board/kickboard</td>
</tr>
<tr>
<td>Screw jack</td>
</tr>
<tr>
<td>Mesh guardrail</td>
</tr>
<tr>
<td>Joining pin</td>
</tr>
<tr>
<td>Guardrail post</td>
</tr>
<tr>
<td>Ladder</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Components – Mobile scaffold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frame</td>
</tr>
<tr>
<td>Platform</td>
</tr>
<tr>
<td>Plan brace</td>
</tr>
<tr>
<td>Handrail</td>
</tr>
<tr>
<td>Face brace</td>
</tr>
<tr>
<td>Mid-rail</td>
</tr>
<tr>
<td>Internal ladder</td>
</tr>
<tr>
<td>Caster</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Components – Tube-and-coupler</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tube</td>
</tr>
<tr>
<td>Coupler</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Claw hammer</td>
</tr>
<tr>
<td>Level</td>
</tr>
<tr>
<td>Adjustable wrench/spanner</td>
</tr>
<tr>
<td>Tape measure</td>
</tr>
<tr>
<td>Scaffold belt</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hard hat</td>
</tr>
<tr>
<td>Gloves</td>
</tr>
<tr>
<td>Steel cap boots</td>
</tr>
<tr>
<td>Safety glasses</td>
</tr>
<tr>
<td>Dust mask</td>
</tr>
<tr>
<td>Hearing protection</td>
</tr>
</tbody>
</table>
Erect and dismantle restricted height scaffolding

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**Workshop activity 2 – Manual handling**

Working in a group of three, take turns to move larger scaffolding components from one side of an area to the other using correct manual handling techniques.

Two of you will move the scaffolding together, while the other uses this checklist to observe and prompt.

Make sure everyone has a turn to practise manual handling and to observe and prompt.

When it’s your turn to observe, make sure you give your classmates feedback on their manual handling technique.

<table>
<thead>
<tr>
<th>Did your classmate(s):</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-lift</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• check the size and shape of the load (Is it awkward?)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• check the weight of the load (Can you safely lift it?)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• check the area of movement?</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Lifting</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• squat with feet apart?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• grip the load firmly with both hands?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• lift with the legs?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• keep the back straight?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• keep the neck straight?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• keep the head up?</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Carrying</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• keep the arms close to the body?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• evenly distribute the load on both sides of the body?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• maintain a firm, stable hold?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• carry without incident (no bumps, falls)?</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Putting down</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• keep the head up and neck straight?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• keep the back straight?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• use leg muscles to crouch down?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• put down without trapping fingers?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Erect and dismantle restricted height scaffolding

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**Workshop activity 3 – Erecting a single-lift, three-bay, framed scaffold with return**

Your task is to plan and build a single-lift, three-bay, framed scaffold with return, according to the job description provided by your lecturer.

Carry out the following steps.

- Confirm the purpose for the scaffold and the expected load.
- On the sketch below, label all the scaffold components. Draw in any additional components required for the task. Add any signs or barricades required.
- Count up how many of each component you’ll need and write these quantities into the list below the sketch.
- Check any other site-specific requirements such as access and environmental requirements.
- Use the safety checklist to help you identify any safety issues, then use that information to complete a JSA for the erection procedure.
- Put on your PPE; collect your tools and any components you need.
- Check that all tools and components are fit for use.
- Erect the scaffold following instructions from your lecturer. You can refer to the procedure in this guide.

Use your communication skills and work cooperatively with your workmates to get the scaffold erected safely.

Remember to ask for help if you’re unsure at any stage.

Your lecturer will provide you with a location for this work, and all the materials required.

**Sketch**
Components required *(Add quantities)*

<table>
<thead>
<tr>
<th>Component</th>
<th>Quantity</th>
<th>Component</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frames</td>
<td></td>
<td>Mid-rail</td>
<td></td>
</tr>
<tr>
<td>Braces</td>
<td></td>
<td>Base plates</td>
<td></td>
</tr>
<tr>
<td>Mesh guardrail</td>
<td></td>
<td>Handrail/guardrail</td>
<td></td>
</tr>
<tr>
<td>Toe boards/kickboards</td>
<td></td>
<td>Boards/working platform</td>
<td></td>
</tr>
<tr>
<td>Ladder</td>
<td></td>
<td>Sole boards</td>
<td></td>
</tr>
<tr>
<td>Joining pins</td>
<td></td>
<td>Access mesh guardrail</td>
<td></td>
</tr>
<tr>
<td>Guardrail posts</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Signs/barricades required on/near the completed scaffold**
# Safety checklist

Tick the boxes next to any safety requirements or hazards that may apply to this task. Add any issues not listed in the spaces provided. Make notes in the right-hand column about the steps you’ll take to ensure you’re working safely. When you have completed this checklist, use the information to complete in the JSA.

## Training

<table>
<thead>
<tr>
<th>Training</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Safe use of tools or equipment</td>
<td></td>
</tr>
<tr>
<td>Manual handling</td>
<td></td>
</tr>
<tr>
<td>Site conditions</td>
<td></td>
</tr>
<tr>
<td>Site/workshop access</td>
<td></td>
</tr>
<tr>
<td>Access to work areas</td>
<td></td>
</tr>
<tr>
<td>Toilets/amenities access</td>
<td></td>
</tr>
<tr>
<td>Signage and barricades</td>
<td></td>
</tr>
<tr>
<td>Environment</td>
<td></td>
</tr>
<tr>
<td>Hazardous materials</td>
<td></td>
</tr>
<tr>
<td>Public safety</td>
<td></td>
</tr>
<tr>
<td>Traffic control</td>
<td></td>
</tr>
<tr>
<td>PPE</td>
<td></td>
</tr>
<tr>
<td>Eye protection</td>
<td></td>
</tr>
<tr>
<td>Hearing protection</td>
<td></td>
</tr>
<tr>
<td>Respiratory protection</td>
<td></td>
</tr>
<tr>
<td>Foot protection</td>
<td></td>
</tr>
<tr>
<td>Hand protection</td>
<td></td>
</tr>
<tr>
<td>Head protection</td>
<td></td>
</tr>
<tr>
<td>Sun safety</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Tools and equipment

- **Plant and equipment**
- **Hand tools**
- **Electrical and pneumatic tools**
- **Cables and leads**
- **High risk**

### High risk

- **Scaffolding**
- **Working at heights**
- **Welding**
- **Excavations**
- **Overhead wires**

### Emergency

- **Emergency plan**
- **First aid plan**
### Job safety analysis

#### Workshop activities

<table>
<thead>
<tr>
<th>Activity</th>
<th>List the tasks in the order they will be carried out.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazards</td>
<td>List the hazards associated with each task.</td>
</tr>
<tr>
<td>Risk control measures</td>
<td>List the control measures required to minimise the hazard.</td>
</tr>
<tr>
<td>Who is responsible</td>
<td>Name the person responsible for minimising the hazard.</td>
</tr>
</tbody>
</table>

#### JSA number:

<table>
<thead>
<tr>
<th>Date:</th>
<th>Location of work:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Approved by (name):</th>
<th>Name:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity</td>
<td>Hazards</td>
</tr>
<tr>
<td>----------</td>
<td>---------</td>
</tr>
<tr>
<td></td>
<td></td>
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<tr>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Workshop activity 4 – Erecting a single-lift, single-bay, mobile scaffold

Your task is to plan and build a single-lift, single-bay, mobile scaffold. Carry out the following steps.

• Confirm the purpose for the scaffold and the expected load.

• Draw a quick sketch in the space below.

• Indicate on the sketch the location of any signs or barricades required.

• Count up how many of each component you will need and write these quantities into the list below the sketch.

• Describe any signs or barricades required under the component list.

• Put on your PPE and collect your tools and any components and signs/barricades you need.

• Install signs and barricades.

• Erect the scaffold. You can follow the procedure in this guide and/or instructions from your lecturer. Work in pairs for this part of the activity.

Note: Usually a task like this would require you to complete a JSA; however, that isn’t necessary for the purpose of this activity.

Use your communication skills and work cooperatively with your partner to get the scaffold erected safely. Remember to ask for help if you’re unsure at any stage.

Your lecturer will provide you with a location for this work and all the materials required.

Sketch
# Components required (Add quantities)

<table>
<thead>
<tr>
<th>Component</th>
<th>Quantity</th>
<th>Component</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frame</td>
<td></td>
<td>Platform</td>
<td></td>
</tr>
<tr>
<td>Horizontal brace</td>
<td></td>
<td>Handrail</td>
<td></td>
</tr>
<tr>
<td>Plan brace</td>
<td></td>
<td>Mid-rail</td>
<td></td>
</tr>
<tr>
<td>Diagonal brace</td>
<td></td>
<td>Caster</td>
<td></td>
</tr>
<tr>
<td>Adjustable leg</td>
<td></td>
<td>Internal ladder</td>
<td></td>
</tr>
</tbody>
</table>

# Signs/barricades required on/near the completed scaffold

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
</table>
**Workshop activity 5 – Inspecting a single-lift, three-bay scaffold**

Your task is to work in pairs or small groups, as allocated by your lecturer, to inspect a single-lift, three-bay scaffold.

Use the following checklist as a guide to carry out an inspection of some existing scaffolding.

<table>
<thead>
<tr>
<th>Inspection point</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Have any unauthorised changes been made to the scaffold?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Is there a system in place to prevent scaffold from being struck by vehicles or other work?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Are appropriate signs and barricades in place?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Are sole boards and the ground around them in good condition, eg no excavation in the vicinity?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Are base plates positioned centrally on the sole boards?</td>
<td></td>
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<tr>
<td>6. Are frames or standards sitting plumb and firm on the base plates?</td>
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<tr>
<td>7. Are the frames or standards plumb through the full height?</td>
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<tr>
<td>8. Are frames and ledgers level?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Is all bracing in place and properly attached?</td>
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<td></td>
</tr>
<tr>
<td>10. Are all platforms complete?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Is edge protection complete and properly attached for any working platform above 2 m?</td>
<td></td>
<td></td>
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<tr>
<td>12. Are ladders fitted correctly?</td>
<td></td>
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<tr>
<td>13. If mobile scaffold, is the supporting surface hard, flat, stable and free of hazards?</td>
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</tr>
<tr>
<td>14. Are the caster wheel locks in working order and kept locked when workers are on the scaffold?</td>
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</tbody>
</table>

If the answer to any of the above checks is ‘no’, rectify the issue or attach an ‘out-of-service’ or appropriate tag.
Erect and dismantle restricted height scaffolding

CPCCCM2008B
Workshop activity 6 – Making changes

The next job workers will be using the scaffolding for requires a longer scaffold. An additional bay needs to be added to the scaffold to reach a bit further, so that the next work can be done.

Carry out these steps.

1. Confirm the purpose for the scaffold and the expected load.
2. Use the sketch provided to identify and then count the scaffold components needed to make this change.
3. In the table that follows the plan, list the components and their quantities, and describe any signs or barricades required.
4. Put on your PPE, and then collect the tools and any components you need.
5. Check that all tools and components are fit for use.
6. Alter the scaffold following the instructions from your lecturer. The procedure shown earlier in this guide may be helpful.

Note: Usually a task like this would require you to complete a JSA; however, that isn’t necessary for the purpose of this activity.

Use your communication skills and work cooperatively with your workmates to get the scaffold changed safely.

Your lecturer will provide you with a location for this work, and all the materials required. Remember to ask for help if you’re unsure at any stage.

Sketch
### Components required *(Add quantities)*

<table>
<thead>
<tr>
<th>Component</th>
<th>Quantity</th>
<th>Component</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frame</td>
<td></td>
<td>Toe board/kickboard</td>
<td></td>
</tr>
<tr>
<td>Brace</td>
<td></td>
<td>Handrail</td>
<td></td>
</tr>
<tr>
<td>Sole board</td>
<td></td>
<td>Mid-rail</td>
<td></td>
</tr>
<tr>
<td>Base plate</td>
<td></td>
<td>Platform</td>
<td></td>
</tr>
<tr>
<td>Joining pin</td>
<td></td>
<td>Mesh guardrail</td>
<td></td>
</tr>
<tr>
<td>Ladder</td>
<td></td>
<td>Rope</td>
<td></td>
</tr>
</tbody>
</table>

### Signs/barricades required on/near the completed scaffold

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
</table>
Workshop activity 7 – Part 1: Dismantling scaffold

For this two-part activity, you'll work in pairs or small groups, as allocated by your lecturer, to dismantle a scaffold (Part 1), then clean up the work area, plant and equipment (Part 2).

Before you begin, list three important rules to follow when dismantling scaffold to ensure your safety and that of your workmates.

Then:

• put on your PPE and collect any tools or equipment you will need
• dismantle the scaffold following instructions from your lecturer.

The procedure shown earlier in this guide may be helpful.

Use your communication skills and work cooperatively with your workmates to dismantle the scaffold safely.

Your lecturer will provide you with the materials for this activity, and a location. Remember to ask for help if you're unsure at any stage.

List three important safety rules to follow when you're dismantling scaffold.


Workshop activity 7 – Part 2: Clean-up

Follow the procedures in this guide and the instructions from your lecturer to complete the following tasks.

• Clean and inspect all scaffold components and tools.
• Tag any damaged or defective components or tools.
• Stack/store scaffold and tools ready for next use.
Erect and dismantle restricted height scaffolding

CPCCCM2008B
ERECT AND DISMANTLE RESTRICTED HEIGHT SCAFFOLDING
CERTIFICATE II IN BUILDING AND CONSTRUCTION
(PATHWAY – TRADES)
CPCCCM2008B

LEARNER’S GUIDE

DESCRIPTION
This learner’s guide contains a mix of content and hands-on activities that support the unit CPCCCM2008B Erect and dismantle restricted height scaffolding from the Certificate II in Building and Construction (Pathway – Trades). The course, and this guide, focus on the skills and knowledge required to get your career started as a tradesperson in the building and construction industry. The focus of this unit is the skills and knowledge required to erect, inspect, alter and dismantle restricted height scaffolding that can be used as work platforms for other trades and workers on a construction site.

The topics covered in this guide include:
• planning and preparing for a project
• scaffolding rules and requirements, and types of scaffold
• planning and preparing to erect scaffold
• selecting, designing and erecting scaffold in accordance with required safety standards
• inspecting, repairing and altering scaffold
• dismantling scaffold and clean-up procedures.

You will also learn about using safety barriers. Suggested assessment activities are also included. Note: this guide may be used for this unit as part of other qualifications within the building and construction industry.

EDITION
Edition 1, 2014

COURSE / QUALIFICATION
Certificate II in Building and Construction (Pathway – Trades)

UNIT OF COMPETENCY
CPCCCM2008B Erect and dismantle restricted height scaffolding

RELATED PRODUCTS
This resource is part of a series that supports core and trade-specific elective units of the Certificate II in Building and Construction (Pathway – Trades) qualification. Please refer to our product catalogue for more information.