

Fatal Risk Procedure

Risk of Falls

(HSE)

Document Number: A4003981



Excellence



Honesty



Accountability



Courage



Caring

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1. Objective

This Procedure gives effect to GMW's Safety & Wellbeing Policy. This standard operating procedure (SOP) establishes the requirements for the management of the risk of falls from height at Goulburn-Murray Water (GMW) workplaces and sites. In particular it:

- Sets out the requirements and procedures for the protection of people undertaking work that presents a risk of falling or being struck by falling objects that is reasonably likely to cause injury and or property damage.
- Details the risk assessment process and compliance requirements to eliminate or minimise potential fatalities, injuries and incidents arising from risks related to falls.

2. Scope

This standard operating procedure (SOP) applies to all GMW employees, contractors, consultants, visitors and labour hire on GMW controlled worksites. It outlines the requirements to prevent the risk of falls for tasks that are done above 2 meters. All tasks at 2 meters and below must apply the Ladder Safety principals.

3. Procedure

GMW will take action to manage all GMW facilities, plant, work environment and tasks to eliminate the risk of falls at their worksites, and if that is not possible, GMW will minimise the risks so far as is reasonably practicable. Examples of tasks and locations at GMW worksites that may present a risk of a fall include:

- Access and rescue within confined spaces,
- Accessing fixed structures within GMW worksites,
- Work in and above inspection/maintenance holes of water,
- Construction of new facilities such as channels and pits,
- Accessing roof tops,
- Working above water bodies such as channels and water storages,
- Accessing which also includes standing on mobile plant.

To manage the risk of a fall at GMW worksites, GMW (Employee/Manager/ Site Supervisor) will:

- Complete a risk assessment, which identify and assess the risk for all locations and tasks that could cause injury due to a fall,
- Develop a safe System of Work
- Supply and maintain suitable plant and equipment for workers to reduce the likelihood of a fall,
- Train workers in the safe use of equipment and plant relevant to their tasks,
- Educate workers in the risks and controls required for managing falls,
- Complete a Working From Height Permit,
- Develop and test emergency response, rescue and first aid plans.



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3.1 Risk Assessment

A risk assessment must be conducted prior to undertaking all working at heights activities and documented as one of the following:

- Working at Heights Safe Work Method Statement; or
- Generic risk assessment for multiple tasks and locations, provided the fall hazards and risks are the same.

Workers and other affected stakeholders such as contractors and or land owners shall be consulted during the risk assessment process.

A summary of potential hazards to consider during the risk assessment is provided in Table 1.

Table 1. Potential Fall Hazards to be Considered During Risk Assessment	
Accessing areas of mobile or fixed plant without edge protection	Access and egress to locations from which someone could fall
Adverse weather	Unprotected edges
Workers suspended in a harness after a fall	Working at height above water
Fragile work surfaces e.g. skylights	Openings or holes in floors/ roof tops
Worker competencies	Inadequate lighting
Mezzanine floors (may have unprotected edges)	Condition of work surfaces (i.e. stability, slipperiness, slope angle)
The “pendulum effect”	Contractors and visitors
Tools/ equipment being used above people/ equipment	Anchorage point condition and structural integrity
Access and egress to plant and structures e.g. vehicles, building roofs	Using fall protection equipment e.g. harnesses and lanyards
Operating temporary work platforms e.g. EWPs	Roofing materials containing asbestos
Using ladders	Suitability of lighting for work tasks
Accessing scaffolding	

3.2 Permit to Work

The GMW Permit to Work is an administrative tool managed by designated GMW Work Sites and depots to record, authorise and schedule work.

Ensure a Working at Heights Permit has been completed and approved before commencement of any work.

Where the access method and working at heights controls are the same, then 1 permit per activity to be approved by the Supervisor. (**Activity** is defined as: a series of tasks, in one or more locations).



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Eg: If working on 5 x telecommunications towers and have all have similar ladders and similar access requirements, then 1 permit is required to be approved by the supervisor.

3.3 Hierarchy of Controls

In developing a safe system of work, the following hierarchy of controls for managing the risks of falls shall be followed, with preference given to higher order controls whenever reasonably practicable. When required, a combination of controls shall be utilised e.g. PPE along with use of a temporary work platform (see image below):

- Prevent the fall: carry out the task on the ground to eliminate the risk of a fall, or if this is not practicable,
- Prevent the fall: carry out the task on a solid construction, or if this is not practicable,
- Minimise the risk of a fall: provide and maintain a safe system of work by using:
 - A passive fall prevention device such as a temporary work platform, scissor lift, cherry picker, roof safety mesh or guard-railing shall be used, or if this is not practicable,
 - A work positioning system such as industrial rope access and travel restraint systems shall be used or if this is not practicable,
 - A fall injury prevention system such as, catch platforms and individual fall arrest systems shall be used or if this is not practicable,
 - A fixed or portable ladder or an administrative control shall be used.

Fix
Work through this list in the following order to control the risk of falls at your workplace. In many instances, a combination of approaches will result in the best solution.

- 1. Do the work on the ground or on a solid construction**
Example: Use tilt-up concrete construction instead of constructing the concrete walls at a height.
- 2. Use a passive fall prevention device**
Example: Elevating work platform, scaffolding or guard railing.
- 3. Use a work positioning system**
Example: Industrial rope access system or travel restraint system.
- 4. Install a fall arrest system**
Example: Industrial safety net, catch platform or safety harness system.
- 5. Use a fixed or portable ladder, or implement administrative controls**
Example: Establish a safe work procedure to prevent employees from accessing a brittle and fragile roof, and put up a sign.

Fig 1: Guard railing

Fig 2: Travel restraint system

Review
It's important to review your risk controls regularly to ensure they are implemented correctly and to monitor their effectiveness.
You need to review (and, if necessary, revise) your risk controls whenever any changes are made to the workplace that could increase risks, such as changes to the way work is done.
A review is also necessary if a health and safety representative requests one.
Employees and HSRs must be consulted when reviewing risk controls.



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3.3.1 Work On the Ground

Eliminating the need to work at height is the most effective way of protecting workers from the risk of falls. When conducting a risk assessment, preference must be given to conducting the task at ground level when it is reasonably practicable.

3.3.2 Work on a Solid Construction

Where tasks cannot be undertaken from the ground, working on a solid construction is required as it provides an environment where the likelihood of a fall may be eliminated. 'Solid construction' means an area that:

- is structurally capable of supporting workers, material and any other loads applied to it,
- is provided with barriers around its perimeter and around any openings from or through which a person could fall,
- has an even, accessible surface and gradient, and
- Has a safe means of entry and exit.

Design of edge protection, access and egress structures must meet the requirements of the *Compliance code: Prevention of falls in general construction 2019* and *AS 1657: Fixed platforms, walkways, stairways and ladders – Design, construction and installation*.

3.4 Temporary Work Platforms

If the risk assessment determines that certain controls cannot be utilised for all or part of the task, temporary work platforms shall be used if reasonably practicable.

A 'temporary work platform' is a working platform, other than a permanently installed fixed platform, used to provide a working area for the duration of the job. The risk assessment will assess which type of temporary platform is most suitable for the task and work location.

Temporary work platforms include:

3.4.1 Scaffolds

- Fabricated frame scaffolds are the most common type of scaffold because they are versatile, economical, and easy to use. They are frequently used in one or two tiers by residential contractors, painters, etc., but their modular frames can also be stacked several stories high for use on large-scale construction jobs.
- Mobile scaffolds are a type of supported scaffold set on wheels or casters. They are designed to be easily moved and are commonly used for things like painting and plastering, where workers must frequently change position.

Requirements for use of scaffolding on GMW sites includes:

- Scaffolding on GMW worksite must be installed and inspected by a competent licensed and trained person.
- Scaffolding will be inspected before use, after any incident that could affect its stability (such as a severe storm), after any repairs, and at least every 30 days.



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- Unauthorised access to scaffolding must be prevented on scaffolding that is incomplete and left unattended (for example, by attaching danger tags and warning signs at appropriate locations).
- Safe access to and egress from the scaffold must be provided.
- Edge protection (handrails, mid-rails and toe boards) is provided at every open edge of a work platform.

Scaffolds must comply with the Australian/New Zealand Standards *AS/NZS 1576 2010 Scaffolding and AS/NZS 4576 – Guidelines for scaffolding*.

3.4.2 Elevating work platform (EWP) consist of a platform surrounded by an edge protection system.

EWPs are a telescoping device, hinged device or articulated device, or any combination of these devices, which is used to support a platform on which personnel, equipment and materials can be elevated to perform work.

EWPs can provide superior reach and versatility to access more awkward areas quickly and effectively. They do not need to be placed right next to the job task in order to gain access and in some cases can be driven over poor terrain conditions.

Requirements for use of EWPs on GMW sites include:

- EWPs shall not be used for access and egress to work areas;
- workers required to operate EWP must be trained and competent to do so;
- use of safety harnesses and lanyards shall be applied as per manufacturer's requirements; and
- Operators of boom-type elevating work platforms with a boom length of 11 metres or more shall be licensed.

3.4.3 Lift boxes/Crane Workboxes that consist of a platform surrounded by an edge protection system, which is designed to be suspended from a crane.

Lift boxes are designed to lift or move people, equipment or materials e.g. access top of structures during construction. Lift boxes generally do not provide a level of safety equivalent to scaffolding and EWPs.

Requirements for use of lift boxes / crane workboxes on GMW sites include:

- use of safety harnesses and lanyards shall be applied as per manufacturer's requirements;
- the workbox is not to be suspended over persons;
- the workbox is designed for the task and is fitted with a compliance plate;
- the workbox is fitted with a suitable anchorage capable of withstanding the fall forces specified in AS/NZS 1891.4 Industrial fall-arrest systems and devices—selection, use and maintenance;
- workers are attached using safety harnesses and lanyards;



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- the crane is suitably stabilised at all times while the workbox is used;
- the crane has 'drive up' and 'drive-down' controls on both the hoisting and luffing motions and those controls are used (no declutching allowing free fall is to be used while a workbox is in use);
- the crane is fitted with slack line detection/prevention:
- workers do not exit a suspended workbox;
- at least one person in the workbox has a Dogger competency;
- the crane is fitted with a safety hook and moused (lashed) accordingly; and
- the operator remains at the controls of the crane at all times.

For specifications for the use of crane workboxes refer to AS 2550.1 Cranes, Hoists and Winches—Safe Use—General Requirements.

3.4.3.1 Work boxes are secured to a forklift to provide access to a working area for short duration and occasional usage e.g. minor maintenance tasks.

Requirements for use of work boxes on GMW sites include:

- the work box is fitted with a compliance plate and is in good condition;
- The work box has a mechanism to secure it to the forklift and this is applied whenever the workbox is in use;
- workers must remain in the work box at all times, wearing a safety harness and lanyard assembly;
- people are not raised on the tines of forklift trucks or a pallet;
- no other device (for example, ladder or pallets) is used to gain additional height; and
- the safety gate is self-locking and kept shut when in the elevated position.

3.4.4 Perimeter Guard Rails/Edge Protection

When workers are required to perform work in locations with exposed edges, measures shall be taken to install suitable edge protection to prevent access to exposed edges. Guard rails shall be applied where a person is at risk of falling, for example;

- 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 (e.g. tanker vehicles, inspection platforms);
- around openings in floor and roof structures;
- above water e.g. dams, channels and water storages, and or storages;
- at the edges of shafts, pits and other excavations.

Edge protection shall be installed regardless of the distance that a person or object may fall, if the risk assessment determines that any fall could have serious harmful or dangerous consequences.

Before using a guard rail system, it must be checked to verify that it will be adequate for the potential loads. The required load resistance will depend on the momentum of a falling person. For example, the momentum of a person falling from a pitched roof will increase as the pitch of the roof increases.



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Edge protection for permanent structures/ plant must meet the requirements of AS 1657: *Fixed platforms, walkways, stairways and ladders – Design, construction and installation*.

Guard rails must incorporate a top rail 900mm to 1100mm above the working surface and a mid-rail and a toe board. Refer to AS/NZS 4994—*Temporary Edge Protection series for further guidance*.

3.4.5 Safety Mesh

Safety mesh is designed to prevent internal falls through a roof. If securely fixed, safety mesh provides fall protection for roof installers and offers long-term protection against falling for maintenance and repair workers. The risk assessment for use of safety mesh must include and meet the following requirements:

- use of edge protection if there are exposed edges;
- compliant with AS/NZS 4389 Safety Mesh; and
- Competent persons used for installation of the mesh.

3.5 Work Positioning Systems

Where it is not practicable to work at heights from a work platform, a work positioning system must be considered. A work positioning system involves the use of equipment that enables a person to work supported in a harness in tension in such a way that a fall is prevented.

Work positioning systems require a high level of competency on the part of the user and supervisors to ensure safe use. Users, including supervisors, must undertake a competency based course of training.

3.5.1 Industrial Rope Access Systems

Industrial rope access systems are used for gaining access to and working at a workplace, usually by means of vertically suspended ropes.

Due to the high level of training and skill involved with the use of industrial rope access systems, it is only considered practical for specialised personnel specifically trained in its use, e.g. emergency rescue personnel.

Requirements for use of these systems on GMW sites include:

- exclusion zones established around the work area;
- workers are trained and competent;
- a backup system is used to protect the operator;
- two independently anchored ropes are used for each person;
- any person within 3 (three) metres of an unguarded edge is adequately secured;
- all operators wear a full body harness;
- Supervisors can communicate with workers;
- where necessary, appropriate personal protective equipment is used, such as helmets, gloves, hearing protection, goggles and masks; and
- barricades and signposts are placed on all access areas below the working area and anchorage locations to exclude and alert the public and tradespeople.



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Guidance on the use of industrial rope access systems is available in *AS/NZS 4488 (series) – Industrial rope access systems*.

3.5.2 Restraint Technique

A restraint technique controls a person's movement by physically preventing the person reaching a position at which there is a risk of a fall. This type of system is less desirable than previous measures detailed such as installation of physical barriers but is preferred over those that arrest a person after they have fallen.

Common GMW fall restraint systems comprise:

- anchorage point(s);
- a static line or restraint line of appropriate strength and length; and
- a harness or restraint belt.

A restraint system shall be set up to comply with the following;

- the user can maintain secure footing (consider the slope of the surface, surface texture, whether it is wet/slippery etc.);
- the work surface is sufficiently strong to support the worker;
- the worker cannot reach an exposed edge;
- shall be installed by a trained and competent person;
- users shall be trained in safe operating requirements and safety equipment.

Guidance in the use of industrial rope access systems is available in *AS/NZS 1891 Industrial fall arrest systems and devices*.

3.5.3 Individual Fall-Arrest Systems

Where a higher level of control is not practicable or possible, a fall-arrest system should be considered. Fall-arrest systems may be used to supplement a higher level of control if the higher levels are not fully effective in preventing a fall on their own.

If any one or more of the following situations apply then a fall-arrest system must be used:

- the user can reach a position where a fall over an edge is possible;
- the user has a restraint line that can be adjusted in length such that a free fall position can be reached;
- There is a danger of the user falling through the surface (i.e. roofing material).

Prior to undertaking work using fall arrest equipment, verify through inspection that there are no obstructions in the potential fall path.

Key requirements regarding the fall-arrest system must be:

- inspected prior to use, with defective and out of service equipment tagged out of service and placed into an area away from serviceable equipment;
- installed so that the maximum distance a person would free fall before the fall-arrest system takes effect is 2 metres;



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- sufficient distance between the work surface and any surface below to enable the system, including the action of any shock absorber to fully deploy;
- to work out whether there is enough distance available, you must as part of a risk assessment take into account:
 - the worker's height;
 - the height and position of the anchorage point;
 - the length of the lanyard;
 - any slack in the horizontal life line;
 - any stretching of the lanyard or horizontal life line when extended by a fall; and
 - the length of the energy absorber when extended by a fall.
- a suitable lanyard fit for the task to help arrest the fall must be attached to the harness. Lanyards must not be used in conjunction with inertia reels as this can result in an excessive amount of free fall prior to the fall being arrested;
- a full body harness must be worn;
- maintain minimum of slack in fall-arrest lanyard;
- safe use of inertia reels;
- use compatible components to minimise risk of 'roll-out' of karabiners and attachment devices.
- under no circumstances is fall arrest equipment to be anchored to scaffolding, handrails or other structures not designed and approved to withstand 15 kN of force for a single person and 21 kN for two people;
- persons using a fall arrest system will not work alone;

Fall-arrest systems must comply with the *AS/NZS 1891 (series) Industrial fall arrest systems and devices* of standards.

3.5.3.1 The Pendulum Effect

Assessment of the work task must be made to manage the potential for workers to strike the ground or structures in the event of a fall resulting from the 'pendulum effect'. The pendulum effect can be avoided by making sure that the inertia reel's anchorage point is more or less perpendicular to the line's position at the perimeter edge. A mobile anchorage is of assistance here.

In some circumstances, it may be necessary to use side guard railing in conjunction with the use of individual fall arrest systems in order to ensure that the pendulum effect is avoided at both the side and leading edges.

3.5.3.2 Anchorage Points

Competent personnel shall be engaged for designing, selecting and/or installing all anchorage points.

Each anchorage point must comply with the requirements in *AS/NZS 1891:4 Industrial fall-arrest systems and devices* – selection, use and maintenance.



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Key requirements regarding anchorage points include:

- they must have a minimum ultimate tensile strength of 15 kN – for use by one person;
- if two people are attached to the same anchorage point then the minimum ultimate tensile strength for the anchorage point is 21 kN;
- the maximum number of persons connected to any one point shall be two;
- tested and approved by a competent person before use. Where welding processes are used in designing anchor points all welds will be 100% magnetic particle tested on installation;
- anchorage points for fall-arrest devices must be where practical, above the head of the worker, to ensure that in the event of a fall the worker will neither swing nor touch the ground;
- each anchorage point must be located so that a lanyard of the system can be attached to it before the person using the system moves into a position where the person could fall;
- each component of the system and its attachment to an anchorage must be inspected by a competent person:
 - after it is installed, but before it is used;
 - at regular intervals; and
 - Immediately after it has been used to arrest a fall.

3.5.3.3 Anchorage Lines or Rails

Anchorage lines or rails are temporary or permanent fall-arrest systems, which can be installed to provide continuous fall protection for persons using ladders or climbing towers.

If anchorage lines or rails are not suitable, then double lanyards can be used. Training in the correct technique must be provided to workers.

Temporary systems must comply with the AS/NZS 1891 series of standards.

3.6 Ladders

3.6.1 Portable Ladders

Due to the potential risk of injury, the use of ladders is the last level in the hierarchy of controls for fall prevention and should only be used where the higher order controls are not practicable. The safe use of portable ladders must include but not limited to the follow:

- extension or single ladders should generally only be used as a means of access to or egress from a work area. They should only be used as a working platform for light work of short duration that can be carried out safely on the ladder;
- must have a load rating of at least 120 kg and be manufactured for industrial use;
- if a person uses either a single or an extension ladder then the person must ensure that the ladder is placed with a slope of 4:1, so that the distance from ladder base to the base of the support is one quarter of the working length of the ladder;
- ladders must be situated on firm footing and secured to prevent movement;



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- where a ladder is used to gain access to a working platform or roof then the top of the ladder will extend beyond the platform or roof a distance of not less than 0.9 metres;
- metal ladders and timber ladders with wire reinforcing will not be used where an electrical hazard exists;
- all ladders will be inspected prior to use and only used if in good condition.
- ladders will be marked for identification purposes. Ladders found without a legible identification mark are to be removed from service until inspected and approved for further use;
- a ladder register must be maintained for each work site and this must include the date of the last inspection;
- materials or tools are not carried while climbing the ladder – use a tool belt or side pouch;
- minimum of 2 people to be present whilst using portable ladders or as defined in the risk assessment.

Guidance on the selection, safe use and care of portable ladders is set out in AS/NZS 1892 Portable ladders series. The manufacturer’s recommendations on safe use must also be followed.

3.6.2 Fixed Ladders

- fixed ladders must be installed in accordance with AS 1657 Fixed Platforms, Walkways, Stairways and Ladders – Design, Construction and Installation;
- fixed ladders with angles exceeding 75 degrees to the horizontal should be fitted (where practical) with a permanent or temporary fall-arrest system (anchorage lines or rails). Further advice can be found (Table H1 below)
- a specifically designed rescue procedure must be developed for use in ladder cage situations.

TABLE H1 (continued)

Angle	Type of access	Fall protection for a fall distance of			Platforms and landings	Other measures
		0 m to 3.5 m	>3.5 m to 6 m	>6 m		
≥70° to 75°	Rung-type ladder (twin-stiles) (Section 7) preferred range 70° to 75°	Three (3) points of contact when climbing	Three (3) points of contact when climbing	Restricted access or locked-off Three (3) points of contact when climbing Landings at not more than 6 m vertical distance A ladder cage or a harness-based fall-arrest system	Maximum 6 m vertical distance between landings Provide change of direction or stagger, or other protection (e.g. barrier or 1.5 m landing length)	Provide warning signs Provide other controls as required, based on site hazards, ladder configuration and frequency of use
≥75° to 90°	Rung-type ladder (twin-stiles) (Section 7)	Three (3) points of contact when climbing	Restricted access or locked-off Three (3) points of contact when climbing Landings at not more than 4.5 m vertical distance or A ladder cage or a harness-based fall-arrest system	Restricted access or locked-off Three (3) points of contact when climbing Landings at not more than 4.5 m vertical distance A ladder cage or a harness-based fall-arrest system	Maximum 4.5 m vertical distance between landings Provide change of direction or stagger, or other protection (e.g. barrier or 1.5 m landing length)	Provide warning signs Provide other controls as required, based on site hazards, ladder configuration and frequency of use
85° to 90°	Rung-type ladder (single-stile) (Section 7)	Restricted access or locked-off Three (3) points of contact when climbing	Restricted access or locked-off Three (3) points of contact when climbing A harness-based fall-arrest system	Restricted access or locked-off Three (3) points of contact when climbing Landings at not more than 6 m vertical distance A harness-based fall-arrest system	Maximum 6 m vertical distance between landings Provide change of direction or stagger, or other protection (e.g. barrier or 1.5 m landing length)	Provide warning signs Provide other controls as required, based on site hazards, ladder configuration and frequency of use



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3.6.2.1 Fixed Ladder Maintenance

Ladders must be regularly inspected as per GMW Ladder inspection schedule by a competent person. If a portable, ladder is deemed to be defective or unsafe it is to be tagged out of service and placed in a separate storage area away from serviceable equipment.

If a fixed ladder is deemed unserviceable then it is to be tagged out and secured so as that no person/s can access that ladder.

3.6.3 Working on ladders above and below 2 metres

3.6.3.1 Above 2 metres

Whilst working if there is a risk of a person falling more than 2 metres, by law you must:

- follow the prescribed hierarchy of control when selecting fall control measures;
- prepare and follow a safe work method statement (SWMS) as this work is defined as high risk construction work.

3.6.3.2 2 metres and below

Although you are not required to apply the hierarchy of control or prepare a SWMS* for work at heights of 2 metres or less, such falls may still result in serious or fatal injuries.

By law, employers must, so far as is reasonably practicable, provide and maintain for employees a working environment that is safe and without risks to health. This includes identifying hazards and implementing appropriate risk control measures.

The hierarchy of control may be of assistance to help ensure any fall control selected is the highest order of control that is reasonably practicable.

* A SWMS may be required for work on ladders at heights of 2 metres or below if other high risk construction work is performed on ladders or if there are adjacent hazards (eg working on or near live electrical installations, working near mobile plant or over water).

3.6.4 Using ladders safely

If no higher order means of control is reasonably practicable and you intend to use a ladder that is fit for the purpose, the following information outlines the necessary steps to ensure a ladder is used safely.

3.6.4.1 Training

Provide employees with adequate information and training to use ladders safely. Employees should only use a ladder if they:

- are trained and instructed in how to set up, use and maintain a ladder;
- are adequately supervised to ensure safe practices are followed (especially inexperienced and young workers).



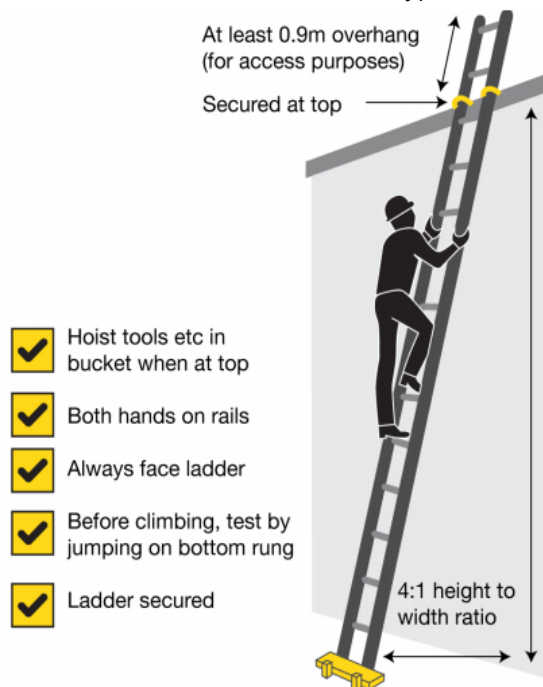
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3.6.4.2 Setting up a ladder safely

Before setting up a ladder, check for visible damage or defects. A ladder must be used on a solid and stable surface to prevent it from slipping or toppling over. Slipping or toppling can be prevented by:

- ensuring the ladder has non-slip feet;
- placing single and extension ladders at a slope of four to one, and setting up stepladders in the fully opened position with the spreaders locked;
- Securing single and extension ladders at both the top and bottom (stepladders may require a second person to 'foot' the ladder for added stability).



Example of correctly set-up straight ladder

- setting up the ladder in places where there is no chance of it being hit or knocked;
- making sure the area surrounding the base of the ladder is clear of any hazards.

Never set-up a ladder on scaffolding, a EWP or stacked materials to gain additional height.



Some effective ways of securing the top and bottom rungs of straight ladders



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3.6.4.3 Safe use of ladders

When using a ladder:

- always maintain 'three points of contact' while going up, down or working from a ladder;
- when going up or down, always have two feet and one hand, or one foot and two hands on the ladder;
- when working from a ladder, have two feet and one other point of contact with the ladder, such as a hand or thighs leaning against the ladder;
- Always have two hands free when climbing up and down (eg a tool belt can be used to free hands);
- do not over-reach. Over-reaching can lead to the ladder tipping sideways.
- work with your belt buckle within the ladder stiles;
- do not use tools that require a high degree of leverage, such as stillsons or pinch bars (may result in overbalancing or falling);
- do not use equipment or tools primarily designed to be used with two hands (eg hammer drills, circular saws, nail guns);
- make sure that no one works underneath the ladder;
- do not allow anyone else to be on the ladder at the same time;
- face the ladder when going up or down or when working from it;
- always stand on a rung that is at least 900mm from the top of a single or extension ladder and on or below the second tread below the top plate of any stepladder;
- never straddle a ladder.

A second person or a physical barrier (eg witches hats) may be necessary to ensure the ladder is not knocked by passing traffic or pedestrians. A second person may be required for assisting with the raising or lowering of plant or materials.



Never straddle or stand above the second tread below the top plate.



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3.6.4.4 Ladder maintenance

Ladders should be regularly inspected and maintained by a competent person to make sure they are safe to use. Ladders with any of the following faults should be replaced or repaired before use:

- rungs, steps, treads or top plates that are damaged, missing or loose;
- stiles/stringers that are damaged (warped, bent, crushed, cracked welds, damaged feet);
- tie rods that are missing, broken or loose;
- ropes, braces or brackets that are missing, broken or worn;
- timber ladders covered with opaque paint or other treatment that could disguise a fault in the timber.

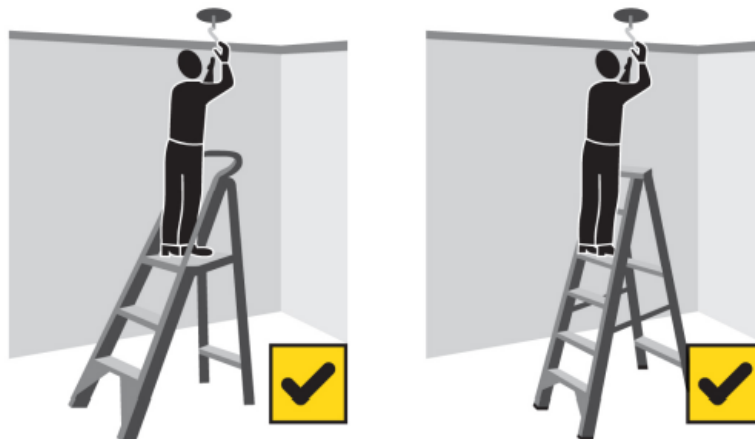
Ladder repairs should be done in accordance with the manufacturer's recommendations.

Ladders should not be painted because this could obscure essential safety information.

3.6.4.5 Acceptable uses

Provided a ladder is fit for the purpose, appropriate for the duration of the task and set up in the correct manner, it may be appropriate for light duty and short duration tasks where higher order controls are not reasonably practicable. You could use a ladder:

- as a means of access (eg getting to and from scaffolding or the roof of a small building or structure);
- when installing lightweight items or fixtures (eg fitting off a light fixture on a 3m high ceiling);
- when inspecting, assessing or undertaking minor maintenance;
- on items or fixtures (eg servicing air-conditioning units, touching up paint work defects);
- while using lightweight, low torque or clutched power tools that are designed to be operated single handed (eg cordless drill)



Platform stepladder and a ladder used for work near a ceiling



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3.6.5 Purchasing ladders

Before purchasing a ladder, consult with employees, service personnel and any health and safety representatives (HSRs), and think about the task it will be used for to ensure you choose the right ladder.

When purchasing or hiring ladders for use in the construction industry the ladder should:

- comply with AS/NZS 1892 – Portable Ladders;
- have a minimum 120kg safe working load rating;
- be marked 'industrial grade' and of robust construction;
- be a suitable type (eg non-conductive for electrical work);
- be a suitable size for the task.

Note: Trestle ladders do not conform to the requirements of AS/NZS 1892 and should never be used as a ladder.

3.6.6 Reducing the use of ladders by:

- using long-handled tools to work from the ground. Care must be taken to ensure this does not introduce new risks such as hazardous manual handling;
- providing all employees with alternatives to ladders on site, such as modular scaffolding systems or order pickers;
- introducing a ladder 'permit to use' system on sites to encourage employees to reduce unnecessary use of ladders where safer alternatives are reasonably practicable.

3.6.7 Increasing safety when using ladders by:

- backfilling around slabs and covering the earth with levelled crushed rock to provide a stable foundation to work off;
- utilising ready-to-fit systems to quickly secure the top of a straight or extension ladder;
- providing extended height railing around balcony zones and exposed edges.

3.7 PPE and Attachment Hardware Requirements

Requirements and specifications for attachment hardware, and for attaching lanyards to harnesses must meet the following requirements:

- comply with the AS/NZS 1891 (series) Industrial fall arrest systems and devices of standards.
- rings must be secured so that:
 - Load-bearing webbing passes through the ring, and in the case of a D-ring, it is secured on the straight bar of the ring; and
 - The assembly is capable of taking the full load of an arrested fall.
- snap hooks and karabiners must be self-closing and self- or manual locking;
- the springs will be loaded so that when the latches are closed the springs rest in position, and are constrained from any movement until deliberate pressure is applied to engage or release the latch;



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- in order to reduce the probability of involuntary opening, snap hooks and karabiners will be capable of being opened by at least two consecutive deliberate actions;
- attachment hardware must be designed to withstand a load of 15 KN without permanent distortion;
- when making any attachment to a point on a harness which cannot be seen by the wearer, the attachment must be made before putting the harness on or alternatively should be made or checked for security by a second person;
- an approved safety harness for use is a full body harness with a single lifeline at the top dorsal position. The harness will routinely inspected and carry a current Australian Standard tag as per AS 1891.4;
- all harnesses and fall prevention equipment must be used and maintained in accordance with the manufacturer’s instructions

3.7.1 Fall-Arrest Equipment Inspection Requirements

Every approved Safety Harness, Personal and Temporary Restraint Lanyard, Temporary Safety line, Anchorage Point or other item of fall prevention equipment will be inspected and tagged by a competent person.

Table 2 provides a summary of Inspection Requirements for fall-arrest equipment (for further details refer to AS 1891.4).

Table 2: Fall-arrest Equipment Inspection Summary

Pre-use inspection by equipment user
Fall arrest devices - external check only Harnesses: <ul style="list-style-type: none"> • Buckles – look for cracks, bent buckles & smooth operation; • Webbing – look for frayed, cracked, burnt, contaminated or otherwise damaged webbing (loose stitching for example); • D-rings – look for cracks, bent D-rings. Lanyards: <ul style="list-style-type: none"> • Snap hooks – look for cracks, bent buckles, double action; • Rope or Webbing – look for frayed, burnt, or otherwise damaged rope / webbing or evidence of partial deployment. Inertia reels: <ul style="list-style-type: none"> • Snap hooks – look for cracks, bent buckles, double action; • Fully extract the webbing or wire and check for damage; • Check for anchorage of the webbing or wire to the drum when it is fully extended; • Secure locking and holding of locking mechanism when the rope is given a sharp tug; • Free running through the anchorage with no tendency to stick or bind.



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Pre-use inspection by equipment user
3 monthly inspections by a competent person
Fall arrest devices - external check only.
6 monthly inspections by Height Safety equipment inspector
<ul style="list-style-type: none"> • Belts; • Harnesses; • Lanyard assemblies; and • Associated personal equipment
12 month inspection/service by Height Safety equipment inspector
<ul style="list-style-type: none"> • Permanently installed anchorage; • Fall-arrest devices – full service including dismantling where indicated; • Fixed Horizontal lifelines and rails, including integral components and permanently installed mobile attachment devices.

Equipment deemed fit for use will be fitted with a coloured tag by the competent inspector. The colour of the tag used will be based on the inspection period as detailed in Table 3 below.

Table 3: Working at heights equipment inspection colour codes:

Quarter	Period	Colour
Q1	January – March	Red
Q2	April – June	Green
Q3	July – September	Blue
Q4	October - December	Yellow
<i>A transition period of ± 2 weeks is permitted between inspection periods</i>		

Harnesses, lanyards and associated equipment shall be removed from service and tagged out under the following conditions:

- after 10 years from the manufacture date in accordance with the manufacturer’s instructions;
- if a current coloured tag is not fitted to the item;
- there is no legible serial number; and or
- if it is defective or has been used in a fall arrest situation to prevent it being used until it is destroyed - arrange a replacement unit through your supervisor.

3.8 Exclusion Zones

Exclusion zones or ‘no go’ areas, are required to be established where people may be exposed to hazards from overhead work, or hazardous areas (such as unprotected edges).

GMW will develop and implement procedures to ensure that the risk of objects falling onto or hitting workers and/or people in adjoining areas is as low as reasonably practicable. Adjoining areas may



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include public footpaths, roads, yards of nearby dwellings, or any other building beside a workplace.

Where overhead work is being performed and there is a risk of equipment, materials and tools falling from the elevated position, an appropriate drop zone must be established at exposed lower levels. When establishing a drop zone, the following must be considered:

- location of the overhead work;
- height of the work above the lower level;
- the possible deflection of falling objects by structures, pipes or equipment in the area; and
- the number of levels to barricade.

Barricades, barriers and signage must be used to demarcate drop zones and hazardous areas. They must be highly visible and securely fixed to prevent displacement. Hazard tape is not acceptable as a visual warning device where the potential to fall exists, in this case Para-webbing or bunting positioned, secured and adequately supported at least 2 metres from the edge of the hazard may be utilised.

Tool lanyards must be used where possible to further protect personnel from objects dropped / dislodged by personnel working from heights.

3.9 Purchasing and Hire of Plant and Equipment

Purchased and rented equipment used to manage the risk of falls is to be inspected. When renting equipment the following is required to be supplied by the hire company:

- recent Inspection paper works (this includes testing of height limiters if they have these);
- maintenance schedule and history;
- pre-start check lists;
- they will also have a colour coded tag as per the table below.

If purchasing equipment, purchaser is to ensure that it is manufactured to Australian Standards, and that the item is placed into Maximo and a maintenance schedule is assigned to the piece of equipment.

Working at heights equipment inspection colour codes:

Quarter	Period	Colour
Q1	January – March	Red
Q2	April – June	Green
Q3	July – September	Blue
Q4	October - December	Yellow
<i>A transition period of ± 2 weeks is permitted between inspection periods</i>		



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3.10 Emergency Response Preparedness & Planning

Site plans for the emergency response, first aid and rescue of personnel who are at risk of a fall must be in place.

Rescue plans for personnel engaged in the following tasks must be in place prior to commencing the task:

- working from temporary work platforms, and or
- using fall-restraint or fall-arrest equipment.

The following aspects must be considered when developing emergency procedures for falls:

- location of the work area;
- access and space for assembling rescue equipment;
- communications;
- rescue equipment;
- capabilities of rescuers (competent in use of rescue equipment: based on risk, rehearsal of rescue scenarios may be required);
- first aid; and
- location of emergency services.

Emergency response equipment must be:

- consistent with the requirements of the rescue plan;
- readily available;
- maintained and used in accordance with manufacturer's instructions; and
- discussed with and understood by all work members involved in the working at heights task. These emergency plans must be attached to the Work at Heights Permit.

Suspension Intolerance: Measures must be taken to prevent suspension intolerance in the event of a worker falling and being suspended in a harness. Required controls include:

- workers never work alone when using a harness as fall protection;
- the time a worker spends in suspension after a fall is limited to less than five minutes (when a suspension is longer than five minutes, foothold straps or a way of placing weight on the legs must be provided);
- workers are trained to do the following when they are hanging in their harness after a fall:
 - move their legs in the harness and push against any footholds, where these movements are possible. In some instances, the harness design and/or any injuries received may prevent this movement;
 - move their legs as high as possible and the head as horizontal as possible, where these movements are possible.

3.11 Competency



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Personnel who conduct work at heights must be trained in the task or tasks applicable to their role. GMW Employees working at heights of 2 metres or above are required to be externally trained to meet the requirements of Working Safely at Heights (RIIOHS204A). This includes those that are going as passengers to complete inspections.

The competencies (or recognised equivalents) listed in Table 4 are applicable to personnel involved in working at heights.

Refresher training for all personnel is required and intervals must not exceed two years.

For all works below 2 metres, it will be based on the risk management approach. A risk assessment is to be conducted identifying the hazards and the risk controls to be implemented.

When considering the use of Ladders, portable steps or other devices to conduct any works at height must consider the minimum requirements of Ladder safety as detailed below.

Table 4: Training and competency requirements

Task	Competency or licence code
Conduct Work at Heights	Managing Risk of Falls SOP
	RIIOHS402A – Work Safely at Heights
	Permit to Work Overview
Supervise Work at Heights	Managing Risk of Falls SOP
	Permit to Work Overview
Elevated Work Platform Operation	WP- Boom type elevating work platform (>11meter boom length) High risk work licence
	Managing Risk of Falls SOP
	RIIOHS402A – Work Safely at Heights
	Permit to Work Overview
Height Safety Equipment Inspector	RIIOHS402A – Work Safely at Heights
Dogging	DG – Dogging High Risk Work license
Basic rigger	RB – Basic rigger High Risk Work license
Intermediate Rigging	RI – Intermediate Rigging High Risk Work license
Advanced rigger	RA – Advanced rigger High Risk Work license
Scaffolding Basic	SB – Scaffolding Basic High Risk Work license
Scaffolding Intermediate	SI – Scaffolding Intermediate High Risk Work license
Scaffolding Advanced	SA – Scaffolding Advanced High Risk Work license

3.12 Records



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Applicable documentation and records related to the management of falls must be kept in the Electronic Document Management System (Objective) or the Learning Management System as applicable.

This requirement applies to the following documents, where applicable:

- Working at Height Permits prepared and verified by authorised persons;;
- associated safety documents, permits, risk assessments, SWMS;
- Working at Heights training and competency records;
- registers, inspection data and maintenance records, including NATA certificates for all working at heights safety equipment and; or
- inspection and/or audit results and a record of the subsequent actions required.

4. Responsibilities

Responsibility	Who
Ownership and Approval	General Manager People Culture and Safety
Implementation	Manager, Safety Wellbeing and Environment

4.1 Executive and Senior Leadership Team

Executive and Senior Leadership Team is to:

- Executive and Senior Management (Managing Director, Executive and Senior Leadership teams) are responsible for the following:
 - overseeing and ensuring the implementation of the requirements of this SOP and related procedures within their respective functional areas; and
 - ensuring adequate resources are available to enable the effective implementation of this SOP.

4.2 Supervisors and Managers

Managers and nominated Supervisors ensure that:

Managers in all operational areas and GMW worksites shall ensure that the risks of falls are minimised through the following controls:

- ensuring that the requirements of this SOP and related procedures are followed in all areas of responsibility;
- communicating the requirements of this SOP to their respective areas of responsibility;
- manage the requirements for maintenance of equipment relating to managing the risk of falls e.g. harnesses;
- establishing a training and competency program in accordance with this SOP;



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- ensuring that all required work area / equipment inspections are completed thoroughly by suitably trained and competent persons, in a timely manner;
- ensuring records and registers of equipment and inspections are held on site and within the Learning Management System;
- providing suitable equipment and tools for managing the risks of falls to GMW personnel, contractors and visitors;
- providing employees, contractors and visitors with fit for purpose personal protective equipment;
- scheduling and coordinating the inspection and maintenance of equipment related to managing falls e.g. safety harnesses, anchorage points.

4.2.1 Supervisors / Team Leaders

Supervisors, Team Leaders and Person In Control of Worksite in all operational areas and GMW worksites are responsible for ensuring that the following is undertaken to minimise the risk of falls:

- identify through the risk assessment process tasks where there is a potential risk of falls can occur; This must occur through consultation with the workers performing the tasks;
- addressing the risks associated with falls from heights in site inductions;
- ensuring all workers are familiarised with the relevant parts of this SOP;
- ensuring that emergency rescue plans are in place for all tasks where there is a risk of a fall;
- ensuring the tasks address by this SOP are carried out under competent supervision;
- documenting and retaining records of equipment inspections both on site and within Maximo;
- ensuring only permit trained and competent people carry out tasks where there is a risk of a fall;
- educating workers in the work at heights permit system and the risk of falls;
- ensuring records and registers of equipment and inspections are held on site and within Maximo.

4.3 Workers

Workers must ensure that they:

- follow the requirements of this SOP in their respective work areas;
- report all onsite hazards in IRIS;
- are active in the identification, reporting and management of fall hazards and related controls in their work area(s);
- carry with them evidence that they have completed the appropriate working at heights training when involved in work at heights tasks; and
- seek advice from supervisors regarding the context of risk controls being implemented for the workplace task.

4.4 Contractors

Contractors must ensure that:

- at all times when performing work on a GMW site or for/on behalf of GMW, contractors (unless Principal Contractor) must meet and comply with GMW management requirements detailed in this and related procedures. This includes:



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- providing adequate resources to ensure implementation of the requirements of this SOP in a timely and effective manner in all areas where work is undertaken;
- complying with this SOP and all relevant legislation, codes of practice, standards and licensing requirements that apply to their respective scope of work; and
- reporting all incidents to the GMW Project Manager.

4.5 GMW Safety Team

GMW Safety Team ensure that:

- the establishment, review and continual improvement of management systems, arrangements and procedures related to managing the risk of falls;
- the provision of advice to assist in the active management and resolution of identified risks of falls in accordance with GMW SMS and relevant legislative requirements.

4.6 Visitors

Visitors must ensure that:

- visitors must complete a visitors induction and be accompanied at all times when on GMW sites. Whilst on a GMW site, all visitors shall ensure that they follow the site-specific risk of falls management requirements.

5. Definitions

Administrative Controls: Systems of work or work procedures which eliminate or reduce the risk of a fall.

Anchorage: A secure point for attaching a lanyard, lifeline or other component of a travel restraint system or fall-arrest system. Anchorages require specific load and impact capacities for their intended use.

Attachment Hardware: Any ring, hook, karabiner, tube nut connector or other connecting device located in such a position that it must sustain by itself the full loading of a fall-arrest.

Competent person: A competent person is defined in regulation 5 to mean a person who has acquired through training, qualification or experience, the knowledge and skills to carry out the task.

Edge Protection System: Edge protection system complying with AS 1657. Includes, guard railing of between 900 mm and 1100 mm high and a toe-board of not less than 100 mm high fitted at sides, edges and openings except at points of access from a stairway or ladder. There shall be no opening of more than 450 mm between the guard railing (top rail and mid rail) and toe board and no more than 10 mm between the toe-board and platform deck.



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Fall-Arrest System: An assembly of interconnected components comprising a harness connected to an anchorage point or anchorage system either directly or by means of a lanyard, lanyard assembly or pole strap, and whose purpose is to arrest the fall of a person.

Fall Hazard: A source (i.e. task, object or location) that has the potential to result in a fall injury.

Fall Injury Prevention System: Equipment, material, or a combination of equipment and material that is designed to arrest the fall of a person.

Free Fall: A fall in which the distance a person using a fall-arrest harness system falls vertically before the system starts to take loading is more than 600mm (for details on how to calculate free fall refer to AS1891.4).

Full Body Harness: An assembly of interconnected shoulder and leg straps, with or without a body belt, designed for attachment to a lanyard, pole strap or fall-arrest device for fall-arrest or work positioning purposes.

Inclement Weather: Prevailing or changing weather conditions that may present a risk to the health and safety of personnel, these conditions may be in the form of any of the following; excessive heat, cold, rain, hail, ice, snow, wind or lightning.

Ladder Register: this is a register of all portable ladders held on a site which includes the dates of their last inspection.

Lanyard: A line used, usually as part of a lanyard assembly, to connect a harness to an anchor point or static line.

Lanyard Assembly: Consists of a lanyard and Personal Energy Absorber. The lanyard assembly must be as short as practicable and the slack working length no more than 2 metres.

Limited Free Fall: A fall in which the distance a person using a fall-arrest harness system falls vertically before the system starts to take loading is not more than 600mm.

Manager: The Manager who has direct responsibility for the activity being performed or the area the activity is occurring in.

Passive Fall Prevention Device: Material or equipment, or a combination of material and equipment, that is designed for the purpose of preventing a fall, and that, after initial installation, does not require any ongoing adjustment, alteration or operation by any person to ensure the integrity of the device to perform its function.



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Pendulum Effect: If a person using an individual fall-arrest system falls, the system may act as a pendulum, and in some situations the user may hit the ground (called 'swing down') or swing back onto the building or structure (called 'swing back').

Personal Energy Absorber: A device or component used in conjunction with a harness which by design reduces the deceleration force imposed by a suddenly arrested fall.

PICOW: acronym used for Person In Control of Worksite

Risk of a fall: A circumstance that exposes a worker while at work or other person while at or in the vicinity of a workplace, to a risk of a fall that is reasonably likely to cause injury to the worker or other person. This includes circumstances in which the worker or other person is:

- In or on plant or a structure that is at an elevated level;
- In or on plant that is being used to gain access to an elevated level;
- In the vicinity of an opening through which a person could fall;
- In the vicinity of an edge over which a person could fall;
- On or in the vicinity of a surface through which a person could fall; and
- On or near the vicinity of a slippery, sloping or unstable surface.
-

Solid Construction: An area that has a surface capable of supporting any people and material that may be on it and has barriers around its perimeter and any open penetrations to prevent a fall from the area. It must have an even and readily negotiable gradient and a safe means of access and egress.

SMS: acronym used for Safety Management System.

Supervisor: Term used for any GMW employee who acts or is appointed as a Supervisor, Coordinator or Team Leader within GMW.

Suspension Intolerance: A natural human reaction to being upright and immobile. Blood pools in the legs potentially leading to unconsciousness. If the condition is allowed to develop unchecked, it could be fatal.

Unprotected Edge: Any edge without a handrail / parapet or with a handrail / parapet of less than 900mm in height, at which a fall hazard is present and/or where a gap, void or space of more than 300mm exists and which is not provided with a barrier to prevent a fall.

OHS: acronym used for Occupational health and Safety.

Work Positioning System: Equipment, other than a temporary work platform that enables a person to be positioned and safely supported at a work location for the duration of the task being undertaken at height. These systems prevent a worker falling over an unprotected edge.

Worker: Employees, contractors, subcontractors, outworkers, apprentices, consultants and trainees, work experience students and volunteers.



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6. Document history

Doc #	Date approved	Approved by	Approval #
A4003981	31 March 2021	General Manager People, Culture and Safety	

7. Associated documents

Document name	#
Occupational Health and Safety Act – 2004 (Victoria)	
Occupational Health and Safety Regulations – 2017 (Victoria)	
Compliance Code – Prevention of Falls in General Construction – WorkSafe Victoria	
AS/NZS 1576 - Scaffolding	
AS/NZS 4576 - Guidelines for scaffolding	
AS/NZS 1891 - Industrial fall-arrest systems and devices	
AS/NZS 4994 - Temporary Edge Protection series for further guidance	
AS/NZS 4389 - Safety Mesh	
AS/NZS 4488 - Industrial rope access systems	
AS/NZS 1892 - Portable ladders series	
AS 1657 - Fixed platforms, walkways, stairways and ladders	
Working at Heights Permit	A4083776
Working at Heights Rescue Plan	A4083774



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8. Appendices

Appendix A - Procedural Overview / Toolbox

This Appendix is designed to provide an overview of the requirements of this procedure – it is to be used as an aid/refresher to the procedure, and is not to be used in isolation without prior training of the procedure. Section 4 – Responsibilities has not been included within this Appendix (Please see Procedure for respective details)

It outlines the requirements to prevent the risk of falls for tasks that are done above 2 meters.

- All tasks at 2 meters and below must apply the Ladder Safety principals.

Sect.	Requirement
3.1 Risk Assess.	<ul style="list-style-type: none"> • A risk assessment must be conducted prior to undertaking all working at heights activities and documented
3.2 Permit	<ul style="list-style-type: none"> • Ensure a Working at Heights Permit has been completed and approved before commencement of any work
3.3 Hierarchy of Controls (3.3 to 3.6.2)	<ul style="list-style-type: none"> • Hierarchy of controls for managing the risks of falls shall be followed, with preference given to higher order controls whenever reasonably practicable <ul style="list-style-type: none"> - Section 3.3.1 Work On the Ground - Section 3.3.2 Work on a Solid Construction - Section 3.4 Temporary Work Platforms <ul style="list-style-type: none"> ▪ Section 3.4.1 Scaffolds ▪ Section 3.4.2 Elevating work platform (EWP) ▪ Section 3.4.3 Lift boxes/Crane Workboxes ▪ Section 3.4.4 Perimeter Guard Rails/Edge Protection ▪ Section 3.4.5 Safety Mesh - Section 3.5 Work Positioning Systems <ul style="list-style-type: none"> ▪ Section 3.5.1 Industrial Rope Access Systems ▪ Section 3.5.2 Restraint Technique ▪ Section 3.5.3 Individual Fall-Arrest Systems - Section 3.6 Ladders <ul style="list-style-type: none"> - Section 3.6.1 Portable Ladders - Section 3.6.2 Fixed Ladders
3.6.3 Working on ladders above and below 2 metres	<ul style="list-style-type: none"> • Whilst working if there is a risk of a person falling more than 2 metres, by law you must: <ul style="list-style-type: none"> - Follow the prescribed hierarchy of control when selecting fall control measures; - Prepare and follow a safe work method statement (SWMS) as this work is defined as high risk construction work • Although you are not required to apply the hierarchy of control or prepare a SWMS for work at heights of 2 metres or less, such falls may still result in serious or fatal injuries. <ul style="list-style-type: none"> - By law, employers must, so far as is reasonably practicable, provide and maintain for employees a working environment that is safe and without risks to health - This includes identifying hazards and implementing appropriate risk control measures
3.6.4 Using ladders safely	<ul style="list-style-type: none"> • If no higher order means of control is reasonably practicable and you intend to use a ladder that is fit for the purpose • Employees are trained in the safe set up, use, and maintenance requirements of ladders (both fixed and portable)



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Sect.	Requirement
3.6.4 Using ladders safely	<ul style="list-style-type: none"> If no higher order means of control is reasonably practicable and you intend to use a ladder that is fit for the purpose <ul style="list-style-type: none"> Employees are trained in the safe set up, use, and maintenance requirements of ladders (both fixed and portable)
3.6.5 Purchasing ladders	<ul style="list-style-type: none"> When purchasing or hiring ladders for use in the construction industry the ladder should: <ul style="list-style-type: none"> Comply with AS/NZS 1892 – Portable Ladders Have a minimum 120kg safe working load rating Be marked 'industrial grade' and of robust construction Be a suitable type (e.g. non-conductive for electrical work) Be a suitable size for the task
3.7 PPE and Attachment Hardware	<ul style="list-style-type: none"> Requirements and specifications for attachment hardware, and for attaching lanyards to harnesses must meet the following requirements: <ul style="list-style-type: none"> Comply with the AS/NZS 1891 (series) Industrial fall arrest systems and devices of standards Section 3.7.1 Fall-Arrest Equipment Inspection Requirements
3.8 Exclusion Zones	<ul style="list-style-type: none"> Exclusion zones or 'no go' areas, are required to be established where people may be exposed to hazards from overhead work, or hazardous areas (such as unprotected edges)
3.9 Purchasing and Hire of Plant and Equipment	<ul style="list-style-type: none"> Purchased and rented equipment used to manage the risk of falls is to be inspected When renting equipment the following is required to be supplied by the hire company: <ul style="list-style-type: none"> Recent Inspection paper works (this includes testing of height limiters if they have these) Maintenance schedule and history Pre-start check lists They will also have a colour coded tag as per the table If purchasing equipment, purchaser is to ensure that it is manufactured to Australian Standards, and that the item is placed into Maximo and a maintenance schedule is assigned to the piece of equipment
3.10 Emergency Response Preparedness & Planning	<ul style="list-style-type: none"> Site plans for the emergency response, first aid and rescue of personnel who are at risk of a fall must be in place Rescue plans for personnel engaged in the following tasks must be in place prior to commencing the task: <ul style="list-style-type: none"> Working from temporary work platforms, and or Using fall-restraint or fall-arrest equipment Measures must be taken to prevent suspension intolerance in the event of a worker falling and being suspended in a harness
3.11 Competency	<ul style="list-style-type: none"> GMW Employees working at heights of 2 metres or above are required to be externally trained to meet the requirements of Working Safely at Heights (RIIOHS204A) <ul style="list-style-type: none"> This includes those that are going as passengers to complete inspections Refresher training for all personnel is required and intervals must not exceed two years
3.12 Records	<ul style="list-style-type: none"> Applicable documentation and records related to the management of falls must be kept in the Electronic Document Management System (Objective) or the Learning Management System as applicable

