

# LEARNER GUIDE



# Elevating Work Platform

RII COMPETENCY

**RIIHAN301E**

Operate elevating work platform  
(Boom length less than 11 metres)

This material is not intended for use with Scissor Lift  
**Includes question/answer and operational checklists**



**EASY  
GUIDES**

Australia Pty Ltd  
Industry Training Resources

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# Introduction to Elevating work platforms



## Getting ready for your elevating work platform competency assessment

Operating an elevating work platform can be very dangerous.

This is why you must be assessed as competent before operating an elevating work platform.

The only way to be assessed as competent is to pass an accredited course. To pass and be deemed competent, you must do a practical test to show you have learnt the basics of operating an elevating work platform as well as passing a written test.

This information book will help you learn everything you need to know to pass the written test. Good luck.

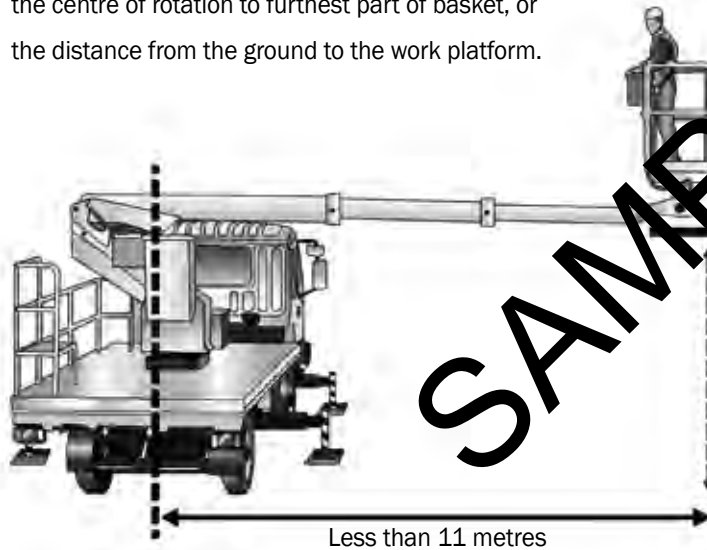


## What is a boom type elevating work platform?

A boom type elevating work platform (EWP) is a powered plant. It has a platform to help you reach high places with materials and equipment. EWPs can telescope, hinge and articulate, or any combination of these. This guide covers boom type elevated work platforms with a boom length **less than 11 metres**.

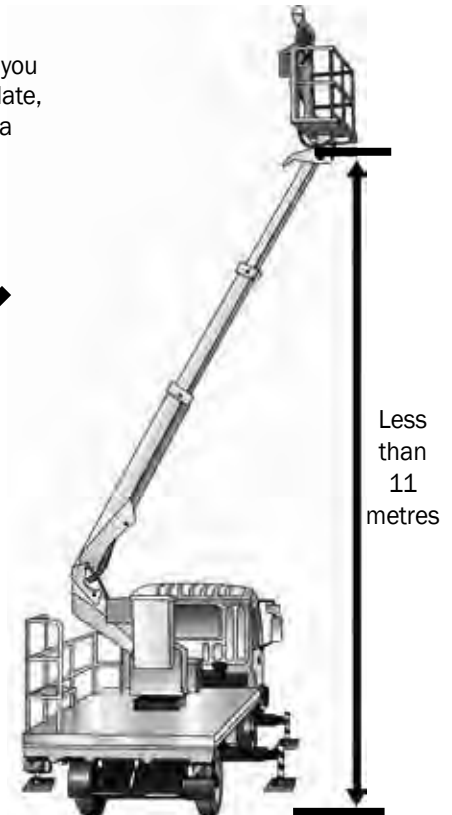
The 11 metre boom length is the longest of:

- the centre of rotation to furthest part of basket, or
- the distance from the ground to the work platform.



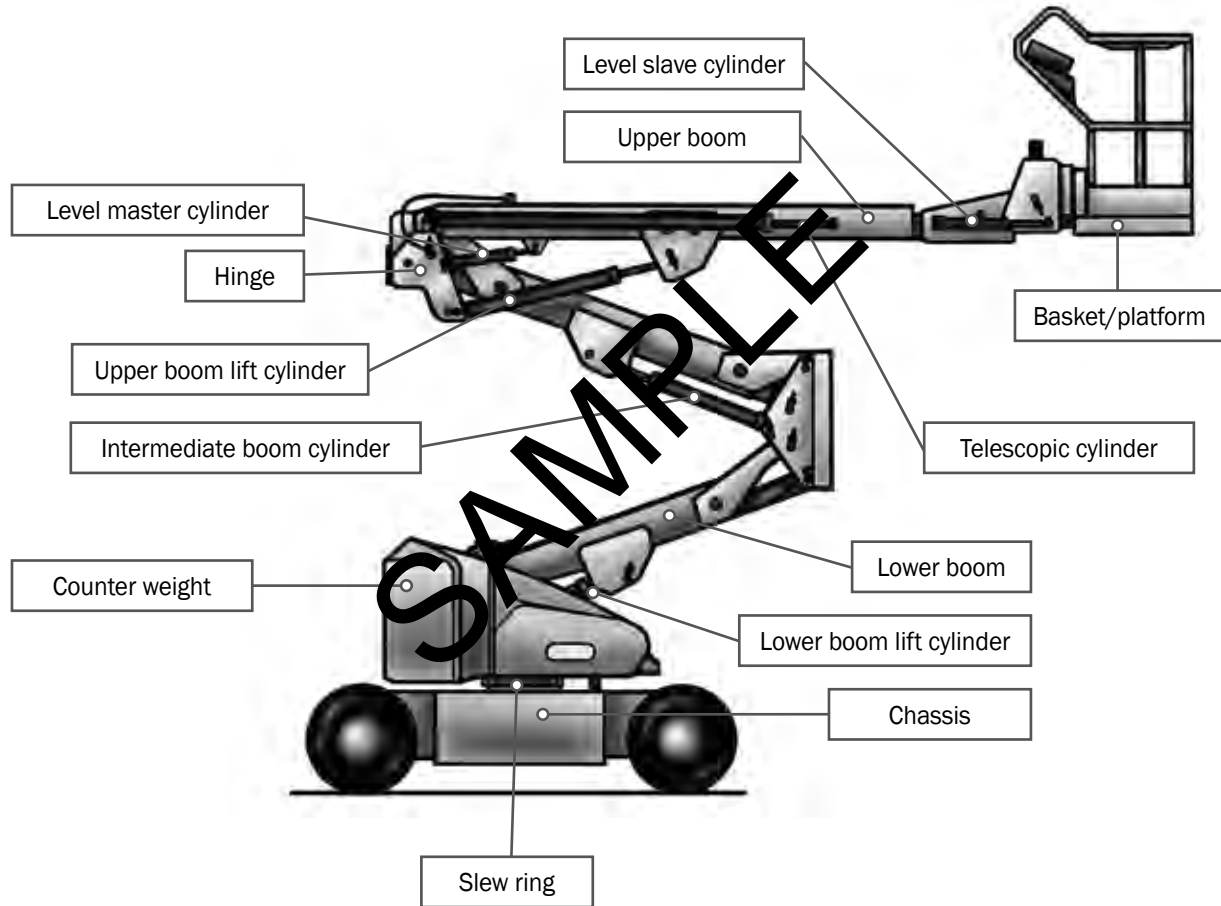
Centre of rotation to furthest part of basket

**You must have a high risk work licence to operate a boom type elevated work platform with a boom length greater than 11 metres**



The distance from the ground to the work platform

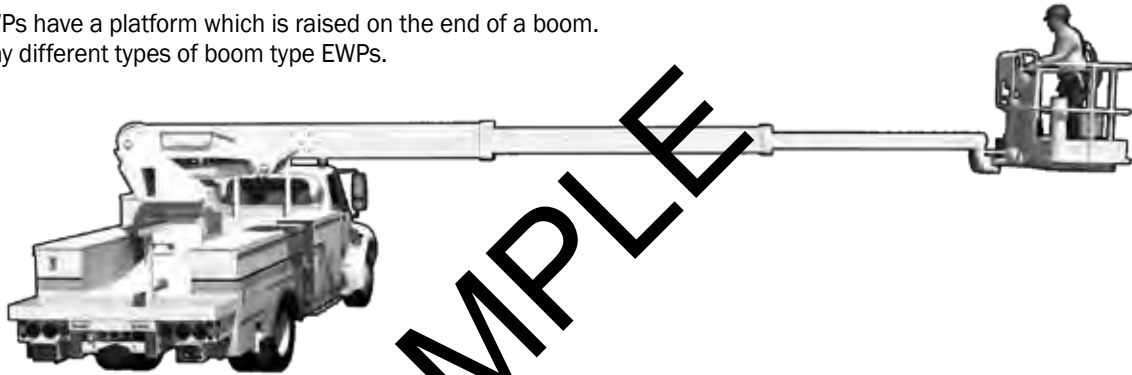
### Parts of a boom type elevating work platform



## Types of elevating work platforms

Elevating work platforms (or EWP), are work platforms which can be raised to make working at heights much easier. EWPs are sometimes called cherry pickers, sky-workers, sky-cranes and boom lifts.

Boom type EWPs have a platform which is raised on the end of a boom. There are many different types of boom type EWPs.



Telescopic boom lifts. These are also called 'straight stick' booms. With these models, the boom extends outwards, but does not articulate.



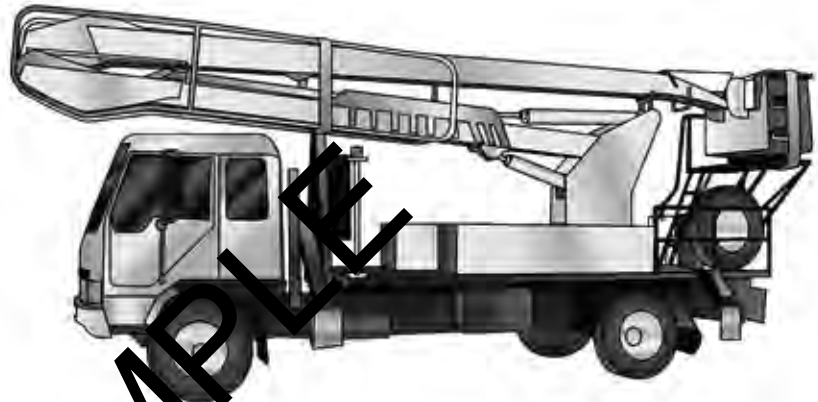
Articulated boom lifts are often called 'knuckle booms'. They have a feature called 'up and over reach'. This means they have the ability to place operators in locations that require vertical height, and horizontal reach.



*Types of EWP (continued)*

Truck-mounted EWPs offer a safe and easy way of working at heights with the flexibility of quick movement between sites.

There are both articulating and telescopic versions of truck mounted EWPs.



Trailer mounted EWPs have the ability to place operators at locations that require vertical height and horizontal reach.

They are available in varied sizes and can be electric or engine powered.

A key feature of trailer mounts is 'up and over reach' with the flexibility of towing the trailer lift to the job sites using your own vehicle.





# Plan and prepare for operating an elevating work platform

## Element 1



## Work requirements

Work requirements are usually communicated by creating a work plan. A work plan, sometimes called a job plan, helps to organise the way the job is carried out. Each worksite will have its own procedures for developing the work plan.

When a work plan is developed it must take into account things like:

What plant or equipment is needed.



What hazards there are, and how these will be controlled.



Laws, Australian standards, or manufacturer's instructions which must be followed.



Worksite rules and procedures.



The order of the tasks which need to be done.



## Tools and equipment

Before you start a job you need to identify the tools and equipment you will need to complete the task. All tools and equipment need to be checked and any problems should be fixed and/or reported to your supervisor.

Some examples of tools and equipment you may need are:

<p>An EWP appropriate for the task</p> 	<p>Safety barriers and signs</p> 	<p>Communication equipment</p> 
<p>Extra lighting</p> 	<p>Tools to do the job</p> 	<p>You must check tools and equipment and report any defects to your supervisor verbally or in writing.</p> 

SAMPLE

## Loads and forces

When you work with EWPs, you need to understand the different kinds of loads and forces placed on them.

Dead load means the weight of the work platform itself.



Live load is the weight of the people and materials on the work platform.



Side force is the amount of force an EWP can take horizontally when it is at full height.



Wind load is the maximum wind speed at which the EWP can work safely. The maximum wind load for the EWP you are using should be in the EWP's manual on the EWP itself.



According to the Australian Standard, any EWP used outside must have a wind speed rating of at least 12 metres per second (or 45 km/h). A machine without a wind rating must only be used indoors.



## Working out the weight of the load

You must make sure your work platform has enough capacity for the load you will carry. To do this you need to know the working load limit of your EWP. You also need to know the weight of the load. Here's how to work out the weight of the load.

In this example, you and your workmate need to do some repair work on a building using an EWP.

1. The EWP has a working load limit of 230 kg. You must work out the total weight of the load before you start work.



2. To do this you must first think about the body weight of you and your workmate.

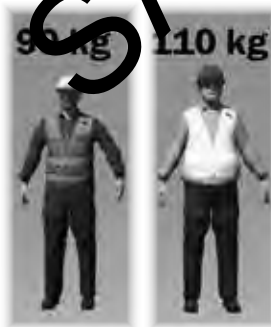


3. For example, if you weigh 90 kg and your friend weighs 110 kg

$$90 \text{ kg} + 110 \text{ kg} = 200 \text{ kg}$$

Now take away the total of the load weight from the working load limit of the EWP.

$$230 \text{ kg} - 200 \text{ kg} = 30 \text{ kg}$$



4. This means you can safely lift up to 30 kg of tools and equipment.

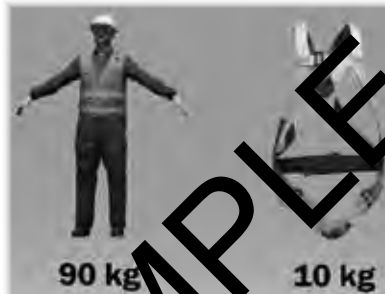


You are using an EWP with a working load limit of 300 kg to do some painting work. You need to work out how many tins of paint you can safely lift with you.

1. In this example, the weight of each tin of paint is 25 kg.



2. Your weight is 90 kg and your fall arrest harness and lanyard is 10 kg.



3. Add the weight of your fall arrest equipment to your body weight.

$$90 \text{ kg} + 10 \text{ kg} = 100 \text{ kg}$$



4. Now subtract this from the working load limit of the work platform.

$$300 \text{ kg} - 100 \text{ kg} = 200 \text{ kg}$$



5. To work out how many paint tins you can lift, divide 200 kg by the weight of each tin of paint.

$$200 \text{ kg} \div 25 \text{ kg} = 8$$

You can safely carry 8 tins of paint on this EWP.

