# 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.



**Above:** three types of Elevating Work Platform – 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.

# Risk control measures

# Selecting the appropriate equipment for the task

Consideration of each task and any potential hazards to ensure an EWP is suitable to use and that the type of EWP is appropriate for the task e.g. indoors or outdoors, presence of overhead hazards, condition of supporting surfaces. It may be appropriate to use an alternative – like scaffolding – to reach and carry out the task.

Before operating 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.

# 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.

# Secondary guarding devices

Various secondary guarding devices may help prevent crush or trap injuries, depending on the type of EWP and work being done. Examples are:

- 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 including consultation with the designer/manufacturer/ supplier to determine whether there are any impacts on 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.

# **Operator training**

Before operators start using EWPs training must be provided about the functions, 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 boomtype 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.

# **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**

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.

The positioning must ensure that access to the emergency retrieval system is maintained.

#### 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 requirements**

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.

### **Further information**

Code of Practice – Managing the Risks of Plant in the Workplace

AS 2550.10: Cranes, hoists and winches – Safe use. Part 10: Mobile elevating work platforms

Elevating Work Platform Association of Australia www.ewpa.com.au

This information was prepared by:





















© Government of South Australia, 2016 | 0935-AUG 2016



This publication is licensed under a Creative Commons Attribution Australia Licence v3.0. For terms see: http://creativecommons.org/licences/by/3.0/au/deeden.

Disclaimer I While care has been taken to ensure the accuracy and currency of the information in this publication, at the time of reading it may not be sufficiently accurate, current or complete to suit your individual needs. Reliance on the information in this publication is at your own risk. SafeWork SA accepts no liability for any loss resulting from your reliance on it. To best meet your work health and safety obligations refer to current Acts, Regulations and Codes of Practice.