# JER-8000-MGT-PRO-0037 Working at Heights

*(AS/NZS, ISO 45001:2018, Clause 8.1.2)*

## 1. SCOPE

The procedure applies to all KGL Resources Workers undertaking work where there is a risk that a person could fall from an elevated plant or a structure, or through an opening or from an edge resulting in an injury.

## 2. PURPOSE OF DOCUMENT

The purpose of this procedure is to provide a proactive and risk-based approach to managing risks arising from working at heights.

## 3. RELEVANT LEGAL & OTHER REQUIREMENTS

It is the responsibility of all personnel to comply with this procedure and seek guidance from the Project Director where clarification is required.

- Work Health and Safety Act 2011 (NT)
- Work Health and Safety Regulation 2011 (NT)'
- Code of Practice Managing the risk of falls at workplaces 2020 (NT)
- AS 1418:2009 Cranes, Hoists and Winches
- AS 1657:2018 Fixed Platforms, Walkways, Stairways and Ladders
- AS 2550:2011 Cranes, Hoists and Winches – Safe Use Set
- AS/NZS 1576.1:2010: Scaffolding – General requirements
- AS/NZS 1576.6:2000 Scaffolding – Metal Tube-and-Coupler Scaffolding
- AS/NZS 1891.1 :2020 Industrial Fall-Arrest Systems and Devices- Harnesses and ancillary equipment
- AS/NZS 1891.2 :1997 Industrial Fall-Arrest Systems and Devices-Horizontal lifeline and rail systems
- AS/NZS 1891.3 :2020 Industrial Fall-Arrest Systems and Devices-Fall-arrest devices
- AS/NZS 1891.4 :2009 Industrial Fall-Arrest Systems and Devices-Selection, use and maintenance
- AS/NZS 1891.5 :2020 Lanyard and Pole Straps
- AS/NZS 1892.5:2000 Portable Ladders – Selection, Safe Use and Care
- AS/NZS 4576:1995 Guidelines for Scaffolding
- AS/NZS 4994.1:2009 Temporary edge protection- General Requirements
- AS/NZS 4994.2:2009 Temporary edge protection- Roof edge protection- installation and dismantling
- AS/NZS 4994.3:2010 Temporary edge protection- Installation and dismantling for edges other than roof edges

- AS/NZS5532 Manufacturing requirements for Single Point Anchor device for harness-based work at height
- ISO 22846.1 Personal Equipment for Protection Against Falls-Rope Access Systems-Part 1: Fundamental Principles for a System of Work
- ISO 22846.2 Personal Equipment for Protection Against Falls-Rope Access Systems-Part 2: Code of Practice

# 4. DEFINITIONS

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| Competent worker | A worker with a combination of skills and knowledge to a standard appropriate to the task. Generally, can be demonstrated by assessment against a competency standard. |
| Edge protection | A guard railing consisting of a mid- and top-rail system, and a toe-board/kick plate. |
| Elevated Work Platform | A telescoping, scissor or articulated device consisting of a platform surrounded by an edge protection system or any combination used to move personnel, equipment and materials to and from work locations at heights. |
| Fall | Means a fall by a person from one level to another. |
| Fall-arrest system | A system incorporating a fall-arrest harness that is designed to minimise the length and severity of a fall. |
| Fall restraint | Control on a person's movement by use of a fall-arrest system, which physically prevents the person from reaching a position at which there is a risk of a free or limited free fall. |
| Industrial Rope Access | A safe method of working at height where ropes and associated equipment are used to gain access to and from the work position, and to be supported there. |
| Portable ladder | A ladder that is not permanently attached to a structure, such as a step ladder, hanging ladder, or extension ladder. |
| Risk of a fall | Means a circumstance that exposes a worker to a fall that is reasonably likely to cause injury to the Worker or other person. |
| Scaffolding | A temporary structure specifically erected to allow access to a workplace or platform. |
| SWMS | A SWMS is a pre-start risk assessment that is undertaken prior to commencing any high-risk construction work or as otherwise required by a supervisor or manager. A SWMS must be completed in accordance with the KGL Resources Risk Management Procedure. |
| Take 5 | A Take 5 is a pre-start risk assessment that is undertaken by all workers prior to commencing work. A Take 5 must be completed in accordance with the KGL Resources Risk Management Procedure. |
| Workers | Workers include employees, contractors, sub-contractors, volunteers and consultants who conduct work for KGL Resources. |

# 5. RESPONSIBILITIES

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| Senior Leadership Team | 1. Provide adequate resources to managers, supervisors and workers to support working at heights risk control implementation.<br>2. Reviews and acts on reported organisational risk management performance. |
| Safety Manager | 1. Ensure this procedure is fit for purpose and meets all applicable legislative requirements.<br>2. Establishes, maintains and monitors hazard identification, risk management, and training systems within the KGL Resources Integrated Management System<br>3. Support managers, supervisors and workers in the implementation and operation of this procedure.<br>4. Recommend change and improvement to this procedure as required. |
| Managers and Supervisors | 1. Ensure all contractors under their management and control are made aware of this procedure and processes are established to ensure their contractors comply with this procedure.<br>2. Ensure that this procedure is implemented in their area by ensuring that all workers are aware of and understand this procedure.<br>3. Ensure that workers are provided with appropriate training in relation working at heights and the appropriate control measures; and<br>4. Ensure that workers implement risk control to eliminate or minimise risks arising from working at heights. |
| Worker | 1. All workers must ensure they are familiar with and understand this procedure.<br>2. Ensure that they are fit for duty when they present for work, and capable of performing the inherent requirements of the job in a safe, secure, productive and efficient manner.<br>3. Continually monitors/assesses hazards and report to manager or supervisor any change of conditions.<br>4. Comply with this procedure. |

# 6. WORKING AT HEIGHTS RISK MANAGEMENT

Working at heights exposes workers to risk of falls. Managing risks associated with working at heights and industrial rope access risks in the workplace is a shared responsibility between KGL Resources, managers, supervisors and workers.

KGL Resources manages risk of falls through a risk management approach. The key elements of KGL Resources' systematic approach to risk management include:

a. hazard identification;
b. risk assessment;
c. controlling risks; and
d. reviewing control measures to ensure they remain effective.

This is to be undertaken in line with the **KGL Resources Risk Management procedure.**

Where there is a risk of falls, a manager or supervisor are responsible for:

a. ensuring that there is a Take 5 and SWMS where there is a risk of a fall **greater than 2 metres**; or

b. a Take 5 where there the risk of fall **is less than 2 metres**.

## 6.1 Hazard Identification

The purpose of identifying hazards associated with working at heights is to eliminate or, if it is not reasonably practicable to eliminate the risk, to minimise it so far as is reasonably practicable.

Hazards associated with working at heights (for example the risk of a fall) can occur where a worker is:

- in or on plant or a structure that is at an elevated level (for example using a portable ladder);
- in or on plant that is being used to gain access to an elevated level (for example an elevated work platform or scaffolding);
- in the vicinity of an unprotected opening through which a person could fall (for example a lift shaft, trench or hole);
- in the vicinity of an unprotected edge over which a person could fall (for example a roof).

## 6.2 Risk Assessment

When assessing the risks arising from working from heights, workers must consider the following:

a. the design and layout of elevated work areas, including the distance of a potential fall;

b. the number and movement of all people at the workplace;

c. the proximity of workers to unsafe areas where loads are placed on elevated working areas and where work is to be carried out above people and there is a risk of falling objects;

d. the adequacy of inspection and maintenance of plant and equipment (for example, scaffolding);

e. the adequacy of lighting for clear vision;

f. weather conditions—the presence of rain, wind, extreme heat or cold can cause slippery or unstable conditions;

g. the suitability of footwear and clothing for the conditions;

h. the suitability and condition of ladders, including where and how they are being used;

i. the adequacy of current knowledge and training to perform the task safely (for example, young, new or inexperienced workers may be unfamiliar with a task); and

j. the adequacy of procedures for emergency situations.

## 6.3 Risk Control Measures for Working at Heights

As set out in KGL Resources' Risk Management Procedure, control measures should always be considered in the order of the hierarchy of controls starting with elimination. In some circumstances, two or more control measures will be required to minimise so far as is reasonably practicable the risk(s).

KGL Resources applies the Hierarchy of controls to eliminating, so far as is reasonably practicable, or minimising the risks arising working at heights. Set out in **Table 1** below are some examples of risk control measures to eliminate or minimise these risks according to the hierarchy of control.

**Table 1: Examples of risk control measures for working at height**

| Risk Control Hierarchy | | Example of risk control measures for working at heights |
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| Level 1 | • Eliminate the hazards | • Eliminate the need to work at a height to eliminate the risk of a fall.<br>• Undertake work on the ground or a solid construction, if reasonably practicable. |
| Level 2 | • Substitute the hazard with something safer<br>• Isolate the hazard from people<br>• Reduce the risks through engineering controls | • Provide a fall prevention device (for example, installing guard rails) if reasonably practicable to do so.<br>• Use an elevated work platform. |
| Level 3 | • Reduce exposure to the hazard using administrative actions<br>• Use personal protective equipment | • Provide 'No Go' areas.<br>• Ensure that only allow competent persons trained in the use of relevant control measures to work in the area with the hazard.<br>• Organising and sequencing work to ensure workers do not interfere with other workers and increase risk.<br>• Provide a fall- restraint or fall arrest system, so far as reasonably practicable, if it is not reasonably practicable to provide a fall prevention device or work positioning system.<br>Where level 3 controls are required for the primary control when working at heights, the SWMS must be approved by the responsible KGL Project Manager. |

## 6.4 Guidelines for Working at Heights Risk Controls

Where the risk of falls cannot be eliminated through design of the structure, redesign of the task or through other means the following may be required:

| **Work on the ground or solid construction.** | |
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| **Barriers or edge protection** | Edge protection shall consist of guard rails with the top guard rail of between 900mm and 1100mm above the working surface with mid rails and toe boards/kick plates or mesh infill panels to Australian Standard requirements. |
| **Fall prevention device** | |
| **Temporary work platform – Scaffolding** | Must be erected, altered and dismantled by a competent person. Scaftags should be used to indicate inspections and approval to use.<br>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 licenced scaffolder. |

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| | Scaffolding shall be inspected by a competent person every 30 days.<br><br>Scaffold and it supporting structure shall be inspected by a competent person before use after any incident that could affect its stability (such as a severe storm) or after any repairs.<br><br>Work platforms and scaffolds must have complete floors, guardrails and toe boards/kick plates with safe access and egress.<br><br>Workers must understand the loads that the scaffold can take, and other safety precautions associated with the structure.<br><br>Where Light Duty Suspended Scaffold such as Swing Stages are used:<br><br>• the working load and specifications are in accordance with AS 1576.4 Scaffolding-Suspended Loads;<br><br>• workers operating light duty suspended stages are trained in safe operation;<br><br>• persons installing or servicing a Light Duty Suspended Stage hold licence for advanced rigging or advanced scaffolding;<br><br>• where the Swing Stage is suspended by two wire ropes to each winch, a safety harness and restraint lanyard is attached to a suitable anchor point of the Swing Stage. |
| **Elevating work platforms -** scissor lifts, cherry pickers, boom lifts and travel towers. | These platforms must only be used on solid level surfaces or in accordance with manufacturer's specifications where outriggers and other stabilisers are provided.<br><br>Properly anchored safety harnesses must be worn (exception-scissor lifts) and workers must be licensed to operate platforms with a boom length of 11 metres or more. |
| **Workboxes** | Must be supported by a crane (complies with AS2550.1:2011), hoist forklift or another mechanical device.<br><br>The workbox must be fitted with a suitable anchorage, workers in baskets must be secured at all times with fall protection and the workbox should have a safety gate that is self-locking.<br><br>Workboxes must be certified for use, a compliance plate should be easily read with all specification clearly marked with a test date and expiry date. |
| **Administrative Controls** | |
| **'No Go' areas** | 'No Go' areas require clear signs warning people not to access the hazardous area. They can be used to highlight the risks of entry to an area where there is an unguarded hazard, or to areas where work is being undertaken overhead and there is a risk of falling objects.<br><br>Relevant information and instruction should be provided about 'no go' areas with adequate supervision to ensure that no unauthorised worker enters the 'no go' area.<br><br>Barriers should be used in conjunction with signs to cordon-off areas where there is a risk of falling or being hit by falling objects. They should be highly visible and securely fixed to prevent displacement.<br><br>The use of Administrative Controls as the primary means of control must be approved by the response KGL Project Manager. Approval is evidenced through the approval of the SWMS. |

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| **Work positioning system** | |
| **Industrial Rope Access systems** | Must be utilised in accordance with Safe Work Australia's Guide to managing risks of industrial rope access systems,ISO 22846.1 Personal Equipment for Protection Against Falls-Rope Access Systems-Part 1: Fundamental Principles for a System of Work and ISO 22846.2 Personal Equipment for Protection Against Falls-Rope Access Systems-Part 2: Code of Practice.<br><br>This includes levels of competencies for users and supervisors, rescue plans, team requirements, and security of operators when working near live edges. Industrial rope access technicians must hold current and relevant IRATA International qualifications.<br><br>The use of Personal Fall Protection (PPE) as the primary means of control must be approved by the responsible KGL Project Manager. Approval is evidenced through the approval of the SWMS. |
| **Ladders** | |
| **Fixed ladders** | Inclined twin-stile ladders should be nominally angled at between 70° and 90°. Ladder cages shall be provided where a person could fall more than 6-m, irrespective of landings. Where installation of a ladder cage is not possible, a fall-arrest system complying with AS1891 series shall be provided.<br><br>Fixed ladders are used for access only. |
| **Portable ladders** | Ladders must have a load rating of at least 120kg and be manufactured for industrial use and be suitable for the specific task. Metal ladders shall not be used where there is a risk of exposure to electricity.<br><br>Ladders must be set up on a solid stable base.<br><br>Ladders should be placed at a slope of 4:1 and should not be extended or used at lengths greater than 4-m.<br><br>Ladders shall be secured at the top and may also be secured at the bottom.<br><br>Portable ladders are used for access only. Step ladders are NOT to be used on site.<br><br>Platform ladders, which provide a working platform, should be used where light work is required to be performed. Platform ladders / step platforms provide an improved level of fall protection over traditional step or single ladders as they include a small working platform and a partial handrail. Heavy work should be conducted from a scaffold or other suitable platform.<br><br>Workers will maintain 3 points of contact whilst using ladders.<br><br>Workers are not to use ladders with any power or handheld tools requiring two hands to operate.<br><br>No worker is permitted to stand on a rung closer than 900mm from the top of the ladders.<br><br>Safe access and egress must be allowed if ladders need to extend above a roof. |
| **Personal Fall Protection (PPE)** | |
| **Industrial Rope Access systems** | Industrial Rope Access should only be used when it is not practicable to use fall restraint systems. Industrial rope access systems are described in ISO 22846 and consist of the use of two parallel ropes to suspend the worker, |

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| | using descenders, ascenders and back up devices. See Fall restraint and arrest systems section for additional requirements. |
| **Fall restraint and arrest systems** | Restraint systems should only be used when it is not practicable to install a physical barrier. Fall-restraint systems prevent the worker from reaching a fall position.<br><br>Fall-arrest systems should only be used when it is not practicable to use fall restraint systems. Fall arrest systems protect the worker in the event of a fall from striking the ground, or a lower level or other object.<br><br>Fall protection equipment must be of a full body harness type with shock absorbing lanyard (for fall arrest systems) and the fall clearance must be taken into consideration. E.g. a 2 metres shock absorbing anchor can only be used if the anchor is at least 6.5 metres above the ground or other place to which the worker can fall.<br><br>Fall protection shall be anchored by double or triple action snap hooks and secured to certified anchorage points (minimum 15kN ultimate force for one person). The building or structure and anchorage points shall be assessed by an engineer, unless it is clear to a person competent to identify and assess anchorages, that the anchorage systems is structurally adequate.<br><br>Working at heights training is required and emergency procedures, including rescue procedures, must be in place for any work undertaken using a fall-arrest system. A rescue from a fall arrest system must be undertaken as soon as possible. Serious injuries have occurred from suspension syndrome after as little as three (3) minutes.<br><br>Under no circumstances will KGL Resources workers undertake working at heights activities using industrial rope access systems, fall restraint systems or fall arrest systems without supervision or suitable training to ensure competency. At least one other competent person must be in a position to supervise and observe all operations until the completion of the project.<br><br>When working in a fall arrest system, an appropriate rescue plan must be developed, and the rescue of a person sustaining a fall in a fall arrest system must be undertaken as soon as practicable, and in accordance with AS/NZS 1891.4, to avoid potential suspension syndrome, which is a medical condition caused as a result of a restriction of blood flow due to the pressure placed on the body when being suspended in a fall-arrest harness.<br><br>The use of Personal Fall Protection (PPE) as the primary means of control must be approved by the Branch Project Manager. Approval is evidenced through the approval of the SWMS. |

# 7. REVIEW AND REVISION OF CONTROL MEASURES

Risk controls must be reviewed on a regular basis to ensure their effectiveness and to ensure that new risks have not been introduced. A review is required:

a) when the control measure is not effective in controlling the risk;

b) before a change at the workplace that is likely to give rise to a new or different health and safety risk that the control measure may not effectively control;

c) if a new hazard or risk is identified;

d) if the results of consultation indicate that a review is necessary; and

e) if a health and safety representative requests a review.

## 8. INSPECTION AND TESTING OF CONTROL MEASURES

KGL Resources has established a planned program of workplace inspections and testing for control measures, detailed in the KGL Resources Assurance Procedure. KGL Resources' workplace inspection and testing regime specifies:

- the equipment to be inspected, including its unique identification;
- the frequency and type of inspection;
- action to be taken on finding defective equipment;
- means of recording the inspections;
- training of users; and
- the system of monitoring the inspection regime to verify that workplace inspections are carried out appropriately.

## 9. INFORMATION, INSTRUCTION, TRAINING & SUPERVISION

Managers and supervisors must provide workers with information on how to manage work at heights matters including knowledge of KGL Resources consultative mechanisms for raising work health and safety matters. This procedure is also communicated during project inductions.

Managers and supervisors must ensure that workers exposed to a risk of a fall are adequately supervised by a competent person, especially if they are undergoing training or are unfamiliar with the working environment.

## 10. INCIDENT REPORTING AND INVESTIGATION

Any incidents arising from fatigue must be reported in accordance with the **KGL Resource Incident Management Procedure**.

## 11. BREACH OF THIS PROCEDURE

Workers must comply with this procedure at all times. KGL Resources takes breaches of this procedure very seriously.

If an employee is found to have breached this procedure, they may be subjected to disciplinary action in accordance with KGL Resources' disciplinary processes. Contractors of KGL Resources who are found to have breached this procedure may be the subject of action under their contract with KGL Resources.

## 12. CONSULTATION

This procedure has been developed and implemented in consultation and co-operation with KGL Resources' workers.

## 13. RELATED DOCUMENTATION

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| JER-8000-MGT-PRO-0006 | Risk Management |
| JER-8000-MGT-PRO-0023 | Incident Management |
| JER-8000-MGT-FRM-0011 | Incident Report Form |

# 14. MONITORING, EVALUATION AND REVIEW

| **VERIFICATION** | |
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| Monitoring | Compliance with this procedure will be monitored through training and regular audits. |
| Evaluation & Review | The risk rating is high, reviewed every year.<br>A review will be undertaken sooner if there are changes to legislation, standards and industry codes, or following an SMS review, changes as defined by WHS Regulators, or to ensure continual improvement. |
| Version Control | Version 1: May 2026 |

# 15. APPROVAL

**Konrad Litfin**

**Project Director**