Elevating Work Platforms
Safe operation of elevating work platforms

Elevating Work Platforms (EWPs) are mobile items of plant designed to lift or lower people and equipment by a telescopic, hinged or articulated device, or combination of these, from a base support.

Use appropriate equipment for the task
Consider each task and any potential hazards (e.g. indoors or outdoors, presence of overhead hazards, condition of supporting surfaces) and select an EWP that is suitable to the task. It may be appropriate to use an alternative, like scaffolding, to reach and carry out the task.

Before selecting an EWP undertake a thorough task, site and equipment specific hazard and risk assessment. This may include consideration of the height, reach, crush or trapping hazards, safe working load, ground conditions and terrain, restricted working space and any electrical hazards, including overhead powerlines.

Selecting an EWP
Where possible, use an EWP equipped with secondary guarding devices that may help prevent crush or trap injuries. Examples of such devices include:

- protective structures: a device attached or fixed to the existing guardrails that provides a protective barrier around the operator.
- sensing device: a device activated by force or pressure that stops the movement of the EWP to minimise harm.

If you plan to fit a secondary guarding device to an existing EWP, you must undertake a specific engineering risk assessment. This includes consultation with the designer/manufacturer/supplier to determine whether there are any impacts on...

Above: Three types of Elevating Work Platforms. Left to right; a scissor lift, an articulating boom lift and a straight boom lift.

While EWPs may control work at height risks, the movement of mobile plant introduces new risks. Duty holders usually understand the risks EWPs pose to people on the ground however, what’s often not fully considered is the increased crush risk to workers from the EWP platform or within the basket.
design registration and to ensure any proposed changes do not introduce new safety hazards or negatively impact the operation of the EWP. You can contact SafeWork SA for further information about design registration requirements.

When using a scissor lift, consider one with a moveable or remote control box. Being able to control the plant remotely allows for safer movement of the plant through doorways or where lower overhead structures create a crush risk.

When hiring an EWP or selecting one to use on site, seek out models with standardised controls. Familiarity with a control system contributes to safer operation of the EWP, and can improve outcomes from rescue operations.

**Assistance from support personnel**

Personnel on the ground should assist the EWP operator undertake the job safely. Support personnel provide a line of sight of the operator to spot any overhead hazards. An agreed system of communication between the operator and ground personnel is required. Ground personnel need to be familiar with any emergency descent device on the EWP being used along with any rescue procedures.

**Safe work method statements**

A safe work method statement (SWMS) must be developed and followed for operating an EWP if there’s a risk to people from its movement, including those working in it. Measures to control crush risks must be documented in the SWMS.

Workers must stand on the floor of the EWP only, not on the handrails or items such as ladders, scaffolding or boxes either placed on the platform floor or on the handrails.

**Operator training**

Before operators start using EWPs training must be provided about its functions and any current safe work methods and emergency procedures.

For a boom-type EWP, where the boom length is 11 metres or more, the operator must hold a High Risk Work Licence.

The boom length is the greater of:

- the vertical distance from the surface supporting the boom-type EWP to the floor of the platform, with the platform extended to its maximum height or
- the horizontal distance from the centre point of the boom’s rotation to the outer edge of the platform, with the platform extended to its maximum reach.

Records of training and operator competency need to be maintained.

Hirers of equipment need to ensure they provide all relevant safety information and should obtain or record verification of operator competency before hiring an EWP.

**Pre-operational checks**

Before use and at the start of each shift an EWP must be checked by the operator and tested in accordance with the pre-operational checklist based on Australian Standards.

Checks must include safety devices and interlock controls. If faults are identified, the EWP must be placed out of action (tagged out) and fixed before being used again.

**Positioning and stability**

The position of an EWP must be carefully assessed, in particular where there are overhead power lines or underground services. Prevailing wind conditions should also be considered. The stability of an EWP must also be carefully assessed for surface slopes, ground cavities and the condition of the ground surface.

Positioning should be selected to ensure work can be performed adequately from the platform. The use of a ladder on an EWP platform to gain extra height creates a risk of falls.

The positioning must ensure that access to the emergency descent device is not obstructed, and that all operations can be performed within any required exclusion zone.

**Wheel-mounted EWP**

EWPs that are supported on wheels when elevated must be free of damage that may result in instability. Most self-propelled EWPs are filled with solid or foam filled tyres. EWPs fitted with pneumatic tyres must not be able to elevate without stabilisers being activated. Pneumatic tyres must be free of defects and inflated to the correct pressure.
Base controls
Base controls should not be used when personnel are on the platform, except in an emergency or for maintenance purposes. All EWPs must be fitted with an emergency retrieval system or be provided with auxiliary retrieval equipment to enable the safe evacuation of people from the platform.

Safe working load
The total weight of personnel, tools and material being loaded on the platform must not exceed the EWPs rated load capacity. Refer to the safe working load decal.

Operating instructions
Operating instructions must be clearly and permanently displayed on the EWP.

Safety harness
Full safety harnesses must be worn by everyone on the platform of a boom-type EWP and be secured to the anchor point.

Where there is a risk of a free fall, a fall-arrest harness designed for attachment to a lanyard assembly, including a personal energy absorber, must be worn by everyone on the EWP.

Work in public places
When an EWP is used in a public place or on a roadway, suitable barricades need to be positioned to keep pedestrians and vehicles at a safe distance. Warning signs should be displayed and the appropriate approvals obtained from local authorities.

Overhead powerlines
Extreme caution must be exercised when operating an EWP near overhead powerlines. The minimum safe distances for operating cranes, machinery, vehicles or vessels with elevating components near powerlines are detailed in the Electricity (General) Regulations 2012.

Maintenance
All maintenance, inspections and repairs need to be undertaken regularly and in accordance with the manufacturer’s recommendations. An EWP owner may engage a competent person to ensure this is done properly.

All EWPs ‘in-service’ should be regularly inspected and must be subject to a major inspection by the end of the tenth year.

More information
For more information on Elevating Work Platforms and other work health and safety matters, visit safework.sa.gov.au or call 1300 365 255.

Further reading
Elevating Work Platform Crush Risks – safework.sa.gov.au
Elevating Work Platforms – minimum standard of training – safework.sa.gov.au
Code of Practice – Managing the Risks of Plant in the Workplace – safework.sa.gov.au
Elevating Work Platform Association of Australia – ewpa.com.au
AS 1418.10: Cranes, hoists and winches – Mobile elevating work platforms
AS 2550.10: Cranes, hoists and winches – Safe use. Part 10: Mobile elevating work platforms