

## SAFE WORKING GUIDELINES PLANT & EQUIPMENT

### 1. Introduction

The objective of this procedure is to prevent the occurrence of injury and reduce the severity of injuries resulting from working with or near any plant and equipment by employees and subcontractors of Proline Building Commercial Pty Ltd.

### 2. Purpose

The purpose of this document is to provide suitable information for the identification, assessment and control of hazards associated with plant & equipment where there is a risk.

### 3. Definitions

Plant	includes any machinery or equipment, appliance, power tools or hand held tool and any component or fitting thereof or accessory thereto.
Competent Person	A person who has the necessary practical and theoretical skills, acquired through training, qualification, experience or a combination of these, to correctly and safely undertake the tasks.
RTO	Registered Training Organisation
Suitably Licenced	Holds a Valid National Licence to Perform High Risk Work as required.



### Definition of Licences / Training by RTO's

The items below require training by a registered training organisation (RTO) that can assess knowledge, skills, training, ability and competency of the operators. When the RTO deems you competent for any of the lifting equipment below can apply for a licence.

- Scissor Lifts – WP
- Boom Lifts – WP
- Hosits - HP / HM
- Forklifts – LF / LO

- Cranes – CN / C2 / C6 etc

#### **4. Roles & Responsibilities**

Project Managers/ Supervisors and Site Supervisor are responsible for the following:

- Identification, assessment, control and evaluation of working with plant & equipment;
- Ensure that competently trained operators use plant and equipment only;
- Ensure the at competently trained person/s carry out testing and tagging of plant & equipment
- Ensure that records are kept and maintained on the status of electrical testing and tagging of equipment and to provide a monthly report to the Systems Manager.

Other Employees / subcontractors are responsible for the following:

- Ensure they do not carry out works in where uncontrolled plant & equipment hazards exist;
- Notify the Site Supervisor of any hazards / faults or maintenance requirements of plant & equipment;
- Co-operate with Project Managers/Supervisors and Site Supervisor in implementing the plant & equipment hazards management controls.

#### **5. Procedure**

Employees and subcontractors are responsible for developing an understanding of becoming competent in the implementation of risk management principles and practices on site/s.

This is a four phase process:-

1. Risk Identification
2. Risk Assessment
3. Risk Control
4. Risk Evaluation

##### **5.1 Risk Identification**

Identification of risks associated with working with plant & equipment should be undertaken by the following means:

- Consultation with employees / subcontractors
- Observation of work practices
- Inspections of the task and associated work areas
- Examine workplace injury records to assess what injuries have occurred to what tasks being carried out.

Consideration should also be given to the work area

The identification of particular hazards might include items such as:-

- Faulty plant & equipment;
- Untagged plant & equipment;
- work occurring above or below other people.

##### **5.2 Risk Assessment**

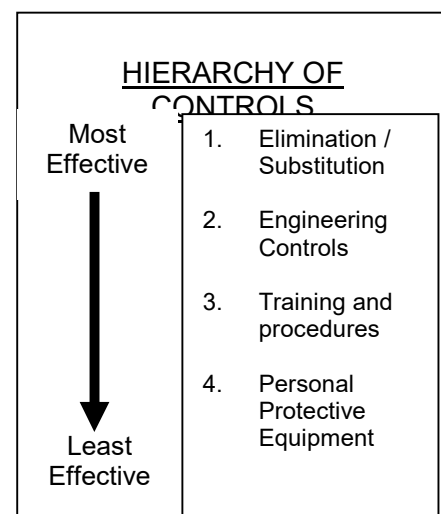
Identified hazards should then be prioritized according to the severity of injury, frequency of task and probability whilst performing the task. When assessing the risk, consideration will be given to:

- The likelihood of the incident occurring and;
- The consequence relating to that type of incident.

### 5.3 Risk Control

It is the responsibility of all employees and subcontractors involved in the working with plant & equipment to ensure that control measures that are put in place by Proline are co-operated with. Risk Control is the means for minimizing or eliminates the identified risk and is carried out using the following hierarchy of control:

- *Eliminate the risk by ceasing the hazardous component or activity*
- *Substitute a less harmful alternative hazard substance or process*
- *Isolate the hazard at source using engineering means*
- *Introduce administrative controls to minimize exposure*
- *Use of Personal Protective Equipment*



General Control options should include the following:

- Ensure all plant & equipment has been checked, tested & tagged;
- Ensure plant log books have been checked to ensure maintenance has occurred according to the manufacturer's specifications;
- Ensure all guards are fitted and equipment is in proper working order
- Ensure person/s using plant & equipment have been trained in the correct use, storage and maintenance
- Ensure when using plant, spotters are present, identifying pedestrians etc

### 5.4 Risk Evaluation

It is important to evaluate the effectiveness of the control measures implemented, to ensure that they are effective and that they do not lead into the introduction of additional hazards within the work environment. An evaluation of control measures must be carried out by the Site Supervisor during the tasks Safe Work Method Statement Reviews.

### 6. Types of Plant

- Cranes
- Hoists – materials
- Hoists – personal and materials
- Scissor Lifts
- Boom Lifts
- Electric Forklifts
- Forklifts
- Skid Steer
- Excavators
- Concrete Pumps
- Elevated Work Platforms
- Reach Stackers – not used by Proline Building during operations.



## **6.1 Inspection of Plant – Daily Checks**

All plant and equipment is to be checked daily by the designated driver/operator. If the plant or equipment is found to be unsafe, it must be removed from site and tagged for repair or disposal.

Plant with moving parts must have guards fitted, if there is a risk that an operator or anyone in close proximity could become entangled in the plant or be hit by something being ejected. If guarding is not possible, it is essential that a safe system of work is provided.

After starting the engine the steering and brakes and hydraulics on mobile plant and equipment will be checked before leaving the parking area to ensure they are operating correctly

The following checklists are to be completed and retained depending on the type of plant being used:

1. Plant & Equipment Checklist Doc No: OHS003
2. Concrete Pump Checklist Doc No: OHS006
3. Mobile Crane Inspection Report Doc No: OHS007
4. Forklift Truck Checklist Doc No: OHS008
5. Hoist Checklist Doc No: OHS009
6. Lifting Gear Checklist Doc No: OHS010
7. Loader/Excavator Checklist Doc No: OHS011
8. EWP Checklist Doc No: OHS0110

And each piece of plant on site, will be listed on the Plant & Equipment Register Doc No: QA08.

## **6.2 Load Control**

### **(Obtained from the Safework Australia – General Guide for Industrial trucks)**

You must use an industrial lift truck that is designed to lift or suspend the load to be lifted. The lifting attachments must be suitable for the load and within the safe working limits of the industrial lift truck.

When suspending or lifting a load you must ensure, so far as reasonably practicable, that it is:

- not lifted over a person unless the industrial lift truck is specifically designed for that purpose
- lifted in a way where you are in control during the activity, and
- not lifted at the same time by more than one industrial lift truck unless the method of lifting ensures that the load placed on each item of plant does not go beyond the design capacity of the industrial lift truck.

The weight, shape, size and composition of a load can change the way it can be lifted safely. Every industrial lift truck should have a manufacturer's data plate and load chart attached in clear view. These two items may be combined on one plate.

The data plate should clearly show the:

- make, model number and serial number
- mast tilt (degrees), forward and rear
- maximum lift height (metres)
- tyre pressures (Kpa), if pneumatic, and
- gross vehicle mass (kgs) and steer axle load (kgs) - unloaded with mast vertical - or drive axle
- loads (kgs).

The load chart should clearly show the rated load capacity (kgs) at certain load centre distance

(mm) and at maximum lift height (metres) with mast vertical. It is critical to limit the load to the rated load capacity of the industrial lift truck or attachment as shown on the load chart. If the rated load capacity is changed as a result of changes to the industrial lift truck or its attachments, the load chart should be revised before use. Each attachment should have its own load chart to help the operator.

Operators should be able to calculate whether loads of varying shapes and masses can be safely lifted by the industrial lift trucks to ensure they do not exceed the capacity of the machine. Loads should be firmly placed against the carriage or back-rest with the mast tilted back enough to stop the load slipping, falling or rolling off the fork arms. Loads that have the ability to slip, fall or roll off the fork arms or pallet should be restrained with straps or similar.

Loads should always be carried as near to the ground as reasonably practicable. Operators should not drive an industrial lift truck with a raised load.

When handling a suspended load the operator should:

- secure the load across both fork arms for balance, using an attachment designed to be used on the industrial lift truck
- not go over the de-rated capacity of the industrial lift truck or the rated capacity of the attachment
- only lift the load vertically (straight up) with no dragging or off-vertical lifts
- move slowly and cautiously when the load is raised, and
- travel with the load as low as reasonably practicable.
- If bulk bags like flexible intermediate bulk containers or similar loads are suspended from the forks of an industrial lift truck, the lifting capacity should be reduced by a safety factor of at least 20 percent to allow for the dynamic forces introduced as a result of sudden stops, starts or turns causing the load to swing.

## **7. Maintenance & Repair of Plant**

All plant must be inspected, maintained and cleaned following the procedures provided by the manufacturer or by a competent person. Only a competent person may repair damaged plant. All safety features and warning devices must be maintained and tested regularly.

Plant must be made safe during inspection, maintenance, cleaning or repairing. Lock out tags must be implemented to prevent equipment being used during downtime. A copy of the maintenance checks / service history must be issued to the Site Supervisor for retention.

## **8. Storage of Plant**

All plant and equipment must be stored in accordance with the manufacturer's specifications. Where possible, plant & equipment must be stored in locked containers out of the elements and away from thieves. No plant or equipment is to be stored in change or lunchrooms.

## **9. Register of Plant & Equipment**

It is a requirement under the Work Health & Safety Regulation 2017, to ensure the following plant is register with Safework NSW.

Types of plant that must be registered include:

- tower cranes including self erecting tower cranes
- mobile cranes with a safe working load of more than 10 tonnes

- concrete placement units with delivery booms
- lifts, escalators and moving walkways
- building maintenance units
- boilers with a hazard level of A, B or C
- pressure vessels with hazard level of A, B, or C (except LP gas fuel vessels for automotive use; serially produced pressure vessels; or pressure vessels that do not require periodic internal inspection)

## **10. Hire of Plant or Equipment**

It is a requirement under the Work Health & Safety Regulation 2017, for a hire company to ensure the identification of foreseeable hazards has been carried out through a Risk Assessment. Hire companies should provide the end user with evidence that the plant & equipment in correct working order, has been maintained ie log books and in some circumstances provide training.

## **11. Hand Tools**

Most construction job tasks involve the use of hand tools. All Proline employees / subcontractors carry their own hand tools and are kept locked away when not being used.

### **11.1 Types of Hand Tools that may be used are:**

- Measuring tape
- Hammer
- Saw
- Screwdriver
- Wrench
- Spanners
- Ratchet socket sets
- Allen keys
- Box cutters
- Chisels
- Other hand held tools.



## 11.2 Use of Hand Tools

Daily checks of hand tools should be carried out prior to use, to ensure they are in correct working order. Use of appropriate PPE must be used and when using all tools. When using sharp tools always work away from body parts and ensure compliance to any relevant SWMS, client regulation or safety rule which may be applicable to the work activity being carried out. When using hand tools at heights, always ensure a “no go zone” has been implemented prior to commencement.



## 12. Power Tools

A power tool is a tool that is actuated by an additional power source and mechanism other than the solely manual labour used with hand tools. The most common types of power tools use electric motors. Most construction job tasks involve the use of power tools. All Proline employees / subcontractors carry their own power tools and are kept locked away when not being used. Power tools are required to be maintained by the owner and have regularly electrical testing and tagging checks completed.

### 12.1 Types of Power Tools that may be used are:

- Angle Grinders
- Circular Saws
- Grinders
- Planners
- Routers
- Power Drills
- Nail Guns
- Multifunction Tools





## 12.2 Use of Power Tools

- Do not operate electrical equipment/leads in wet areas
- Ensure adequate lighting is provided at all times
- Ensure ELCB/RCD is connected and is at supply end of any extension lead (and Dead Man Switch)
- Inspect grinder and wheel for obvious faults and defect on grinders
- Ensure grinder is fitted with a safety guard that covers half the disc between the operator and disc
- Ensure trigger mechanism operates
- Ensure current Inspection Tag is on equipment
- Where applicable obtain a Hot Work permit
- Isolate power before adjusting wheel
- Ensure comfortable position
- Use one hand to hold the trigger, the other hand near the grinder body to secure the machine
- Use the flat of the wheel
- Ensure grinding disc has stopped before putting down
- Ensure the grinding wheel is the correct speed for the Grinder
- Use of an abrasive tool in the open on fire ban days without a permit is forbidden
- Remove all flammables from the work area
- Provide appropriate Fire Fighting Equipment

Note: Any faults of abnormal actions, switch off machine and disconnect from power, DANGER tag and report to Store personal.

## 13. Pneumatic Tools

A pneumatic tool, air tool, air-powered tool or pneumatic-powered tool is a type of power tool, driven by compressed air, supplied by an air compressor. Pneumatic tools can also be driven by compressed carbon dioxide (CO<sub>2</sub>) stored in small cylinders allowing for portability.

### 13.1 Why Proline uses Pneumatic Tools?

Pneumatic tools are safer to run and maintain than their electric power tool equivalents, and have a higher power-to-weight ratio, allowing a smaller, lighter tool to accomplish the same task. General grade pneumatic tools with short life span are commonly cheaper. Industrial grade pneumatic tools with long life span are more expensive.

Types of Pneumatic Tools used by Proline:

- Nail Guns
- Air Drills
- Air Hammers
- Staple guns
- Other tools as required



### **13.2 Use of Pneumatic Tools**

Daily checks of hand tools should be carried out prior to use, to ensure they are in correct working order. Use of appropriate PPE (eye protection / hearing protection) must be used and when using all pneumatic tools.

When using pneumatic tools always check to see that they are fastened securely to the hose to prevent them from becoming disconnected. A short wire or positive locking device attaching the air hose to the tool will serve as an added safety guard. A safety clip or retainer must be installed to prevent attachments, such as chisels on a chipping hammer, from being unintentionally shot from the barrel. Screens should be setup where possible to protect other workers.

Compressed air guns should never be pointed toward anyone at any time. Ensure compliance to any relevant SWMS, client regulation or safety rule which may be applicable to the work activity being carried out.

When using pneumatic / power tools at heights, always ensure a “no go zone” has been implemented prior to commencement.



#### **14. Record Keeping**

Records should be retained in regards to the maintenance and service of plant & equipment. This will be carried out by the Systems Manager.

#### **15. Use of Plant / Equipment / Driving Airside**

Prior to using plant / equipment airside, personnel will need to complete or hold the following:

1. Ensure the appropriate permits have been obtained ie heights / crane
2. Ensure a Tools of the Trade Form has been completed and submitted to security
3. Ensure all tools have been checked tested and tagged
4. Ensure all equipment has been checked, maintenance logs present
5. Ensure all equipment / plant is secured at all times as required

Prior to diving airside, personnel will need to complete or hold the following:

1. Hold a current NSW Drivers licence
2. Hold a current ADA (Authority to Drive Airside) licence or be under instruction / escort to gain experience in view of obtaining a ADA Licence

#### **16. Training**

The Systems Manager will train employees during WHS EMS QA Seminars to ensure that employees can identify risky activities and receive appropriate training.

Project Manager/Supervisors should ensure Site Supervisor train employees / subcontractors in identifying, assessing and controlling risks during Safe Work Method Statement training for any plant & equipment related type work activities.

The Site Supervisor should ensure only person/s trained or licenced use plant on site.

#### **17. Review & Evaluation**

In order to ensure this procedure remains effective, it will be reviewed by Senior Management on an annual basis or in the event of an injury or near miss resulting from any working at heights activity, changes in legislation or if raised by an employees concern.

## 18. References

- Work Health & Safety Act 2011
- Work Health & Safety Regulation 2017
- [www.safeworkaustralia.gov.au](http://www.safeworkaustralia.gov.au)
- [www.safework.nsw.gov.au](http://www.safework.nsw.gov.au)
- Sydney Airport Driving Centre

## 19. Version Control

<b>Date</b>	<b>Version</b>	<b>Owner</b>	<b>Comments</b>
11.05.09	1	Michelle Noy	For Issue
14.02.11	2	Michelle Murphy	Inclusion of checklists
11.11.11	3	Michelle Murphy	Following External 3 <sup>rd</sup> Party Audit
18.04.12	4	Michelle Murphy	Changes in legislation / code of practices
10.06.15	5	Michelle Murphy	Following Management Review
01.09.17	6	Michelle Murphy	General Review
21.05.18	7	Michelle Murphy	Changes in legislation / additional item 15.