**Checklist - planning the safe set-up and operation of elevating work platforms (EWPs)**

An elevating work platform (EWP) is a device used to support a platform on which personnel, equipment and materials can be elevated to perform work. While EWPs come in a range of different configurations, the general types of EWP include:

* self-propelled scissor lifts
* self-propelled boom-type
* truck-mounted
* trailer-mounted.

EWP operation can present a risk of injury to people from the following:

* Structural failure. This includes the failure of any EWP component, such as the base, hydraulic lifting arms or working platform. An EWP may suffer structural failure if it has been overloaded, damaged in transit or during use and can occur without warning.
* Overturning. This can occur if the EWP has been overloaded, placed on unstable or soft ground, on excessive slopes, operated in winds exceeding the permissible wind speed or due to failure to use or fully extend outriggers or stabilisers.
* Contact or collision with other plant and structures. This can occur when sufficient clearances are not maintained between the EWP and other plant and structures, such as buildings, overhead beams, powerlines or other mobile equipment.
* Falls from height. This can occur from an elevated platform or when a worker is accessing or egressing from the EWP while the platform is elevated.
* Falling objects. This can occur from equipment not being secured while the platform is elevated above workers in the vicinity of the EWP or pedestrians in public areas.

**Why is planning important?**

Planning is the first step in ensuring that work is done safely. Planning for EWP operations should start as early as possible and involve consultation, cooperation and coordination with everyone engaged in the work. Good planning involves:

* selecting the right EWP
* planning, scheduling and coordinating the work
* EWP siting and setup
* operating the EWP safely, including shut down.

Effective planning will help identify ways to protect people who are:

* operating or located in the basket of the EWP
* performing other work activities at the workplace
* in an area adjacent to an EWP, including public areas.

**How to use this checklist**

This checklist can be used to assist with the set up and operation of an EWP at construction workplaces. The assessment can be led by a principal contractor (PC), Person Conducting a Business or Undertaking (PCBU), EWP operator or health and safety representative and should be done in consultation, coordination and cooperation with everyone involved. For example, a representative from the principal contractor might assemble a group of relevant people from the site to discuss each item and coordinate the actions required for any **‘no’** responses.

The *Work Health and Safety Act 2011* requires a PCBU to consult, so far as is reasonably practicable, with workers who are likely to be directly affected by a health and safety matter and with other duty-holders at the same workplace. Records of completed checklists can be kept to monitor and review items at a later date.

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| **Part one – site details** |
| **Date of assessment:** |  |
| **Assessment completed by:** |  |
| **Name of PC or PCBU:** |  |
| **Site location:** |  |
| **Name of EWP owner:** |  |
| **EWP item/rego number:** |  |
| **Make, model and year of manufacture:** |  |
| **Type of EWP (e.g. self-propelled scissor, self-propelled boom, truck mounted, trailer mounted):** |  |

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| **Section** | **Item** | **Response and comments** |
| **Part two – selecting the right plant** |
| EWP type | 1. Is the type of EWP suitable for the access work that needs to be performed? Consider:
* working height and reach required
* the size and mass of the EWP relative to the workplace, surrounding structures and supporting surface
* the type of EWP that would permit an optimum approach to the work position
* type, mass and dimensions of loads to be elevated (e.g. workers, materials, equipment)
* the frequency and duration that the EWP will be used
* workplace conditions (e.g. indoor/outdoor use, ground conditions, wind conditions, ease of access, proximity of other plant and structures, public areas)
* travelling characteristics (i.e. movement of the EWP whilst being operated, anticipated gradients)
* electrical insulating characteristics
* whether access/egress of the EWP at height is required.
 | □ Yes □ NoComments: |
| Registration | 1. Is the EWP design registered with WHSQ if required?

Note: Boom-type elevating work platforms are design registerable plant. | □ Yes □ No □ N/AComments: |
| Inspections and maintenance | 1. Has the operator carried out a documented pre-operational inspection on the EWP prior to the start of the work shift? This should cover a visual inspection or functional test of the following items:
* visual inspection of the structure for defects or damage
* all controls and emergency stops
* emergency controls and retrieval system
* alarms
* air, hydraulic and fuel system leaks
* brakes, wheels and tyres
* guardrails, including gates with self-closing action
* personal protective equipment (PPE)
* operate the EWP using the ground controls
* any other items indicated in the operations manual.

Note: Controls should be adequately guarded or protected against inadvertent actuation.Refer to the EWP Safe Use Information Pack published by the EWPA for a pre-operational inspection checklist template - [ewpa.com.au/resources/information-sheets](http://www.ewpa.com.au/resources/information-sheets). | □ Yes □ NoComments: |

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|  | 1. If the EWP’s log book reveals any outstanding faults or safety issues, has the EWP been assessed and appropriate action carried out and recorded by a competent person prior to being put back in to service?
 | □ Yes □ No □ N/A Comments: |
| 1. Is an inspection report available as evidence that routine inspections (i.e. three-monthly) and annual inspections have been carried out?
 | □ Yes □ No □ N/AComments: |
| 1. If the EWP is ten years or older, is the major inspection certificate available for inspection?
 | □ Yes □ No □ N/AComments: |
| EWP manuals and markings | 1. Are the EWP operator manual and manufacturer’s plate written in English, using metric units, legible and available to the operator?
 | □ Yes □ NoComments: |
| 1. Does the EWP have all required markings (e.g. rated capacity, unloaded mass, allowable slope, wind rating, electrical insulation level) and all operator controls and emergency controls indicate their function and operation?
 | □ Yes □ NoComments: |
| Licencing and training | 1. Does the operator of the EWP hold a WP high-risk work licence (if required) or is there evidenced that the operator has been provided adequate information, training and instruction to operate the EWP?

Note: A high risk work licence is required to operate a boom type EWP with a boom length of 11 metres or more. | □ Yes □ No □ N/A Comments: |
| 1. Has the operator received documented familiarisation training on the make and model of EWP they are currently operating?
 | □ Yes □ NoComments: |
| 1. Did the induction training provided to workers (e.g. operator, workers in vicinity of EWP) specifically cover what to do in the event of an emergency involving the EWP?

This includes:* identifying people with specific emergency roles
* locations of emergency controls (ensure that access to emergency controls is possible when the EWP is placed in position).
* outlining rescue plans.

Note: Personnel should rehearse emergency procedures, including operation of the emergency controls prior to operation of the EWP. | □ Yes □ NoComments: |
|  | 1. Has the EWP operator completed any other industry-recognised training (e.g. EWPA ‘Yellow Card’) in the safe use and operation of various types of EWPs?
 | □ Yes □ NoComments: |
| **Part three - planning, scheduling and coordinating the work** |
| Planning the work | 1. Has a Safe Work Method Statement (SWMS) been prepared for high-risk construction work that adequately:
* describes the high-risk construction work to be undertaken
* sets out the steps required to perform the work
* identifies associated hazards
* describes the control measures to be used?
 | □ Yes □ NoComments: |
| 1. Does the SWMS follow the hierarchy of controls to prioritise higher-level control measures and not rely on administrative controls only?
 | □ Yes □ NoComments: |
| 1. Have relevant workers been consulted and provided input in to the development of the SWMS? Can they demonstrate that they understand the content of the SWMS?
 | □ Yes □ NoComments: |
| 1. Have workers involved in the operation of the EWP and others in the area of the EWP who may be affected by its operation signed off that they have been instructed in the SWMS?
 | □ Yes □ NoComments: |
| 1. Is there a system in place for monitoring compliance with the SWMS?
 | □ Yes □ NoComments: |
| Traffic management | 1. Has planning been done to ensure that the EWP is kept a safe distance from pedestrians, other mobile plant or vehicle traffic when it is both moving around the site and positioned for operation?

Note: Creating a site traffic management plan will help to separate routes for pedestrian, plant and vehicle movements and outline how different traffic situations will be managed. | □ Yes □ NoComments: |
| **Part four - plant siting and setup** |
| Unloading the EWP | 1. If the EWP is unloaded from a truck, are there measures in place to prevent people being hit or crushed by the EWP during the unloading process: This includes:
* preventing access of people to the unloading area
* ensuring the boom is lowered
* ensuring the truck is on firm, level ground with no side slope
* using a winch with the required capacity.

Note: When loading and unloading EWP’s on tilt trays the truck winch should be attached at all times (refer WHSQ Alert: Safe loading of elevated work platforms on tilt tray trucks 2009). | □ Yes □ No □ N/A Comments: |
| Proximity to plant, structures and public areas | 1. Is the EWP positioned so that the risk of injury from workers in the working platform being trapped, crushed or otherwise injured is minimised? Consider:
* overhead electrical lines and other services
* overhead structures
* other plant (e.g. EWPs, mobile cranes)
* temporary installations (e.g. scaffold, formwork).
 | □ Yes □ NoComments: |
| Ground conditions | 1. Have ground factors been considered that will affect the ability of the ground to provide adequate support? This will consider, but not be limited to:
* the type of ground (e.g. clay, sand, rock or a mixture of these)
* whether the ground has been backfilled
* the presence of water
* location of excavations, embankments or underground services
* continued operation of the EWP in one location
* non weight bearing structures (pits, manholes)
* elevated/suspended floors.
 | □ Yes □ NoComments: |
| 1. Is certification available from a competent person (e.g. geotechnical engineer for support on ground, structural engineer for structures, marine surveyor for vessels) that the surface has adequate bearing capacity and/or stability to support the EWP in the following situations:
* near an excavation or embankment
* when working on a slope and the manufacturer’s specifications are not known
* on building structures or suspended slabs
* on floating vessels (e.g. barges, pontoons)
* where the bearing capacity of the ground is not known and there are indications that the ground may be made up of fill (e.g. presence of rubble)
* where there is doubt about the safety of any particular siting?

Note: the maximum wheel and/or outrigger loads are specified in the operators manual and marked on the EWP. | □ Yes □ No □ N/AComments: |

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| EWP set up | 1. Are timbers or pads placed under the outriggers of the EWP to help distribute the load over a bigger area and are they set up properly? This includes:
* under all outrigger feet
* not sinking
* not deformed
* non-excessive cracks on timbers (e.g. cracks not longer than one quarter of the length of timber)
* non-excessive gaps between timbers
* according to dimensions and materials specified by the EWP manufacturer or competent person.

Note: Timbers or pads should **not** be placed under the wheels of self-propelled EWPs. | □ Yes □ No □ N/AComments: |
| 1. If operating EWP with partially extended outriggers, do the manufacturer's specifications allow for short-legging?
 | □ Yes □ No □ N/AComments: |
| 1. If the EWP is powered by an internal combustion engine, is the area adequately ventilated for exhaust fumes?
 | □ Yes □ No □ N/AComments: |
| Wind conditions | 1. Have wind conditions been considered as to how they may affect the EWP’s stability?

Consider:* wind speed at height of elevated platform
* maximum wind speed rating specified by manufacturer
* effect of wind gusts
* presence of signs, panels or materials that would increase the wind loading
* experience and judgement of operator.

 Note: only EWPs designed with a wind rating of 12.5 m/s or greater are to be used outdoors or in areas where wind is present. (This should be marked on the decals on the platform). | □ Yes □ NoComments: |
| Exclusion zones | 1. Have appropriate exclusion zones been established around the EWP to prevent:
* the EWP nearing overhead electrical lines
* people working around the area of the EWP that don’t need to be there
* other plant and vehicle traffic from entering the area of the EWP
* elevating the platform over areas where people are present (e.g. workers performing other tasks), where there is a risk of falling tools or materials.

Note: an exclusion zone of at least three metres applies for most situations when operating plant near live power lines with a voltage of up to 132 kV.  | □ Yes □ NoComments: |
| 1. Where a spotter is required to inform the operator when the EWP approaches electrical exclusion zones, is the spotter:
* a competent person
* located in a safe position
* able to clearly observe the separation distances
* not undertaking any other work whilst performing spotting duties
* able to communicate with the EWP operator at all times so that the EWP can be stopped so that exclusion zones are not entered.
 | □ Yes □ No □ N/AComments: |
| 1. Have all workers working in the vicinity of the EWP been informed and understand where exclusion zones are established?
 | □ Yes □ NoComments: |
| **Part five - operating the plant safely** |
| Communication | 1. Has a reliable method of communication been established between the operator(s) of the EWP and those on the ground, such as people with emergency support roles?

Communication can include the use of:* radio communication, including dedicated radio frequency, equipment checks, clear and constant instructions and procedures for loss of signal
* hand signalling
* other methods such as bells, buzzers and whistles.

Note: clear visual contact should be maintained between ground personnel and the work platform. If this is not possible additional personnel may be required. | □ Yes □ NoComments: |
| Safety devices | 1. Is the EWP fitted with any safety devices or indicators, and are they in working order?
* Lights and alarms to indicate of EWP movements.
* Protective structure attached to existing guardrails to prevent crushing or trapping.
* Presence-sensing devices activated by the application of an unexpected force or pressure.
 | □ Yes □ No □ N/AComments: |
| Access / egress from the EWP at height | 1. If workers are leaving or entering the platform whilst elevated, is the risk of a fall being adequately managed? This includes:
* considering whether a safer method of access is available
* the working envelope of the EWP is adequate to access the landing area
* the work platform is adequately positioned in relation to the landing area
* the risk of falling from the landing area is managed
* there is a tag out system on the base controls of the EWP.
 | □ Yes □ No □ N/AComments: |
| Fall arrest systems | 1. If the unit is a boom type EWP, are all occupants wearing a travel restraint or fall arrest harness? This includes:
* harness and lanyard in good condition
* lanyard length suitable for EWP size and work activity
* lanyard attached to appropriate anchorage point
* energy absorption device in lanyard
* workers have been trained in the use of harnesses

Note: shorter 1.2 metre lanyards should be used on smaller platforms with top attachment points (refer: EWPA Policy on the use of fall arrest systems in elevating work platforms - [*ewpa.com.au/resources/information-sheets*](http://www.ewpa.com.au/resources/information-sheets)) | □ Yes □ No □ N/AComments: |
| Managing the risk of falling objects | 1. Are control measures in place to minimise the risk of workers or other people being hit by falling objects when the EWP is in an elevated position? These control measures include:
* tool lanyards
* mesh screens
* scheduling work tasks.

Note: Mesh screens must only be installed with the approval of the EWP manufacturer or a competent person. | □ Yes □ NoComments: |
| Operating the EWP | 1. Are all workers standing on the floor of the EWP and any materials kept within the guardrails?
 | □ Yes □ NoComments: |
| 1. Does the total mass of the personnel, materials and tools inside the platform remain within the rated capacity and allowed single point loadings of the EWP?
 | □ Yes □ NoComments: |
| Leaving the EWP unattended | 1. Before leaving the EWP unattended, has it been secured to prevent unauthorised use?

This includes:* positioning the EWP in a designated area
* disabling all powered motions
* removing keys.
 | □ Yes □ NoComments: |

**What to do next**

If you answered **‘no’** to any of the items during the assessment, further action should be taken. This should start with a discussion with the relevant people on site to gather more information and decide on a course of action. Keeping a record of the completed assessment will help to monitor and review items at a later date.

More information on the safe operation of EWPs can be found in [A*S 2550.10—2006: Cranes, hoists and winches —safe use—Mobile elevating work platforms*](http://infostore.saiglobal.com/store/details.aspx?ProductID=276324) or on the Elevating Work Platform Association of Australia’s website [ewpa.com.au](http://www.ewpa.com.au).

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