



## **EWP SAFE USE INFORMATION PACK**

### **INTRODUCTION:**

The Elevating Work Platform Association of New Zealand (EWPA) is the peak representative body for the supply and safe use of Elevating Work Platforms in New Zealand.

Members include rental companies, manufacturers, suppliers, end-users, trainers and specialised support and service companies that cover the full spectrum of this industry.

Elevating Work Platforms (EWPs) have come a long way from the older 'cherry picker' style truck or trailer mounted booms and are now available in many different configurations suitable for a wide range of applications.

In an effort to promote the correct selection and safe use of EWPs, this Safe Use Information Pack was produced by the EWPA in Australia, and has been made available and amended to suit the New Zealand EWP industry.

USERS OF EWPS ARE ENCOURAGED TO UTILISE THE INFORMATION PROVIDED IN PARTS 1 & 2 WHEN PLANNING AND USING A EWP IN THEIR WORKPLACE.

PART 3 MAY BE UTILISED AT THE USER'S DISCRETION.

### **PART 1 - PRE SELECTION SECTION:**

This section provides information to assist in the planning process and is intended to be conducted prior to the selection of an EWP.

**APPLICATION** – Provides information on the EWP types that are suitable for various typical applications eg: surface conditions, indoor or outdoor use, suspended surfaces etc.

**OPERATOR COMPETENCE & TRAINING** – Details the competence levels required to operate different EWPs and the training options available.

**SITE HAZARD EVALUATION** - Provides information on typical hazards and possible control measures associated with the use of EWPs to allow users to assess the intended use of the EWP in their workplace.

### **PART 2 - PRE ACCEPTANCE SECTION:**

This section provides information to assist users in identifying relevant design standards compliance and maintenance information on the individual EWP being supplied to the users' workplace and is intended to be conducted prior to use.

**New Zealand & Australian Standards Compliance** – Provides a list of requirements for users to check that the EWP complies with NZ & AS Standards.

**Condition & Maintenance** - Provides a list of requirements for users to check that the EWP is provided with the necessary documentation, e.g. operator's manuals, logbooks, decals (labels), owner maintenance conducted etc.

### **PART 3 - PRE OPERATIONAL INSPECTION CHECKLIST:**

This section provides a checklist for users who require a separate itemised record of the Logbook Pre-Use Inspection (Safety Checks) conducted by the operator (or other site personnel) prior to using an EWP in their workplace.

Please refer to the EWPA Webpage [www.ewpa.org.nz/information](http://www.ewpa.org.nz/information) for the latest guidelines.



**PART 1 - PRE SELECTION SECTION:**

This section provides information to assist in the planning process of using an EWP in relation to the application, site conditions, operator competence/ training requirements and hazard evaluation.

The assessment should be conducted by the person(s) responsible for the safe use of plant in their work place prior to the selection of an EWP.

SITE/LOCATION DETAILS		
Company:		
Site Name & Location:		
Assessment Conducted by (Name):		Date:
Position/Title:		Phone No:
APPLICATION (Site Conditions):		
Provides information on the EWP types that are suitable for various typical applications e.g. surface conditions, indoor or outdoor use, suspended surfaces etc.		
Considerations:	Tick	Recommendation:
EWP SIZE (HEIGHT, REACH ETC)		Use an EWP that is adequate in terms of height and reach. NOTE: AS2550.10 provides guidelines relating to the possible requirement for a larger EWP if access/egress from the platform while elevated is a requirement of the job task. Access/egress at height should only be performed if a risk assessment indicates that it is the safest method.
RATED CAPACITY		Use a EWP that can adequately support the required number of personnel (including an operator), tools and equipment.
LOAD DIMENSIONS		Use a EWP that is large enough to carry any intended load inside the platform or on approved load carrying attachments e.g. pipe racks.
INDOOR USE (FULLY ENCLOSED FLAT SURFACE)		Electric slab terrain EWPs most suitable. NOTE: Engine drive EWPs may be used but consideration to exposure to exhaust fumes must be assessed.
OUTDOOR USE (WIND RATING 12.5M/S MINIMUM/SLOPE TO BE DETERMINED)		EWP must be rated for outdoor use (min. 12.5 m/s wind rating)
HARD, LEVEL SURFACE, E.G. CONCRETE, ASPHALT ETC. (MINIMAL SLOPE)		Slab or rough terrain EWP suitable.
SOFT SURFACE, ROUGH TERRAIN OR SLOPING SURFACE		Rough terrain EWP with suitable grade ability must be used.
SUSPENDED SURFACES		Check static wheel load of EWP with supplier and maximum floor loadings with responsible engineer prior to use.
HOT WORK		If hot work is to be performed from the platform, ensure the EWP platform is suitable for such work. (Gas cylinders should not be carried in fully enclosed baskets).
USE OF FALL ARREST SYSTEMS AND FALL RESTRAINT DEVICES		Fall arrest systems or fall restraint devices are only mandatory on boom type EWPs. NOTE: All fall arrest systems or fall restraint devices must be: <b>(i)</b> Manufactured in accordance with AS/NZS 1891.1 2007: Industrial Fall Arrest Systems & Devices: <b>(ii)</b> Harnesses and Ancillary Equipment, and; Maintained in accordance with AS/NZS 1891.4 2009: Industrial Fall Arrest Systems & Devices: Selection, Use and Maintenance.



<b>TRAINING/COMPETENCE</b>		
Details the competence levels required to operate different EWP's and the training options available.		
<b>EWP Types &amp; Specific Procedures:</b>	<b>Tick</b>	<b>Comments:</b>
<p><b>ALL EWPS</b> - Operators must be trained and competent to operate a EWP. NOTE: The Hire Association (HIANZ) have delivered a nationally recognised operator training program also known as the "Silver Card" covering safety, hazard evaluation, pre-operational checks and operation of various types of EWPs.</p> <p>NZQA training is a nationally accepted level of training and the units are registered on the NZQA qualification register for each trainee.</p>		
<p><b>EMERGENCY PROCEDURES</b> – Suitable qualified personnel able to retrieve the platform using the controls at ground level or the Emergency Retrieval System must be available in the event of an emergency (e.g. loss of normal power, incapacitation of the operator).</p>		
<b>SITE HAZARD EVALUATION GUIDANCE</b>		
<p>Provides information on typical Hazards associated with the use of EWPs to allow users to assess the intended use of the EWP in their workplace and implement suitable control measures.</p> <p>For more detailed information on assessing hazards, implementing control measures and operating EWPs safely refer to the following: Manufacturers Operator Manuals, Australian Standard 2550:10, Worksafe NZ – Best Practice Guidelines for working at Height.</p>		
<b>Hazards:</b>	<b>Tick</b>	<b>Possible Control Measures:</b>
MACHINE CONTROLS AND OPERATION		<p>(i) If you suddenly release a control lever of a EWP, there may be a delay of up to a few seconds before the relevant function stops. This is called 'ramp time', and EWP manufacturers set 'factory default' ramp times which allows the function to slow down to a stop, rather than jerk to a halt, helping to keep the EWP stable and prevent the operator from losing balance.</p> <p>Before travelling in or elevating an EWP operators should always familiarise themselves with the operating characteristics of the EWP they are using and in particular take note of the deceleration (or stopping) 'ramp time' of each control function.</p> <p>(ii) EWPs are often provided with control features such as proportional controls, high/low drive speed and function speed select switches, engine high/low rev switches to allow the operator to control the speed of the boom to suit the application, ground conditions and when working near structures.</p> <p>Operators should always refer to the Manufacturers Operating Manual supplied with the EWP for how these controls work and then utilise them when operating the EWP.</p>
PROXIMITY HAZARDS E.G. STRUCTURES, DROP-OFFS OTHER PLANT, TRAFFIC (MOBILE & PEDESTRIAN)		<p>(i) Establish traffic management plan and set up exclusion zones.</p> <p>(ii) Ensure that there is adequate stopping distance between the EWP and fixed structures.</p>
ELECTRICAL HAZARDS E.G. OVERHEAD POWER LINES, ELECTRIC SHOCK		<p>(i) Do not operate EWP where an electrical hazard exists. Refer to 'NO-GO ZONE' decal fitted to EWP and/or local regulatory authority requirements for minimum clearance requirements from overhead power lines.</p> <p>(ii) Always use a Residual Current Device (RCD) protected power supply when charging batteries or using work tools in the platform.</p>



Hazards:	Tick	Possible Control Measures:
SURFACE CONDITION E.G. SLOPING SURFACES OR SOFT UNEVEN GROUND.		<ul style="list-style-type: none"> <li>(i) Do not use on a slope which exceeds the manufacturers rated gradeability (refer Operators Manual)</li> <li>(ii) Do not elevate on ground that exceeds the maximum rated slope of the EWP.</li> <li>(iii) Inspect entire work site and identify soft uneven ground.</li> <li>(iv) When elevated do not drive/operate on soft ground.</li> </ul>
EXCAVATIONS, EMBANKMENTS AND UNDERGROUND HAZARDS E.G. BACKFILLED GROUND, UNDERGROUND CAVITIES ETC.		<ul style="list-style-type: none"> <li>(i) Consult responsible person e.g. engineer, site manager, etc. for location of backfilled ground, underground cavities etc. and inspect entire work site prior to operation.</li> <li>(ii) Do not drive/operate near an unsupported excavation, embankment or over the top of an unsupported underground hazard.</li> </ul>
SUSPENDED SURFACES E.G. CONCRETE SLABS, BRIDGE DECKS, WHARFS, JETTIES, ETC.		Obtain static wheel loads from EWP supplier and maximum floor loading from engineer. Ensure suspended surface is capable of supporting weight of EWP before use.
EXPOSURE TO WIND		<ul style="list-style-type: none"> <li>(i) Do not use an indoor / no wind EWP outdoors.</li> <li>(ii) Do not use any EWP in winds that exceed the manufacturer's recommendations.</li> </ul>
CONFINED SPACES OR LACK OF VENTILATION		Use an electric EWP or ensure adequate ventilation if using an engine powered machine.
EXPLOSIVE/HAZARDOUS ATMOSPHERES		<ul style="list-style-type: none"> <li>(i) Do not operate a EWP in a hazardous environment unless it is appropriately rated for such use.</li> <li>(ii) Do not carry explosive or flammable materials in the platform unless suitably contained.</li> </ul>
ELECTROMAGNETIC INTERFERENCE E.G. WORKING NEAR MOBILE PHONE TRANSMITTERS		If working near sources of electromagnetic interference only use EWPs that have been tested/approved for electromagnetic compatibility – refer operators manual or contact supplier/manufacturer.
HOT WORK		A fire extinguisher must be carried on the platform when performing 'hot work'.
WORKING AT HEIGHTS		<ul style="list-style-type: none"> <li>(i) Remain within the confines of the EWP platform at all times and never sit stand or climb on the handrails or use ladders etc. to gain additional height/reach. Always use a fall arrest system or restraint device when operating a boom type EWP. NOTE: Refer to EWPA "Use of a Fall Arrest System Policy" for detailed guidance and possible exemptions.</li> <li>(ii) It is strongly recommended that persons using fall arrest systems not work alone. A monitoring program must be implemented so that in the event of a fall the person can be rescued as soon as possible, to limit the effects of suspension trauma.</li> <li>(iii) Access/egress from the platform at height should only be performed if a risk assessment indicates it is safe to do so. NOTE: AS2550.10 provides guidelines relating to access/egress from the platform while elevated. iv. All EWPs are provided with an Emergency Retrieval System. Ensure ground personnel are trained in the use of the Emergency Retrieval System to enable the prompt lowering of the platform to the ground in the event of an emergency (e.g. loss of normal power, incapacitation of the operator).</li> <li>(iv) When the use of the Emergency Retrieval System is not appropriate, e.g. the retrieval would require the EWP to be driven (or otherwise relocated); the use of additional auxiliary equipment may be required. In these cases an Emergency Procedure must be planned and practiced before using the EWP.</li> </ul>



**PART 1 - PRE SELECTION SECTION:**

Hazards:	Tick	Possible Control Measures:
CRUSHING HAZARDS		<ul style="list-style-type: none"><li>(i) Establish traffic management plan and set up exclusion zones.</li><li>(ii) Ensure all personnel are clear when raising, lowering or slewing EWP.</li><li>(iii) Ensure enough overhead clearance when operating. Especially consider the effects of leverage when driving boom lifts over drop offs, kerbs, gutters etc. Personnel shall never position themselves under, through or between boom sections or scissor arms.</li></ul>
TIP OVER HAZARDS		<ul style="list-style-type: none"><li>(i) Do not use on a slope which exceeds the manufacturers rated gradeability (refer operators manual)</li><li>(ii) Do not exceed the manufacturers' maximum allowable slope, rated capacity (SWL) or maximum side force on the platform.</li><li>(iii) Do not attach signs or banners to the platform. iv. Do not carry large surface area material such as roof sheets, plasterboard etc. in windy conditions.</li><li>(iv) Do not attach ('tie off') an EWP to a fixed structure or other plant.</li></ul>

**PART 2 - PRE ACCEPTANCE SECTION:**

This section provides information to assist users in identifying that the individual EWP supplied to the users workplace has been designed and maintained to relevant New Zealand Standards and regulatory requirements.

This section should be conducted by the person(s) responsible for the safe use of plant in their work place when the EWP(s) is supplied.

SITE/LOCATION DETAILS		
Company:		
Site Name & Location:		
Assessment Conducted by (Name):		Date:
Position/Title:		Phone No:
PLANT SUPPLIER DETAILS		
Owner/Supplier (Hire Company):		
Contact Name:		Phone No:
PLANT DESCRIPTION		
EWP Type (Please tick one)		
Vertical Lift	Scissor Lift	Boom Lift
Make:		
Model:		
Plant No:		
Serial Number:		
Date of Manufacture:		
Commissioned Date:		
DESIGN / STANDARDS COMPLIANCE		
Provides a list of items for users to confirm compliance to New Zealand Standards or regulatory requirements.		
Design Evidence Item:	Tick	Comments:
Design compliance plate to AS1418.10 fitted.  NOTE: Contact supplier or manufacturer if AS1418.10 compliance plate not attached.		
Maintenance/Inspections compliance to AS2550.10.  NOTE: May be on compliance plate or on Maintenance Summary Statement Card in logbook.		



Design Evidence Item:	Tick	Comments:
Fall arrest systems and fall restraint devices inspection record (where system or restraint device provided by supplier) NOTE: Fall arrest systems or restraint devices are only mandatory on boom type EWPs.  <b>(i)</b> All fall arrest systems or restraint devices, must be manufactured in accordance with AS/NZS 1891.1 2007: Industrial Fall Arrest Systems & Devices: <b>(ii)</b> Harnesses and Ancillary Equipment, and; must be maintained in accordance with AS/NZS 1891.4 2009: Industrial Fall Arrest Systems & Devices: Selection, Use and Maintenance.		
<b>DOCUMENTATION</b> - Provides a list of items that owners/suppliers should supply with the EWP.		
Item:	Tick	Comments:
Manufacturer's operator's manual supplied.		
Logbook supplied. NOTE: The logbook should include provision to record operator pre-operational Inspections.		
Maintenance history summary provided NOTE: <b>(i)</b> In accordance with AS2550.10 a summary of the last major, annual & 3 monthly inspections (as applicable) that have been conducted is required. <b>(ii)</b> The summary statement(s) may be contained on the EWPA Summary Statement Card (Grey Card) located in the front of the logbook pouch.		
Owner maintenance record sited (if required) If required, user to request a copy of the owner's most recent maintenance report.		
<b>MARKINGS</b> - Provides a list of items that should be provided on the EWP.		
Item:	Tick	Comments:
Safe Working Load (SWL) marked on platform and compliance plate. NOTE: Dual ratings may be marked on some small scissor lifts and some large boom lifts.		
Maximum allowable side force marked on platform. NOTE: Side force must be a minimum of 200N for 1 person or 400N for more than 1 person rating.		
Maximum allowable chassis inclination (side slope) marked on compliance plate.		
Wind rating marked on platform e.g. indoor/ outdoor use, dual rating small scissors. NOTE: Outdoor use MUST be at least 12.5m/s.		
Lifting points, tie-down points, winching points (as applicable) marked on EWP.		
All controls/instruments (platform and ground) clearly labelled.		
All operation and safety decals fitted and legible.		
Electrical 'NO GO ZONE' decal fitted and legible.		
<b>PRE-OPERATION INSPECTION</b> Prior to operating the EWP in the users workplace, the following inspection should be conducted:		
Inspection Type	Tick	Comments:
EWP – Conduct a pre-operational safety check as per the manufacturer's operator manual or the checklist on the EWP Safety Check & Routine Maintenance Logbook.		



**PART 3 - PRE OPERATIONAL INSPECTION CHECKLIST:**

A following checklist is provided for users who require a separate itemised record of the Logbook Pre-Use Inspection (Safety Checks) conducted by the operator (or other site personnel) prior to using an EWP in their work place. **NOTE:** The checklist is a copy of the 'Operator Daily Safety Checks in the logbook and should not be used as a substitute when the user is conducting their daily pre-operational checks.

<b>SITE/LOCATION DETAILS</b>		
Company:		
Site Name & Location		
Name of Person Conducting Inspection:		
Position/Title:	Phone No:	
Signature:	Date:	
<b>PLANT DESCRIPTION</b>		
EWP Type (Please tick one)		
Vertical Lift	Scissor Lift	Boom Lift
Make:		
Model:		
Plant No:		
Serial Number:		
<b>BEFORE CHECKING /OPERATING MACHINE</b>	<b>Tick</b>	<b>Comments:</b>
<b>(i)</b> Check to ensure EWP has a current 6-month certificate.		
<b>(ii)</b> Before checking/operating disconnect 240v power (battery charger/extension cords etc.)		
<b>(iii)</b> Check manufacturers operating instructions (or equivalent) on machine and familiarise yourself with them before operating machine.		
<b>PRE START CHECKS</b>	<b>Tick</b>	<b>Comments:</b>
<b>(i)</b> Visually check chain and cable mechanisms for slackness and damage.		
<b>(ii)</b> Chassis, scissor, boom sections, outrigger/stabiliser legs for cracks/damage/security (incl. keeper plates, keeper pins, bolts, nyloc nuts etc.) Check level bubble(s) not damaged (as fitted).		
<b>(iii)</b> Tyres for correct inflation, steering linkages, tyres, wheels, wheel nuts, castors damage/security. NOTE: Most self-propelled EWPs have solid or foam filled tyres.		
<b>(iv)</b> Hydraulic hoses and fuel system for leaks/damage (look for puddles on ground).		
<b>(v)</b> All fluid levels (engine oil to main/aux engines, radiator, fuel and hydraulic tank etc.).		
<b>(vi)</b> Cables, wiring, visible limit switches, battery charger (as fitted) for damage. Conduct ELCB 'Push Button' Test (as fitted). Test tag in date.		
<b>(vii)</b> Warning, operation, safety and SWL signs legible incl. elect hazard, controls, wind rating.		
<b>(viii)</b> Condition of PPE (Personal Protection Equipment) i.e. harness (es), lanyard(s), energy absorber(s) etc. Ensure attachment points secure, no cracks/damage.		





PRE START CHECKS	Tick	Comments:
(ix) Platform & Handrails - no damage, handrails 100% secure, self-closing action of doors working. No grease or debris on floor. Slide out deck(s) (as fitted) smooth operation, latches ok.		
(x) Check controls not damaged and return to neutral / central position when released. Emergency stops, dead man, upper and lower controls. NOTE: Check upper and lower controls		
(xi) Do any other pre start checks specified by the manufacturer.		
(xii) Visually check all fibreglass components for cracks especially where bonded to boom.		
OPERATIONAL CHECKS - MACHINE STARTED	Tick	Comments:
(i) Check operation of following: (ii) BEWARE! Allow for 'overrun' (time delay) when testing controls and brakes (refer manufacturer operator instructions)	(i)	(ii)
(iii) Emergency stops and deadmans as fitted at both upper and lower controls (machine should stop when deadman button or foot control is released).		
(iv) - Controls at ground (raise/lower/slew etc.)		
(v) - Controls at platform (fwd/rev/raise/lower/slew etc.)		
(vi) Safety features and lockouts incl. outriggers, drive/elevation cut out, high/low speed change over, pothole protection system, etc.		
(vii) Brakes check no excessive run on (incl. slew brake as fitted). (viii) BEWARE! Some machines have a time delay before brakes apply.		
(ix) Check operation of platform emergency descent and/or operator retrieval system (as fitted). Ensure valves/control returned to 'normal operating' position (as per manufacturers manual).		
(x) Check operation of flashing lights and audible alarms.		
(xi) Do any other operational checks specified by manufacturer.		
FAULTY EQUIPMENT PROCEDURE – If EWP was found to have any faults see procedure below:		
(i) Tag the equipment with a 'DO NOT OPERATE' tag to warn others that the equipment is faulty. (ii) Advise your supervisor of the faults with the equipment. (iii) Advise the OWNER of the equipment that it is faulty and needs attention. (iv) Record details of fault in 'Section 2 (Part A)' of logbook provided with the EWP.		