
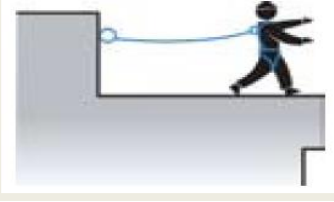


Work at Height | Mirvac Minimum Requirements Reference Document

1. Purpose & Scope

This Mirvac Minimum Requirement Reference Document provides details and information in relation to managing risks associated with work at height in addition to the information contained in the associated [Work at Height Mirvac Minimum Requirements](#). This MMR Reference Document is to be used as an instructional tool for Mirvac employees and should be read in conjunction with the [Work at Height Mirvac Minimum Requirements](#).

2. Definitions

Term	Definition
Catch platform	A temporary platform located below a work area to catch a worker in the event of a fall
Competent person	A person who has acquired, through training, qualifications or experience and has been assessed to have the knowledge and skill to do the task in a safe way
EWP	Mobile work platforms that include scissor lifts, cherry pickers, boom lifts and travel towers
Fall arrest	<p>A system to safely stop a person falling an uncontrolled distance and reduce the impact of the fall</p> <p>Fall arrest equipment is designed to prevent or reduce the severity of an injury to a person if a fall does occur, for example safety harnesses consisting of a lanyard assembly containing a device to absorb the energy, attached to a secure anchorage having a capacity of at least 15kN for one person or 21kN for two persons or industrial safety nets</p> 
Fall prevention	The design and use of system to manage and minimise the risk of a fall hazard
Fall protection	Processes and equipment to manage and minimise injury should a fall occur
Fall restraint	<p>A system that consists of a harness, attached to one or more lanyards, each of which is attached to a static line or anchorage point. It restricts the travelling range of a person wearing the harness so they cannot fall off the edge of a surface or through a surface.</p> 
Inertia reel	Also known as a self-retracting lanyard or fall-arrest block, is a mechanical device that arrests a fall by locking onto a drop line and at the same time allows freedom of movement



Term	Definition
Lanyard	A line used as part of a lanyard assembly to connect a harness to an anchorage point or a static line in situations where there is risk of a fall
Suspension trauma	Suspension trauma is a condition (following a fall in a safety harness), whereby a person suspended in the harness in a substantially upright position may experience blood pooling in the legs. Unconsciousness can occur and deaths have been recorded; for this reason, a retrieval plan must be in place whenever a harness is to be used for fall arrest protection
Three points of contact	Where three of four points of contact are maintained at all times when a person is moving where there is a fall potential e.g. when using a ladder or accessing / leaving mobile equipment – two hands and one foot, or both feet and one hand
Workbox	A purpose-built personnel-carrying device, designed to be suspended from a crane, to provide a working area for persons conveyed by and working from the box
Working at height	Work where a person may fall from one level to another that is likely to result in injury
4 to 1 rule	For every 4 units up the base of a straight or extension ladder is 1 unit out

3. Work at Height MMR Reference Document

This MMR Reference Document accompanies [Work at Height Mirvac Minimum Requirements](#) document and provides more details on Mirvac specific requirements and some requirements found in legislation, Standards and codes.

3.1. Fall Prevention and Prevention of Dropped Objects

Solid or permanent construction must have a safe means for people to get to, from and move around the work area, such as permanently installed platforms, ramps, stairways and fixed ladders that comply with AS 1657 *Fixed platforms, walkways, stairways and ladders – Design, construction and installation*. Where this is not practicable a temporary work platform must be used. 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 a task. Temporary work platforms include scaffolds, elevating work platforms, workboxes, building maintenance units, portable or mobile fabricated platforms or any other platform that provides a working area and is designed to prevent a fall. Consideration must be given to designing out the ability for objects to fall and protecting people below from dropped objects.

a) Design and Installation

Fall prevention strategies must be included in the risk assessment process and installations must comply with appropriate Australian or Australian / New Zealand Standards.

Elimination of the requirement to work at height is the first consideration and if this is not reasonably practical planning should follow the hierarchy of control.

Edge Protection

Edges to structures under construction, demolition, maintenance or refurbishment, including any demolition or construction floor, from which a person or material could fall 2m or greater (or 1.8m in Victoria), must have effective edge protection, scaffolding and screens or mesh guards.

Guard rails must comply with AS 4994.1 *Temporary edge protection - Part 1: General requirements* and be proprietary type systems. Fixing of guard rails shall be by mechanical means (strapping or bolting etc. not tie wire, tape or cable ties).



Where guard rails / mesh guards are utilised for edge protection and they are not full height (i.e. of the floor to ceiling height) there shall be a 3m exclusion zone where a ladder, step or trestles shall not be used and work within this zone. Where the physical layout does not allow this a risk assessment must be completed to determine how a fall over the edge will be prevented. Where safety mesh is used it must comply with the requirements of AS/NZS 4389

For structures under construction, access to areas where poor access and / or lack of edge protection is an identified hazard the [Unprotected Edge Access Permit](#) must be completed prior to any work.

For structures where construction has been completed and access to roof areas is required, the [Roof Access Permit](#) must be completed prior to any roof access.

Scaffolding

All scaffolding must be erected and maintained in accordance with AS/NZS 1576.1:2010 *Scaffolding general requirements*, AS 1576.4:2013 *Scaffolding Suspended scaffolding* and AS 4576:1995 *Guidelines for scaffolding*.

Scaffolds must be erected, altered and dismantled by a competent person. If the scaffold is over 4m it must be erected and signed off by a scaffolder qualified in the specific type of scaffold structure as per Table 2 below.

A Scaffold Handover Inspection Certificate, consistent with appropriate legislative requirements and Codes of Practice, must also be completed and provided to Mirvac prior to use. The certificate must include the loading capacity of the scaffold and clearly state that the design and erection of the scaffold complies with AS1576 and AS4576. It must be retained at the worksite for audit verification purposes.

Where the scaffolding exceeds 4m in height, scaffold erection and configuration drawings detailed by an engineer shall be provided to Mirvac as well as the Scaffold Handover Inspection Certificate. The drawing must identify compass points and other descriptions, to assist in the correlation of scaffold hand-over/inspection certificates to the relevant section of scaffold on the drawing.

The Scafftag Blue Book which includes the handover certificate and inspection checklist, and a colour coded Scafftag card system shall be used on all scaffolding.

All scaffolds must be inspected:

- Daily prior to use to ensure the scaffold has not been altered or damaged;
- Following adverse weather conditions or storm events;
- After the scaffold is altered or repaired i.e. where modifications take place; and
- Formally at maximum 30-day intervals by a competent person.

Unauthorised access is prevented on scaffolding that is incomplete and left unattended (for example, by attaching danger tags and warning signs at appropriate locations).

Where work is performed using a mobile scaffold, it shall:

- remain level and plumb at all times;
- be kept well clear of powerlines, open floor edges and penetrations;
- not be accessed until the castors are locked to prevent movement;
- never moved while anyone is on it;
- only be accessed using internal ladders.

Perimeter Protection

Where work is to be undertaken near an edge, perimeter protection must be installed. This can include screens, fences, hoardings, nets or other physical barriers. For best practice consideration should be given

to full height perimeter protection. All perimeters must have kickboards and a mesh screen where handrails are used, to prevent materials blowing or rolling off. Where any work is conducted outside of perimeter protection which could result in the fall of materials, lanyards should be used to tie-off tools and equipment and measures put in place to protect people below.



Figure 1: Debris perimeter protection



Figure 2: Hand tool secured to wrist by a lanyard

Where mobile equipment (e.g. EWPs) are used in the area, precautions must be taken to prevent them from impacting perimeter protection i.e.; with the use of barriers, jersey kerbs, wheel stops or I-beams between screen needles.

All vertical joints between screens and all horizontal joints abutting the structure shall have no gaps - consider the use of rubber / plywood and carpet to seal.

Lifting of screens must be accompanied by a [Screen Lifting Permit](#). Installation and climbing of screens by a competent person with appropriate system training



Figure 3: Mesh screen



Figure 4: Perimeter screen

The installation, alteration and removal of screens must be undertaken under the supervision of an intermediate rigger. No signage or shade cloth is to be installed on screens without engineers' approval.

When opening or removing platform/flap infills prior to lifting ensure they are securely fixed (i.e. screwed, attached to lanyard or clip) and fit for its intended purpose. All flaps and infills are to have sufficient clearance with no potential snagging points.

Where works on the perimeter edge of the building are being conducted where any material could fall, all tools, equipment and materials must be suitably restrained by means that are fit for its intended purpose and suitably rated overhead protection shall be provided or secure exclusion zones that prevent the entry of people (fenced - not barrier tape).

All screens and attachments to be inspected at regular intervals (minimum 3 monthly) to ensure in good working order and for any deterioration of materials i.e. plywood, fixings or associated elements.

Formwork and Falsework

All formwork shall be supplied, designed, constructed, erected, used, maintained, inspected and tested in accordance with AS 3610: *Formwork for Concrete* and the Code of Practice relevant to the State or region of operation. All persons required to erect and dismantle formwork must be trained or certified for the task.

The formwork designer must be competent in formwork design including documenting temporary work platforms and special equipment needed for safe formwork construction on-site. Risks during formwork construction, use and dismantling are to be considered in the design and methods to manage them.

An Engineer's Certificate must be provided by the Service Provider to Mirvac to verify the structural adequacy of every formwork deck or load bearing structure prior to a concrete pour and records of certificates will be retained at the workplace for audit purposes as required by AS 3610. The Service Provider must provide Mirvac with a signed pre-pour checklist. Mirvac will conduct random inspections using the [Formwork Pre-pour Inspection Checklist](#). Formwork erection and configuration drawings detailed by an Engineer shall be provided to Mirvac prior to erection of any formwork above ground floor height (i.e. suspended formwork).

The risk of a fall from height at the leading edge of every formwork deck must be minimised by design details which specify closely centred joists (i.e. max. 450mm) and the provision of temporary handrails at the completion of work activity at the live edge. The minimum working platform width for all formwork frames shall be two planks (450mm).

Formwork erection is to be carried out in such a manner that fall risk is minimised and not be more than 2m at any time. This will entail:

- Erection of formwork from below;
- Catch / false decks - a continuous deck over the same area as the floor being formed platform, not less than 2m below and extends a 1 in 1 distance (i.e. 3m) horizontally;
- Handrails - edge protection systems designed in as part of the frame erection process. Progressively provide handrails to each work area, mid-rails and kickboards around completed deck (consideration should be given to erecting handrails on the ground beforehand). No person can be exposed to a fall hazard during this work;
- During formation and after stripping of formwork, the formwork contractor will cover and secure all penetrations (refer [Penetration, Riser and Shaft Management MMR](#)).

Access to formwork decks either under construction or being stripped must be restricted to form-workers only with appropriate barricades and signage to prevent unauthorised entry to the area. Signage must comply with AS 1319 *Safety signs for the occupational environment*.

Drop stripping is not permitted; all materials must be lowered in a controlled manner.

Note: Form-ply, timber bearers and joists shall be reused to promote eco-efficiency.

b) Work Methods

Elevating Work Platforms (EWP)

EWPs must be maintained and operated in accordance with AS 2550.10:2006 *Cranes, hoists and winches – Safe use Mobile elevating work platforms*, AS 2550.10:2007 *Cranes, hoists and winches – Safe use Telescopic handlers* and appropriate legislative requirements and Codes of Practice.

All persons required to operate any EWP must be trained or certified for the equipment and must hold the appropriate competency certification.

For EWPs, the operator must have minimum training requirement for use of EWP for the category of

equipment (e.g. SL – Scissor lift), except for boom or knuckle type EWP's over 11m which require a High-Risk Licence.

For all boom/knuckle type EWP's:

- a harness and lanyard must be worn by all personnel within, secured to a rated anchor point provided for the purpose. Unless otherwise specified by the manufacturer each anchor point is only suitable for one person to attach to;
- a secondary protection system (SPS) shall be fitted to prevent crushing hazards.

A secondary protection system is required for scissor lifts where the technology is readily available and there is a risk of crushing. Otherwise, secondary protection systems and/or using a harness and lanyard is not required on scissor lift type EWP's unless advised/supplied by the manufacturer or indicated in the risk assessment, and a suitable anchor and rated point is provided for a lanyard.

Any of a contractor's personnel who operate plant must have a Verification of Competency to operate the relevant plant and this must be provided to Mirvac prior to being admitted to site and be available on request by Mirvac.

The relevant [Plant Arrival Checklist](#) shall be used when an EWP arrives at a Mirvac worksite. In Retail and O&I and where there is interaction with the public during operation (not loading or unloading) the [EWP Permit](#) also must be used. This permit is not required for use of EWP's on Mirvac controlled construction sites.

Working on Roofs

These requirements apply to post construction activities – where the structure has been completed and handed over for operation / use.

There must not be access to a roof, even for routine inspections, without a [Roof Access Permit](#) and JSEA/SWMS being completed.

Note for structures under construction the use of the [Unprotected Edge Permit](#) shall be apply.

The hierarchy of control to manage fall risk continues when accessing roofs; with elimination then fall prevention the priority. Temporary edge protection on roofs shall be erected, maintained and dismantled in accordance AS 4994.2 *Temporary edge protection - Part 2: Roof edge protection - Installation and dismantling*.

Should fall protection equipment be used it must be designed, manufactured, selected and used in compliance with the AS1891 *Industrial Fall-arrest Systems and Devices Selection* series of standards. This includes anchor points and static lines, whether temporary or permanent. Personnel who use this equipment must be appropriately trained and competent (Refer Section 6. [Work at Height MMR](#)).

Do not access a roof after dark or in adverse weather except for emergency repairs or planned work where all appropriate precautions have been taken in advance (including portable lighting – the use of a flashlight is acceptable as a backup only). In these instances, contractors must liaise with Mirvac to develop a safe work method.

Where there is a skylight, hole or opening on a roof then elimination / covering or guardrails as per the [Penetration, Riser & Shaft Management Mirvac Minimum Requirements](#) must be in place.

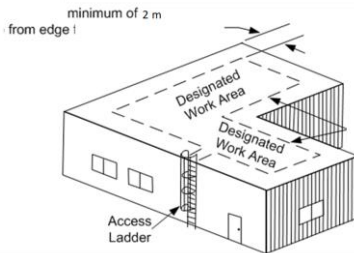
Provision must be made to protect people below from falling object hazards.

Where it can be demonstrated that personnel are not exposed to fall hazards (including roof holes, skylights, leading edges, wall openings, etc.), a designated work area may be set up.

The requirements for a designated work area are:

- Is a minimum of 2m from the edge;

- The work is of a temporary nature such as the maintenance of rooftop equipment or roof maintenance or repair;
- The work cannot be leading edge work or primary roof construction;
- The slope of the roof / working surface must be 10 degrees or less.



There shall be no access between the warning line and an unprotected edge unless a complete guardrail system or fall arrest equipment is being used.

Figure 5: Designated work area

Work Boxes

A workbox must be used only to lift personnel and materials necessary to carry out the work – it is not to be used for lifting / transporting items of general equipment or materials.

Tasks involving the use of a workbox suspended by crane must use the [Workbox Permit](#). Mobile cranes will require a [Mobile Crane Permit](#).

The crane and workbox must comply with the relevant legislation.

Each workbox must be fitted with rated anchor points and all occupants must wear fall protection harnesses attached to the anchor points when in use. The workbox, including lifting attachments, must be listed on the workplace lifting gear register and this equipment must be inspected by a competent person at maximum monthly intervals and prior to any use.

Swing Stages

The swing stage and its use shall comply with AS 1576.4 *Scaffolding – Suspended Scaffolding* and codes of practice relevant to the region of operation.

Those installing or servicing a swing stage must hold a licence for Advanced Rigging or Advanced Scaffolding; and it MUST be operated by a competent person (REFER SECTION 6. [Work at Height MMR](#)).

Persons in swing-stage cradles must wear fall arrest harnesses attached to a properly designed anchorage system. A travel restraint system, where a fall is not possible, attached to a static line in the cradle may be used.

Building Maintenance Unit (BMU)

The BMU must be designed in accordance with AS 1418.13 *Cranes (including Hoists and Winches) - Building Maintenance Units* and operated by competent persons in accordance with AS 2550.13 *Cranes - Safe Use - Building Maintenance Units*. The [BMU Permit](#) must be used for tasks involving operating a BMU.

A BMU platform must have sufficient, clearly designated safety harness anchorage points designed to withstand the forces caused by a fall of any person located anywhere on the platform.

Mobile Equipment

Access to mobile equipment requires working at height strategies to be considered to manage the risk of a fall. This may include hand holds, steps, platforms, rails, non-slip surfaces or fall protection equipment.

Large vehicles are to be provided with adequate stairs, ladders etc. to allow safe access. 3-point contact is to be used for access and egress to all parts of mobile equipment.

Truck Loading and Unloading

When loading and unloading a truck greater than 2m in height, fall control must be utilised, such as an access platform (fixed or mobile) positioned beside the truck bed, full side rails (900 mm) or fall protection equipment / systems.

Accessing the bed of a truck to load/unload shall only be performed after all other options have been exhausted and in these situations a JSEA/SWMS must be completed.

When loading and unloading, segregating people from the area must be considered. The use of fixed barricades or temporary measures must reflect the frequency of loading/unloading, proximity of pedestrian and vehicles to traffic and nature of the load.

The JSEA/SWMS must detail the risk of people and vehicle segregation and provide adequate risk controls.

Portable Ladders

Where ladders are required to be used they must be of the platform type with edge protection around three sides. The use of portable ladders is only permitted at Mirvac where:

1. All other methods of accessing the work area have been assessed and proven unworkable; and
2. A Ladder Risk Assessment has been developed to mitigate the risk of working on the ladder, and has been signed by the Mirvac responsible supervisor (or Workplace (site) Manager).

The [Step Ladder Risk Assessment](#) must be used for this purpose. Once completed, and the task approved, a "Step Ladder Use – Task Approved" sticker filled out with relevant information completed, prior to the sticker being attached to the step-ladder(s) involved in the task.

Requirements for using ladders include:

- Tools required must be restricted to light hand tools that can be carried on a tool belt, holster or pouch;
- Persons do not have to climb over or under handrails;
- The area must be stable where the feet of the ladder rest - not soft, loose, slippery, brittle;
- Ladders are not used on scaffolds or EWPs to gain extra height;
- A ladder, step or trestle must not be used within 3m of an exposed edge or guardrail;
- The task does not require the person to stand on a ladder or stepladder with their feet 2m or more above floor level, or above a void. If so a risk assessment must be undertaken and the hierarchy of

controls applied with a fall prevention / protection strategy implemented.

Portable ladders 900 mm high (or 3 steps shown on left, below) are banned at all Mirvac sites.

A 900-mm high portable platform ladder or a safety step can be used in restricted tight areas where other options are not available, otherwise the minimum acceptable height of a normal step-ladder without a handrail and platform is 1200mm (4 steps).



Figure 6: Portable step ladders

Trestles

Aluminium trestles can be used as a light duty work platform. The width must be a minimum width of 450mm (2 planks) as defined by Part 8.7 of AS4576 *Guidelines for Scaffolding* and Part 3.7.2.2 of AS 1576.1 *Scaffolding General Requirements*.

A JSEA/SWMS must be undertaken for all work involving a trestle.



Figure 7: Trestles

Falling Material and Equipment

Work at height must also consider the potential for materials and equipment, including sparks and material from hot work, falling and appropriate control measures must be provided to manage this risk, e.g. lanyards on hand held tools and equipment, hoardings, toe-boards, exclusion zones established or nets. These control measures must be included in the JSEA/SWMS for a work activity to ensure people are protected from such occurrences by the provision of overhead protective structures and/or a combination of control



measures that eliminate or minimise the risk of falling objects.



Figure 8: Screen on scaffolding

An exclusion zone below the work area must have an appropriate barrier (and signage) to prevent people (public or workers) entering; or a suitable catch deck or overhead protective structure erected.

A 'Type B hoarding' is installed where a more substantial structure is required for overhead protection to the public and personnel; and can span a footpath, railway or roadway. The [Overhead Protective Structures Checklist](#) must be used wherever Type B overhead protective structures are installed and they must be checked periodically according to appropriate legislative requirements, Codes of Practice and Australian Standards.

Figure 9: Overhead protective structure – Type B Hoarding



Catch Platform

Catch platforms must be of robust construction and designed to withstand the maximum potential impact load. Scaffolding components may be used to construct fixed and mobile catch platforms. Catch platforms must:

- incorporate a fully planked-out deck which extends at least 2m beyond all unprotected edges of the work area, except where guard railing is fitted to the platform;
- be as close as possible to the underside of the work area - a person must be no more than 1 metre before landing on the catch platform;
- have an adequate form of edge protection.

3.2. Fall Protection

If fall prevention measures are not a reasonably practical consideration must be given to fall protection methods.

All equipment used for fall protection must be designed, manufactured, selected and used in compliance with the AS1891 *Industrial Fall-arrest Systems and Devices Selection* series of standards and be installed by a competent person in accordance with the manufacturer's instructions.

Work positioning (fall restraint or industrial rope access) must be considered before fall arrest.

Where fall protection equipment is used a retrieval/rescue plan in the event of a fall, is required to be in place to minimise suspension trauma risk. [Retrieval Plan Template](#)

All anchor points, harnesses, lanyards, inertia reels and other fall protection equipment must be inspected prior to use and on a regular basis to AS1891.4 and a record of inspection maintained on the [Fall Protection Equipment Register](#).



The installation of fall arrest anchors must only be carried out by personnel competent to undertake this specified work, e.g. engineer, scaffolder or rigger - this includes static lines.

A formal inspection of Mirvac fall protection equipment must be carried out by a competent person as per AS1891.4 and the table below. Contractor service providers must provide equivalent evidence of inspection of fall arrest equipment at the request of Mirvac.

Inspection Requirements (AS1891.4)	Inspection description
Inspection prior to use	Visual inspection e.g. burns, stitching missing, cuts, worn areas, operation - of all personal equipment including: harnesses, lanyard assemblies, connectors, fall arrest devices – external check only
6-monthly inspection by competent person	Fall arrest devices – (e.g. rope grabs, inertia reel, self-retracting lifeline) external visual check only
	Belts, harnesses, lanyard assemblies, karabiners and associated personal fall arrest equipment
12-monthly inspection/service by NATA accredited personnel/testing authority	Permanently installed anchorages; fall arrest devices-full service including dismantling where indicated; horizontal lifelines and rails including integral components & permanently installed mobile attachment devices Written evidence should be supplied that individual anchor points can withstand a load of 15 kN without failure.
Life expired equipment	Personal equipment must be destroyed. Life lines and rails must be inspected and re-certified.
After a fall arrest, and equipment that shows a defect	Tag and destroy all items that have potentially been stressed as a result of a fall arrest incident

Fall protection equipment subjected to stress from a fall arrest incident must be tagged ‘Out of Service’ and marked “to be destroyed”.

All persons using a harness must have received formal training, i.e. Work At Heights / Harness course which is nationally accredited and deals with the selection, assembly and use of a restraint / fall protection / arrest system. Records shall be kept of personnel’s working at height training and competencies.

Fall restraint

Fall restraint must only be used if it is not reasonably practicable to prevent falls by providing a physical barrier (for example, a guard rail).

It physically prevents a person reaching a position at which there is a risk of a fall and consists of a harness that is connected by a lanyard to an anchorage or horizontal life line. It must be set up to prevent the wearer from reaching an unprotected edge (Figure 13).

Travel restraint systems are not fall-arrest devices; therefore, inertia reels and retractable lanyards are not to be used.



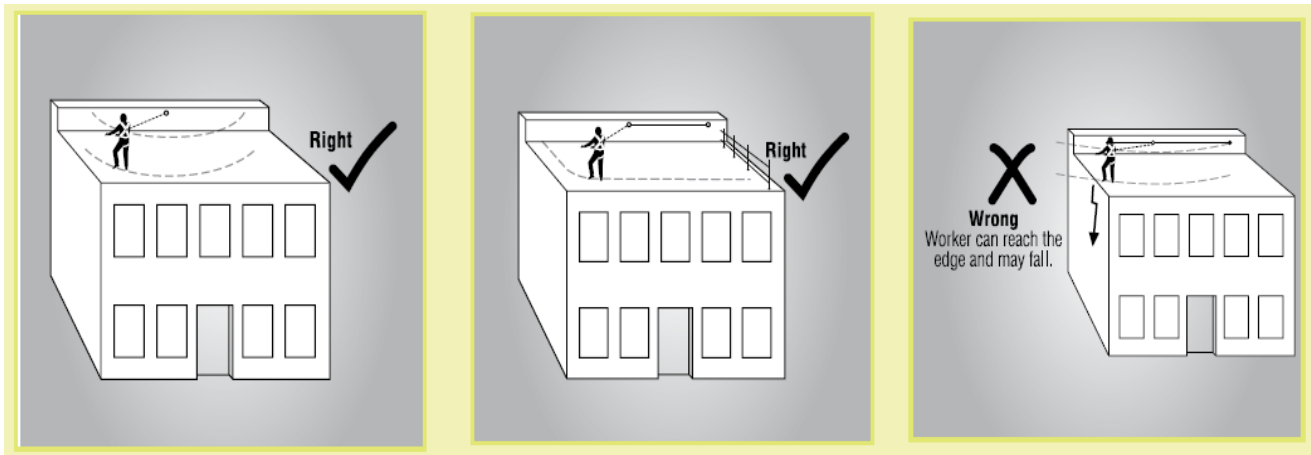


Figure 10: Restraint technique options

A restraint technique can be used where the user can maintain secure footing without having to tension the restraint line and without the aid of any other hand hold or lateral support.

Restraint anchorage should be designed for fall-arrest loading.

Industrial Rope Access

Where an industrial rope access system is to be used it must meet the requirements of the Industrial Rope Access Trade Association (IRATA) International Guidelines on the Use of Rope Access Methods for Industrial Purposes.

Rope access must only be performed by those who are qualified and competent in rope access technique to Industrial Rope Access Trade Association (IRATA) Certification.

Tasks involving the use of industrial rope access must use the [Industrial Rope Access Permit](#) and a JSEA/SWMS completed.

Fall Arrest

Where the above methods are not reasonably practical, use of fall arrest equipment can be used e.g. a safety harness and anchor line or a safety net which complies with AS 1891 *Industrial Fall Arrest Systems and Devices*.

Fall-arrest systems that incorporate a harness and lanyard, must be installed so that the maximum distance a person would free fall before the fall-arrest system takes effect is 2 metres. There should be sufficient distance between the work surface and any surface below to enable the system, including the action of any shock absorber to fully deploy. The minimum free fall distance must be as specified in AS1891.4 Section 7 *Fall Clearance*, which is relative to the type and combination of fall arrest components.

Consideration must also be given to the pendulum effect or 'swing back' or 'swing down' where a person is exposed to a free fall (because of the position of the anchor point the lanyard can 'swing back' onto the building or structure or 'swing down' to hit the ground). Swing down can occur if the lanyard slides back along the perimeter edge of the roof until it is vertical and the person may hit the ground, or the lanyard may break from contact with the edge of the roof

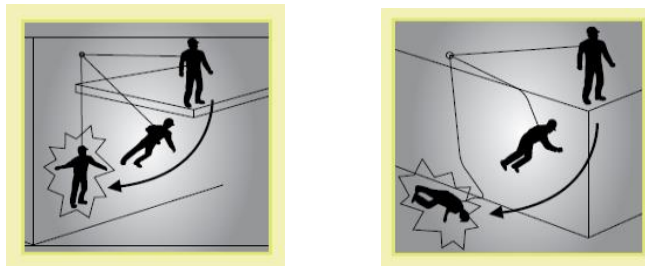


Figure 11: Swing back

Swing down

Lanyards must not be used in conjunction with inertia reels as this can result in excessive free fall prior to the fall being arrested.

The use of safety nets must be consistent with codes of practice and legislation relevant to the region.

Where safety nets are installed, they shall not be used to enter or exit a work area or as a working platform.

Safety nets are to be hung as close as is practicable to the underside of the working area, but no more than 2m below the working area and where perimeter safety nets are used, shall extend at least 2.5m beyond the leading edge of the working area.

3.3. Rescue

Should a person fall and is suspended in a harness, with the risk of suspension trauma, time is critical and immediate response is required. Whilst anyone is working at height with fall personal protection equipment; a retrieval plan using the [Retrieval Plan Template](#) must be in place with nominated personnel and plant on stand-by at all times.

The retrieval / rescue plan as a minimum must include:

- the location(s) where the work is to be carried out and scope of works;
- if the workplace has the capacity to undertake rescue of a suspended person and the means of access for the rescuers, e.g. crane and workbox; elevated work platform; Gotcha grab system or other, or if emergency services will be the preferred method;
- the availability and capacity of the proposed solution to reach the potential area of any suspension victim, e.g. crane or elevated work platform readiness and reach;
- the requirement to practice the emergency retrieval plan on a regular basis so that a safe and efficient rescue within a short time can be achieved.

Once the person has been rescued, they must be attended by experienced Ambulance Personnel, or Occupational First Aider, as laying them down may cause further complications to their condition.