

FALL PREVENTION DEVICES

A fall prevention device is any equipment that is designed to prevent a fall for temporary work at heights, and once in place does not require any further adjustment by workers using the device.

SCAFFOLDING

Scaffolding can be very effective protection in preventing falls, however, there are specific requirements that apply to some types of scaffold under the WHS Regulations, namely:

- The scaffold and its supporting structure is inspected by a competent person before use, after any incident that could affect its stability (i.e. a severe storm), after any repairs, and at least every 30 days.
- Unauthorised access is prevented on scaffolding that is incomplete and left unattended (i.e. by attaching danger tags and warning signs at appropriate locations).
- Any scaffold from which a person or object could fall more than four metres must be erected, altered and dismantled by or under the direct supervision of a licensed scaffolder.
- Prefabricated scaffolds are of the same type and not mixed components, unless the mixing of components has been approved by the manufacturer.
- Edge protection (i.e. hand rails, mid-rails and toe boards) is provided at every open edge of a work platform.

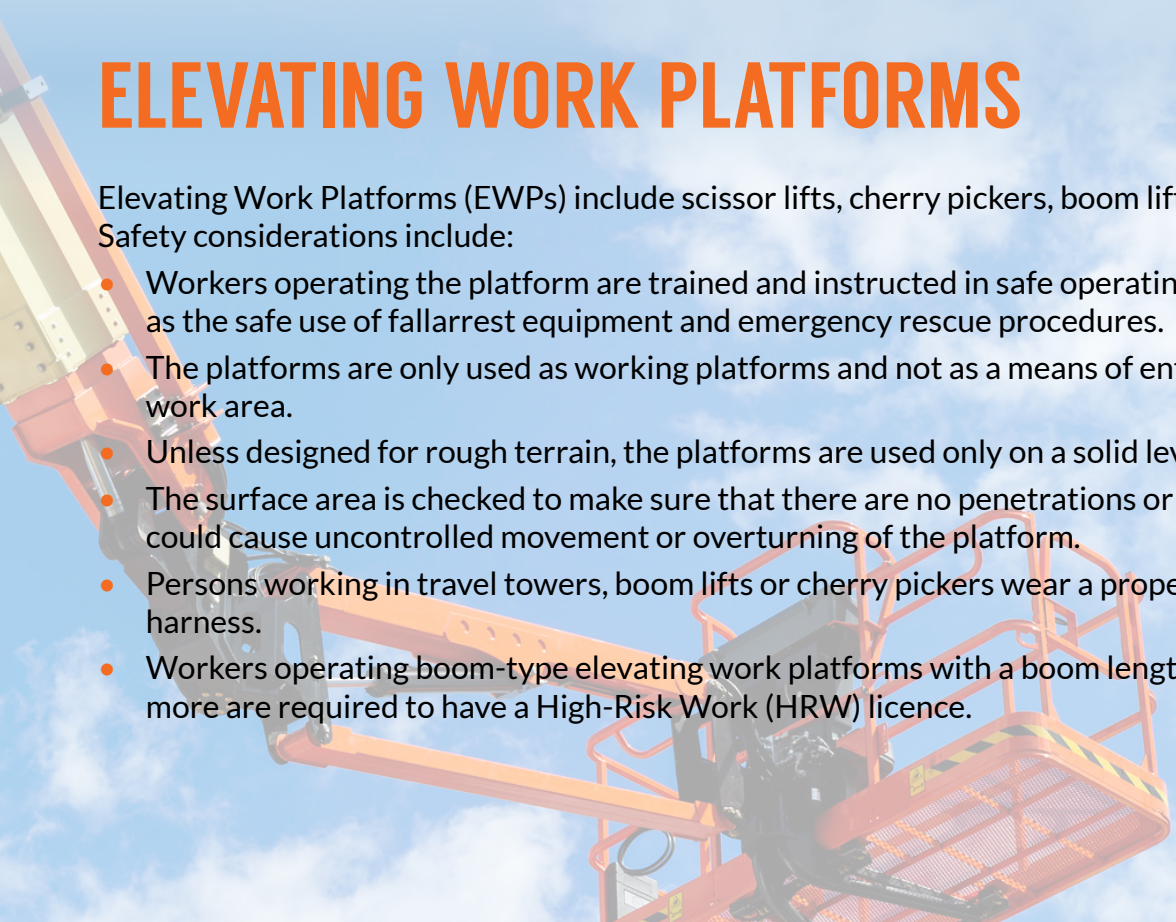
Where work is performed from a scaffold, ensure workers understand:

- Scaffold load capacity.
- That no unauthorised alterations to the scaffold occur (i.e. removal of guard rails, planks, braces).
- Working platforms need to be kept clear of debris and obstructions.

ELEVATING WORK PLATFORMS

Elevating Work Platforms (EWPs) include scissor lifts, cherry pickers, boom lifts and travel towers. Safety considerations include:

- Workers operating the platform are trained and instructed in safe operating procedures, as well as the safe use of fallarrest equipment and emergency rescue procedures.
- The platforms are only used as working platforms and not as a means of entering and exiting a work area.
- Unless designed for rough terrain, the platforms are used only on a solid level surface.
- The surface area is checked to make sure that there are no penetrations or obstructions that could cause uncontrolled movement or overturning of the platform.
- Persons working in travel towers, boom lifts or cherry pickers wear a properly anchored safety harness.
- Workers operating boom-type elevating work platforms with a boom length of 11 metres or more are required to have a High-Risk Work (HRW) licence.



WORKBOXES

The safety requirements and considerations include:

- The workbox is not suspended over persons.
- The workbox is designed for the task and securely attached to the crane. The workbox, lifting attachments and records should be checked by a competent person before use.
- The workbox is fitted with a suitable anchorage capable of withstanding the fall forces. Workers must be attached to the anchorage by a lanyard and harness unless the workbox is fully enclosed.
- Workers remain within the workbox while they are being lifted or suspended.
- Workers do not enter or leave the workbox when it is suspended (except in an emergency).
- The crane is fitted with the means to safely lower it in an emergency or a power supply failure.
- The crane is suitably stabilised at all times while the workbox is used.
- An effective means of communication between any person in the workbox and the operator is provided.
- The operator remains at the controls of the crane at all times.

PERIMETER GUARD RAILS

Guard rails may be used to provide effective fall prevention:

- At the edges of roofs.
- At the edges of mezzanine floors, walkways, stairways, ramps and landings.
- On top of plant and structures where access is required.
- Around openings in floor and roof structures.
- At the edges of shafts, pits and other excavations.

Guard rails should incorporate a top rail 900 millimetres to 1100 millimetres above the working surface, a mid rail and a toe board. A guard rail system should be checked that it will be adequate for the potential loads. The required load resistance will depend on the momentum of a falling person.



FALL-ARREST SYSTEMS

A fall-arrest system is intended to safely stop a worker falling an uncontrolled distance and reduce the impact of the fall. This system must only be used if it is not reasonably practicable to use higher level controls or if higher level controls might not be fully effective in preventing a fall on their own. All equipment used for fall-arrest should be designed, manufactured, selected and used in compliance with the **AS1891** series of standards. Key safety considerations in using fall-arrest systems are:

- The correct selection, installation and use of the equipment. Make sure the harness is not too tight or too loose.
- Make sure the attachment lanyard is not too long – the longer the lanyard the further the person will fall resulting on greater stress on the body when the fall is arrested.
- That the equipment and anchorages are designed, manufactured and installed to be capable of withstanding the force applied to them as a result of a person's fall.
- That the system is designed and installed so that the person travels the shortest possible distance before having the fall stopped.
- That workers using a fall-arrest system wear adequate head protection to protect them in the event of a fall.
- All workers using fall protection equipment should be trained in the dangers of fall-arrest intolerance and how to avoid it.
- That if the equipment has been used to arrest a fall it is not used again until it has been inspected and certified by a competent person as safe to use.

