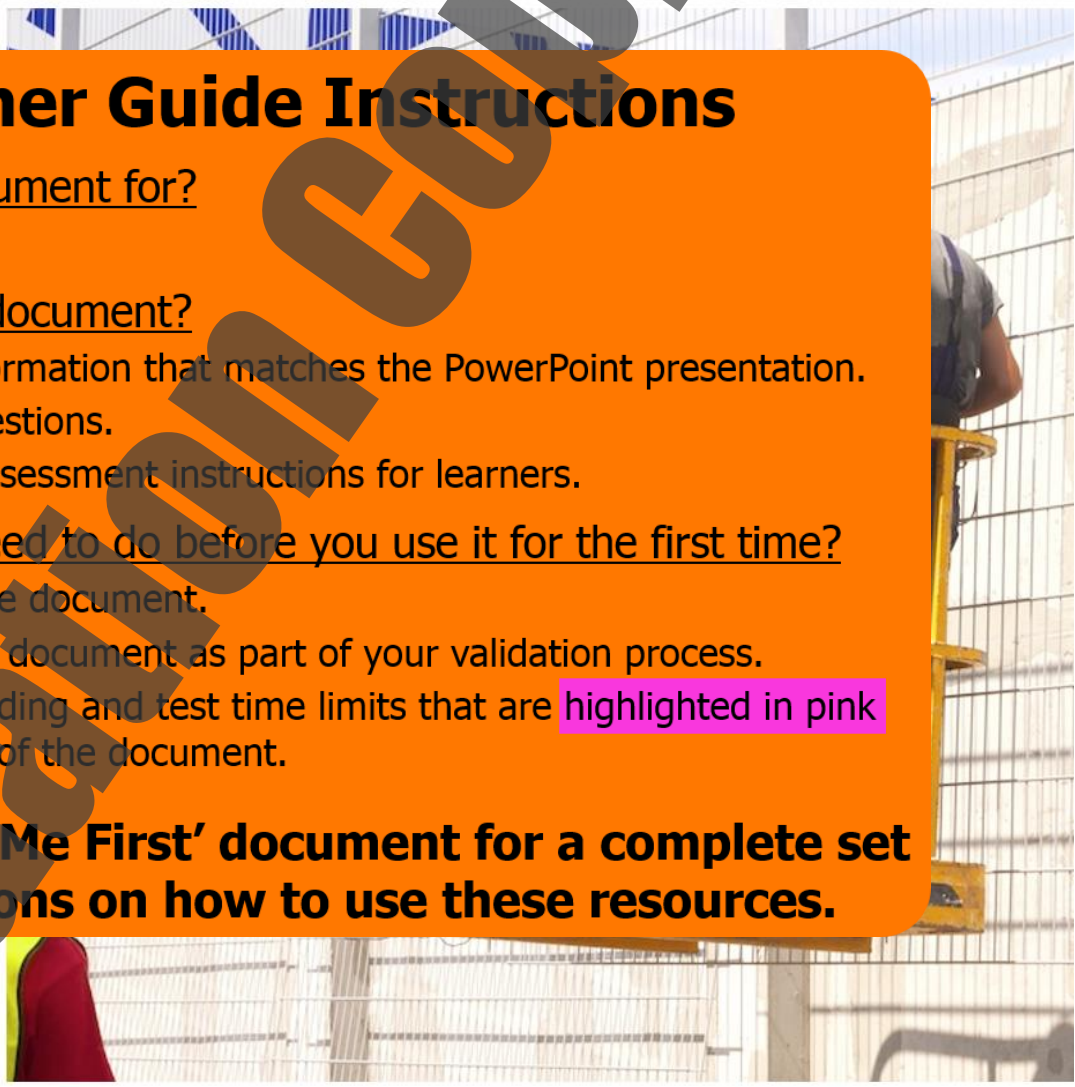
RIIHAN301E

Operate Elevating Work Platform



Learner Guide Instructions

Who is this document for?

The learner.

What is in this document?

- Course information that matches the PowerPoint presentation.
- Review questions.
- Practical assessment instructions for learners.

What do you need to do before you use it for the first time?

1. Rebrand the document.
2. Review the document as part of your validation process.
3. Set the reading and test time limits that are highlighted in pink at the end of the document.

See the 'Read Me First' document for a complete set of instructions on how to use these resources.

LEARNER GUIDE

RIIHAN301E Operate Elevating Work Platform

Learner Name:	
Learner ID:	
Learner Contact Number:	
Learner Email Address:	
Date Training Commenced:	

This Book Contains:

- ☐ Course Information.
- ☐ Review Questions.
- ☐ Practical Assessment overview and instructions.

Table of Contents

1.1 Introduction

This course is based on the unit of competency **RIIHAN301E Operate Elevating Work Platform.**

This unit covers the operation of elevating work platforms in the resources and infrastructure industries.

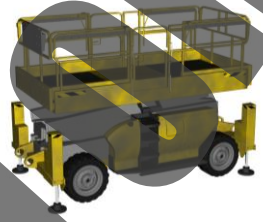
It includes:

- Planning and preparing for operations.
- Working from the platform.
- Carrying out maintenance.
- Cleaning up.

1.1.1 What is an Elevating Work Platform?

There are a number of different elevating work platforms (EWPs) available. The height, reach, safe working load, ground conditions and terrain all play a part in selecting the correct EWP for the job at hand.

Type	Description	Example
Trailer Mounted EWP	These are mounted on a moveable trailer and can be towed by most vehicles with a tow ball. They have manually adjusted stabilisers to provide stability for the platform while it is being used and have a range of working heights up to 26 metres.	
Self-Propelled EWP with Telescoping Boom	These are self-propelled units for use on flat slabs or firm unsealed areas. The work platform is elevated using a straight extension (telescoping) boom. There are controls at ground level and on the platform.	
Self-Propelled EWP with Telescoping Knuckle Boom	These are self-propelled units for use on flat slabs or firm unsealed areas. The work platform is elevated by a boom with at least 2 main sections, with a knuckle between them, and is mounted on a turret which allows slewing. This arrangement permits the boom to reach up and over obstacles. Both boom sections may incorporate a telescoping extension. There are controls at ground level and on the platform.	

Type	Description	Example
Vehicle-Mounted EWP	These are usually road-registered trucks with a boom or knuckle boom mounted on the truck chassis. The boom is mounted on a turret to allow slewing, and outriggers are fitted to the chassis. There are controls at ground level and on the platform.	
Scissor Lift	A scissor lift is an aerial platform that provides more space than a regular boom-type EWP and can be raised or lowered, but has no ability to slew or telescope. Scissor lifts are most appropriate on firm flat surfaces and are not suitable for steep inclines. Some are fitted with outriggers/stabilisers.	

This unit of competency qualifies you to gain a nationally recognised EWP yellow card. The card indicates that you have been trained to safely operate various types of EWPs, 11 meters or lower.

A national High Risk Work Licence is required to operate a boom-type elevating work platform with a reach of 11 meters or higher.

Review Questions

1.	a) What does the EWP Yellow Card indicate? b) When do you need a high risk licence to operate an EWP?	☐
a) b)		

1.2 Site Policies and Procedures

You must follow all safety rules and instructions when performing any work. If you are not sure about what you should do, ask your boss or supervisor. They will tell you what you need to do and how to do it in a safe way.

Before starting your work you need to make sure you have access to all operations documentation for the job. This will help you to do your work in the safest way and make sure all work is compliant.

Operations documentation includes:

Site Details

The information and safety requirements of the workplace environment (where you will be working).

Hazard Details

Any hazards in the work area or related to the work. This could also include instructions on how to handle dangerous or hazardous materials.

Task Details

Instructions of what the work is or what you will be doing (this can include diagrams or plans). Also instructions on how to safely do the job.

Faulty Equipment Procedures

Isolation procedures to follow or forms to fill out.

Signage

Site signage tells you what equipment you need to have, or areas that are not safe to be in.

Emergency Procedures

Instructions on what to do in emergency situations, for example if there is a fire, accident or emergency where evacuation or first aid is needed.

Equipment and Work Instructions

Details of how to operate plant and equipment and the sequence of work to be done.

Your worksite will also have instructions for working safely including:

- Emergency procedures, including using fire fighting equipment, first aid and evacuation.
- Handling hazardous materials.
- Safe operating procedures.
- Personal protective clothing and equipment.
- Safe use of tools and equipment.

Review Questions

2.	List 3 things that may be included in 'operations documentation'.	☐
1. 2. 3.		

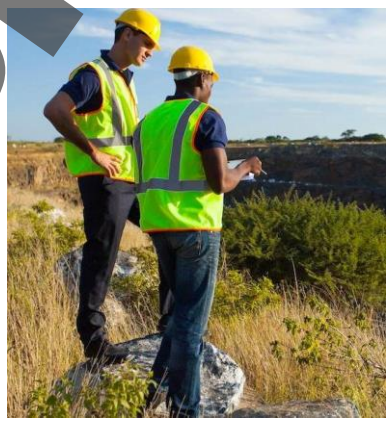
1.3 Work Instructions

You need to be clear about what work you will be doing. Make sure you have everything about the job written down before you start. This includes what you will be doing, how you will be doing it and what equipment you will be using.

Make sure you have all of the details about where you will be working. For example:

- **The Site** – Is there clear access for all equipment? Are there buildings, structures, facilities or trees in the way? What are the ground conditions like?
- **The Weather** – Is there wind, rain or other bad weather? Is it too dark?
- **Facilities and Services** – Are there power lines or other overhead or underground services to think about?
- **Traffic** – Are there people, vehicles or other equipment in the area that you need to think about? Do you need to get them moved out of the area? Do you need to set up barriers or signs?
- **Hazards** – Are there dangerous materials to work around or think about? Will you be working close to power lines or other people?

You also need to make sure you have all of the details about the kind of work you will be doing:



- **The Task** – What is the EWP being used for? How long will the task take? Does it need any special equipment?
- **Plant and Equipment** – What type of EWP will be used? How big is it? How much room does it need? What equipment and tools are needed?
- **Communications** – How are you going to communicate with other workers?
- **Procedures and Rules** – Do you need any special permits or licences? Are there site rules that affect the way you will do the work?

1.3.1 Reading and Checking Your Work Instructions

All work needs to follow worksite, environment and company safety procedures.

Procedures help to make sure that all work is done in a safe way, without damaging equipment or putting people in unsafe situations. They also help to make sure that work is done in the correct order and doesn't interrupt or get in the way of other work that is happening on the site.

Your work instructions will tell you the safest way to do the job, and the equipment that you will need to use. It is a good idea to check your work instructions with your boss or supervisor to make sure you know exactly what you need to do.

If you don't know where to get your instructions or you can't understand them, you can ask your boss or supervisor. They will tell you where to find your work instructions and explain what they mean.

1.3.2 Work Method Statements

Many worksites require a work method statement before any potentially dangerous work can start. A work method statement is a list of steps that outlines how a job will be done. It also includes any hazards that occur at each step, and what you need to do about them.

These statements can also be known as Safe Work Method Statement (SWMS), Job Safety Analysis (JSA) or Safe Operating Procedure (SOP).

Review Questions

3.	What details about the work area can you get from your work instructions?	☐

4.	What details are found in a Work Method Statement?	☐

1.4 Emergency Procedures

Emergency procedures will vary depending upon the worksite. These procedures could include:

- Emergency shutdown.
- Evacuation.
- First aid.
- Fire fighting.

1.4.1 Emergency Shutdown of Equipment

If there is a fire, emergency or accident you might need to use the emergency stop on the equipment you are using. This will turn the equipment off immediately.

You can also use the emergency stop if the equipment stops working properly or you lose control of the equipment.

1.4.2 Evacuation

Things to remember are:

1. Keep calm.
2. Move away from the danger to a designated evacuation point, sometimes called an emergency assembly area.
3. Do not let other people into the area.
4. Call emergency services in accordance with workplace procedures and policies.

1.4.3 First Aid

First Aid is the quick care given to an injured or ill person. Every site will have a First Aid Officer. If somebody needs first aid you must tell your supervisor or First Aid Officer. Do not try to give first aid if you have not been trained.

1.4.4 Fire Fighting Equipment

Fire fighting equipment on site could be anything from small fire extinguishers through to large water cannons. Different fire fighting equipment should be used for different types of fire. Always check the equipment for information on what type of fire it can be used on.

Steps for using a fire extinguisher:

1. Evacuate the area.
2. Isolate the area.
3. Call emergency services or other designated on site procedure.
4. If it is safe to do so, use an extinguisher to attempt to control the fire using the PASS system.

The **PASS** system:

P	**Pull** the pin.
A	**Aim** at the base of the fire.
S	**Squeeze** the trigger.
S	**Sweep** the base of the fire.

Contact your site emergency management team as soon as possible and call the fire brigade on 000.

Review Questions

5.	What emergency situations are generally outlined in site emergency procedures?	☐

1.5 Hazard Identification and Control

Before you start work, you need to check for any hazards or dangers in the area. If you find a hazard or danger you need to do something to control it. This will help to make the workplace safer.

1.5.1 Identify Hazards

Part of your job is to look around to see if you can find any hazards before you start any work.

A **hazard** is the thing or situation that has the potential to cause injury, harm or damage.

When you start checking for hazards, make sure you look everywhere. A good way to do this is to check:

- Up high above your head.
- All around you at eye level.
- Down low on the ground (and also think about what is under the ground).

Some hazards you should check for in the work area:

- **Installed Services** – underground or above ground power lines, telephone lines, gas pipes, cables. To find out the location of underground services you may need to contact the site supervisor (who will contact the supply authorities or council for maps of the site).
- **Weather Conditions** – electrical storms, wind, heat, floods, fires, humidity.
- **People** – site workers, non-inducted workers, site visitors, others authorised or unauthorised.
- **Environmental/Ground Conditions** – uneven or unsafe ground, excavations, holes and potholes, unstable faces, over-hanging rocks, recently filled trenches, sinkage areas, dust and noise, trees and other vegetation.
- **Equipment/Machinery** – other vehicles, conveyors, fixed plant, abandoned or unattended equipment, ancillary equipment, lifting equipment.
- **Damaged or Defective Equipment** –pressurised hoses and fastenings, non-pressurised hoses, ancillary machinery equipment, vandalised equipment.
- **Structural Hazards** – adjoining pit walls or structures, buildings, structures, facilities, bridges, suspended pathways, walkways, service drains, fences, structural obstructions, ramps.
- **Chemical Hazards** – fuel, chemicals, contaminants, gases, dusts. Specific training may be required to deal with chemical hazards. Speak with your supervisor if you are unsure if you need specialised training for the chemical hazards on your worksite.
- **Stored Energy** – any system or equipment that stores any form of energy could become a hazard or risk.

1.5.2 Working Near Power Lines

Working near power lines can be really dangerous if you are not careful.

It is very important that you know the safe operating distances for different types of power lines and the steps you must take if your job needs you to work closer than the safe distances.

Generally, if you need to work closer than the safe work distance you must:

- Contact the local electrical authority for permission to work closer (this is called an exemption).
- Have the power lines shut off. If this is not possible then have the power lines insulated.
- Use a spotter (depending on local laws and rules).

Distances are different depending on the voltage of the power lines. You should check with the local electrical authority for information and advice to find out the voltage of power lines in your work area.

QLD

The Queensland Electrical Safety Regulation breaks down the distances in detail. Exclusion zones are broken down not only by size of electric/power line but also by the competency level of the operator. This means that the requirements should be clarified with the electrical authority before work commences even if the distance appears to be outside the zones.

The following minimum distances are provided as guidance:

Electric/Power Line Type	Distance
Up to 132kV	3.0m
132kV up to 330kV	6.0m
330kV and above	8.0m

NSW

In New South Wales, for anyone who is not accredited, equipment operation may not be any closer than the following distances to electric/power lines:

Electric/Power Line Type	Distance
Up to and including 132kV	3.0m
Above 132kV up to and including 330kV	6.0m
Above 330kV	8.0m

To work closer than these distances requires authority from the relevant electrical authority and adherence to cl.64(2)(e) of the regulations.

ACT

In the ACT mobile plant operators and persons erecting or working from scaffolding must maintain a safe minimum distance to power lines as outlined in the table below:

Electric/Power Line Type	Distance
Less than 33kv	4.0m
33kV or more (transmission lines)	5.0m

VIC

In Victoria the Framework for Undertaking Work Near Overhead and Underground Assets states that equipment must not be closer than the following distances to electric/power lines:

Electric/Power Line Type	Distance
Distribution lines up to and including 66kV (power poles)	6.4m (or 3.0m with a qualified spotter)
Transmission lines greater than 66kV (towers)	10m (or 8m with a qualified spotter)

TAS

In Tasmania equipment must not be closer than the following distances to electric/power lines:

Electric/Power Line Type	Distance
Up to and including 133kV (poles)	6.4m (or 3m with a safety observer)
Greater than 133kV (towers)	10m (or 8m with a safety observer)

SA

In South Australia mobile plant operators and persons erecting or working from scaffolding must maintain a safe minimum distance to power lines as outlined in the table below:

Electric/Power Line Type	Distance
Up to 132kv (including 132kv poles)	6.4m (3.0m with a spotter)
132kv or more (including 132kv towers)	10.0m (8.0m with a spotter)

WA

In Western Australia this falls under Regulation 3.64 from the OSH Regulations and states the following as the minimum distances:

Electric/Power Line Type	Distance
Up to 1kV (insulated)	0.5m
Up to 1kV (uninsulated)	1.0m
Above 1kV and up to 33kV	3.0m
Above 33kV	6.0m

NT

In the Northern Territory equipment must not be closer than the following distances to electric/power lines:

Electric/Power Line Type	Distance
Up to and including 132kV (distribution lines)	6.4m (or 3m with a spotter)
Greater than 132kV (transmission lines)	10m (or 8m with a spotter)

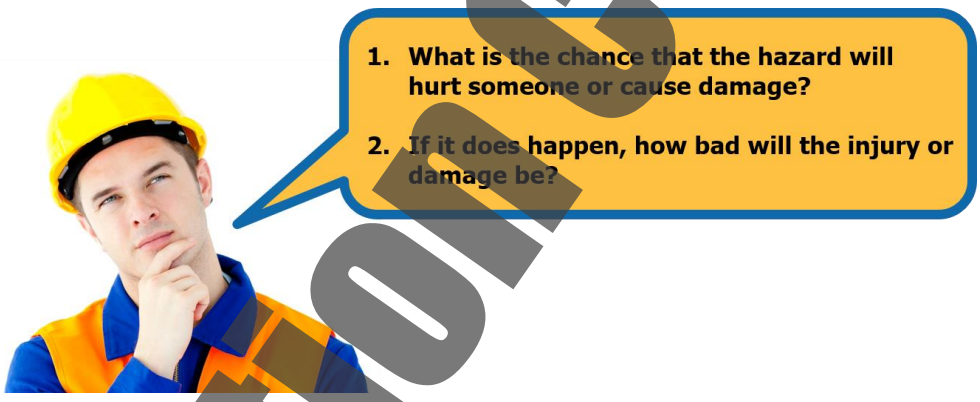
1.5.2.1 Tiger Tails

Tiger tails are used to show where overhead power lines are. They are bright coloured and easier to spot overhead than the standard wire on its own.

Just because power lines have tiger tails doesn't mean they are safe to hit. The tiger tails do not stop the flow of power. Even with tiger tails in sight you still must keep to the safe distances for the state you are working in.

1.5.3 Control Hazards

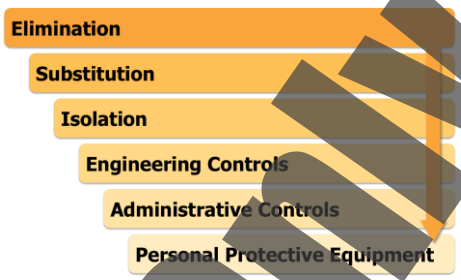
After you have found hazards or dangers you need to work out how bad they are:



Thinking about these things will help you to choose how to control the hazards. Hazards controls need to follow:

- Legislation (laws).
- Australian Standards.
- Codes of Practice.
- Manufacturers' specifications.
- Industry standards.

The best way to control hazards is to use the Hierarchy of Hazard Control. This is the name given to a range of control methods used to eliminate or control hazards and risks in the workplace.



You start at the top of the list and see if you can take away (eliminate) the hazard or danger.

If you can't take it away you move down the list to see if you can swap it for something safer (substitution).

Keep working through the list until you find something that controls that hazard or danger.

This table shows you the 6 different types of controls in order from best to worst:

Hierarchy Level	Action
1. Elimination	Completely remove the hazard. This is the best kind of hazard control.
2. Substitution	Swap a dangerous work method or situation for one that is less dangerous.
3. Isolation	Isolate or restrict access to the hazard.
4. Engineering Controls	Use equipment to lower the risk level.
5. Administrative Controls	Site rules and policies attempt to control a hazard.
6. Personal Protective Equipment	The least effective control. Use PPE while you carry out your work.

Hazard control measures need to be put in place before you start your work, or as soon as you see a hazard while you are doing your work. Hazard controls can sometimes be listed in your work instructions or you can ask your boss or supervisor for help.

Once a hazard control is in place you will need to check to make sure it is working well to control the hazard or danger.

Talk to your supervisor or safety officer if you are not sure if it is safe enough to carry out your work. If you think the hazard is still too dangerous you should not try to do the work.