WHS-12 Working at Heights Procedure

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1.0	12/09/2014	Rebranding	Rebranding and recoding

1 Purpose

The purpose of this procedure is to outline the requirements for safe working at Heights including guidance on the requirements for a person using fall protection to control the risks of working at heights.

2 Scope

This procedure will apply to all persons conducting work at heights on Territory Generation controlled sites.

This procedure applies for any task where the risk assessment highlights a danger of injury from falling. In any case, fall prevention or protection shall be used for elevated work where one's feet are 2.0 metres above the measured surface.

3 References

- NT Worksafe, Safe work Australia, Code of Practice: Managing the Risk of Falls at Workplaces.
- NT Worksafe, Safe work Australia, Code of Practice: Construction Work.
- Australian Safety and Compensation Council, National Code of Practice for the Prevention of falls in General Construction.
- Australian Standards
- AS/NZ 1891 - Industrial Fall Arrest Systems and Devices
- AS/NZ 1891.1 - Industrial Safety Belts and Harnesses
- AS/NZ 1891.2 - Horizontal Lifelines and Rail Systems (Interim Standard)
- AS/NZ 1891.3 - Fall Arrest Devices
- AS/NZ 1891.4 - Industrial Fall Arrest Systems & Devices – Selection Use & Maintenance
- AS/NZ 1576.1 - Scaffolding – General requirements
- AS/NZ 1576.2 - Scaffolding – Couplers and Accessories
- AS/NZ 1576.3 - Scaffolding – Prefabricated, Tube and Coupler Scaffolding
- AS/NZ 1576.4 - Scaffolding – Suspended Scaffolding
- AS/NZ 1657 - Fixed Platforms, Walkways, Stairways & Ladders Design, Construction and Installation
- AS/NZ 1892.1 - Portable Ladders – Metal
- AS/NZ 1892.2 - Portable Ladders – Timber
- AS/NZ 1892.5 - Portable Ladders – Selection, safe use and care
- AS/NZ 2550 - Cranes Safe Use – Elevated Work Platform

4 Roles and Responsibilities

Role / Title	Responsibility
Chief Executive Officer	Shall ensure that : • All personnel are aware of requirements of this procedure and its management in sites under Territory Generation control. • Initiates procedure review as required.
All Managers/Site Coordinators	Shall ensure that: • This procedure is put in place at all Territory Generation controlled power stations sites. • Personnel are advised and trained as necessary in the procedure to be followed. • Contractors are informed of and follow the procedure, where applicable. • Contribute to procedure reviews
Project Officers/Contract Managers	Shall ensure that: • Contractors under their control are informed of and follow the procedure, where applicable. • Contribute to procedure reviews
All Personnel	Shall ensure that: • This procedure is followed personally and by contractors/visitors under their control, where applicable • Contribute to procedure reviews
Document Owner	• The position responsible for the preparation, review and accuracy of this document.
Document Sponsor	• The position responsible for the approval and use of this document

5 Definitions

Anchorage Point	Means a secure point on a structure to which fall protection device may be secured (this includes static lines). Anchorage points shall be capable of withstanding a minimum force of 15kN (1500Kg) for fall arrest to 6kN (600Kg) for fall restraint except on elevating work platforms where a suitable anchor point as per AS 2550 shall be fitted.
Anchorage Sling	Means a sling designed to be placed around a structural element to form an anchorage.
Barricades	Means where overhead work is being conducted, barricades shall be erected around the area

	below the work area to protect others below from falling objects
Dedicated Anchorage Point	Means an anchorage point that shall not be used for any other purpose.
Elevating Work Platform	Means a telescoping device, scissor device, articulated device, crane attachment or any combination thereof used to position personnel, equipment and materials at work locations above or below the base support surface.
Free Fall Arrest	Is to provide persons with approved personal fall arrest harnesses with attachments, which not prevent a fall but will minimise the risk of injury caused by the fall. Free fall arrest shall prevent a person from freefalling more than 2.0 meters.
Fall Prevention	Means creating a safe working area that eliminates the possibility of a fall by using fixed work platforms, scaffolding and physical barriers.
Fall Protection	Means the use of industrial fall restraint/arrest equipment including full body harnesses, lanyards and attachment devices along with secure anchor points. Sometimes used to provide additional protection with some fall prevention measures, or where fall prevention is not practicable, fall protection may be used. This includes the use of elevating work platforms and man lifts. Fall protection can be defined as either fall restraint or fall arrest.
Full Body Harness	Means an assembly of interconnected shoulder and leg straps. Often referred to as a parachute style harness.
Job Safety Environmental Analysis (JSEA)	Means the process used to break a task into steps; identify the potential hazards and control measures; and implement these so that the task can be completed safely. This process is conducted at the task level by the persons carrying out the work.
Karabiner	Means a ring used for anchorage connection.
Lanyard	Means a Lanyard is a device used to connect a safety harness to an anchor point. A shock absorbing lanyard includes a device to reduce the load applied to the body to a maximum force of 6kN (600Kg).
Mobile Platform	Means a fabricated ladder and work platform construction that can be mobilised to different locations and provide safe access and egress to a work area at heights.

Restrained/Limited Fall Arrest	Is to provide workers with approved personal fall arrest harnesses with attachments for restraint or work positioning and used to limit a possible fall to less than 600mm.
Scaffold	Means a temporary construction that consists of a framework and an elevated working platform for supporting workers and materials.
Shall	Means a Mandatory requirement
Should	Means an Advisory requirement
Suspension Trauma	Means a condition (following a fall), whereby a person suspended in a harness in a substantially upright position may experience blood pooling in the legs. Depending on the susceptibility of the individual, this may lead to loss of consciousness, renal failure and eventually death.
Toe Board	Means a raised edge on a platform that serves the purpose of stopping objects falling off the platform
Total Fall Restraint	Is to provide persons with approved equipment designed to allow access to the work area without reaching an area where there is a risk of falling.
Task Based Risk Assessment	A structured risk assessment process usually covering a segment of work or a specific job
Worker	Means an employee, a contractor or subcontractor; an employee of a contractor or subcontractor, an employee of a labour hire company who has been assigned to work at a Territory Generation owned/controlled site, an outworker, an apprentice or trainee or a person of a prescribed class.
Working at Heights	Accessing, egressing, ascending, descending or working in any position where a person can slip and/or fall from, into or through anything from one level to another. This also includes where objects could fall from one level to another.
Work Positioning	Is to provide persons with approved equipment designed to support them by means of industrial systems to complete tasks while minimising the risk of any fall.

6 Records

6.1 Maintenance Manager North and South respectively shall store the Heights Equipment registers for sites under their control in EDMS. A link will be created from the legal compliance register to the EDMS trim file to demonstrate legal compliance.

7 Attachments

7.1 Attachment 1 – WHS-12A Work at Heights Checklist (BDOC2013/107)

8 General Requirements

8.1 The requirements for workers working at heights on Territory Generation controlled sites include:

a) A task based risk assessment (Job Safety Environmental Analysis or equivalent) shall be conducted before the commencement of worked performed at any height there is the potential for fall or to sustain an injury and at any time the scope of work changes or the risk of a fall increases.
b) A task based risk assessment process shall be used to identify, assess and control work at heights.
c) The need to work where there is the risk of a fall shall be eliminated or reduced to acceptable levels by use of the hierarchy of control selection process.
d) The Territory Generation Working at Heights Checklist (BDOC G-WHS-12A) shall be used to assist in the control of work at heights hazards.
e) All working with heights equipment shall comply with the requirements of relevant Australian Standards and be fit for purpose.
f) All equipment shall be “pre-use” checked prior to every use and after every use.
g) Any faulty equipment shall be reported to the relevant line Manager/Supervisor for that site.
h) Comprehensive inspections of the equipment shall be undertaken and documented at six (6) monthly intervals or as required or determined by the relevant legislation or the manufacturer’s recommendations.
i) All equipment shall be registered and tagged to indicate compliance with inspection requirements.
j) Barricades and signage are placed to restrict/prevent access to an area that falling objects may land in if dropped from upper levels.
k) The personnel using tools and equipment at heights shall implement controls to prevent them from falling from height. (e.g. tool lanyards)
l) All forms of fixed, portable and moveable work platforms and suspended work cages shall conform to legislative requirements and relevant Australian Standards.
m) All persons erecting scaffolding or operating elevating work platforms or cages shall be trained, competent and where necessary be certified for the equipment they are using.
n) All persons tasked to work at heights are physically and psychologically suitable for such work.
o) All persons engaged to work at heights are competently trained and assessed at regular intervals as per legislative requirements.
p) Adequate supervision is provided for tasks involving work at heights.

9 Guidelines

This *procedure* applies to any task where the task based risk assessment highlights a danger of injury from falling. In any case, fall prevention or protection shall be used for elevated work where one’s feet are 2.0 metres above the measured surface.

9.1 Risk Management

a) A task based *risk assessment* using a *SWMS/JSEA* as a minimum *shall* be conducted before the commencement of any task or activity to determine if there is a potential of falling or being struck by falling objects. If such hazards are identified, then *control measures* shall be put in place based on the hierarchy of control to reduce the overall risk of working at heights to low.

b) For more complex work activities at heights the G-WHS-30 Territory Generation Operational Risk Assessment Template (BDOC2013/326) may also be utilised.

c) When using the hierarchy of control to reduce the risk of working at heights, it is preferable to adopt controls that constitute fall prevention. This process allows a safer work environment when working at heights. If such controls are inappropriate for the nominated task, then the use of fall protection in the form of either fall restraint or fall arrest shall be implemented as a control measure.

- Elimination e.g. Do we need to expose people to height or falling objects?
- Substitution e.g. Is there a safer way to do the task/activity?
- Isolation e.g. Handrails, platforms, scaffolding
- Engineering e.g. design specifications
- Administration e.g. Signage, training, procedures
- Personal Protective Equipment e.g. Fall restraint/arrest equipment

9.2 Fall Prevention

a) Where practicable, a safe working area *shall* be provided by means of *work platforms* or *scaffolds*.

b) Such constructions shall only be operated or erected by fully trained and *competent* personnel.

9.2.1 Scaffolding and Temporary Work Platforms

a) Work shall only be carried out utilising a complete scaffolding or temporary work platform, unless the work involves erection or dismantling of the scaffolding or work platform.

b) Scaffolding shall be provided with full floors, toe boards and guardrails.

c) All personnel involved in scaffolding and rigging work shall hold the appropriate certificate of competency in accordance with the National Occupational Health and Safety Certification Standard for Users and Operators of Industrial Equipment.

d) The area around erected scaffolding or work platforms shall be barricaded to prevent access from beneath, thus ensuring the risk from falling objects is low.

e) Scaff tags (or similar) shall be used to identify scaffolding under construction or ready for use.

f) Fall protection is not required provided the following criteria are met:

- An appropriate means of access and egress is provided that conforms to the relevant ladder requirements. Access and egress shall, where possible, not allow gaps to remain in the floor of the scaffold.
- If access to the scaffolding platform results in gaps in the flooring, such gaps shall be hard barricaded and be surrounded by toe boards to prevent people and/or equipment from falling.
- The occupant(s) of the scaffold shall not attempt to step out of the confines of the scaffold except by using the provided means of access or egress.

9.2.2 Portable Ladders

a) All portable ladders shall comply with the relevant Australian Standard, be fit for purpose, and have the correct rating for the person using the ladder.

b) Portable ladders may be used as fall prevention provided the following are adhered to:

- Portable ladders shall have non-slip devices fixed to the base of each ladder.
- The floor around the foot of each ladder shall be free from all obstacles.
- No person shall use the top rungs of a ladder that are less than 1 metre from the top of the ladder unless an approved working platform has been provided.
- A person may climb or descend a ladder without fall protection provided that they are able to use both hands and legs to do so and that they face the ladder and use one step /rung at a time.
- Ladders shall be securely tied off or supported below at all times when in use.

- Only one person shall be on the ladder at any time.

c) Whilst on a ladder, the worker must maintain three points of contact at all times. Both feet are to remain on the ladder and the worker's upper body shall lean into the ladder whilst conducting work, unless a fall restraint device is in use.

d) Work is not to be performed on a portable ladder if the worker's body needs to extend beyond the boundaries either side of the ladder. If so, then alternative methods of working at height shall be identified.

e) If work is to be performed where a worker's feet are above 2.0 metres from a surface then it is deemed to be working at heights and additional fall protection shall be utilised.

9.2.3 Mobile Work Platforms

a) Mobile work platforms may be used to access work areas provided the following criteria are met:

- Mobile platforms should be constructed to the relevant standards and deemed suitable for the task at hand, based on a risk assessment.
- Mobile platforms that are mounted on wheels shall have all wheels or travel device secured whilst the platform is in use.
- Mobile platforms should have handrails that extend the full length of the access/egress and work area.
- If work is to be carried out on the platform, then a safety chain shall be erected to restrict access to the ladder section of the platform whilst work is being performed.
- Any steps on the mobile platform should have anti slip devices installed.
- The area around the mobile platform shall be free of obstructions and the floor clean and devoid of slippage.

b) When using a mobile platform to gain access to a work area, suitable controls must exist to reduce any work at height risks that may have been identified in the risk assessment for that work area.

9.3 Fall Protection

a) In all cases where adequate fall prevention is not available, fall protection shall be used. This includes situations in which work is being carried out from an elevated work platform or man-cage. Where an adequate work platform or fall protection is not available, work shall not proceed.

b) All personnel required to use fall protection shall be trained and deemed competent.

c) A person has Fall Protection if s/he is secured with an approved full body harness, fall restraint line, appropriate shock absorbing lanyard (where the potential to fall is greater than 4 meters), or short restraining lanyards (where the potential to fall is less than 4 meters) self-locking double acting hooks (or Karabiner type rings) and secure anchorage points.

d) Fall protection is using industrial fall restraint/arrest equipment subject to four (4) applications:

- Total Fall Restraint
- Work Positioning
- Restrained/Limited Fall Arrest
- Free Fall Arrest

9.3.1 Fall Protection Equipment

a) A competent person shall inspect all fall protection equipment used by employees or contractors at a maximum of six-monthly intervals. Fall Protection Equipment used by contractors shall be maintained on an approved register and made available on request to Territory Generation representatives for their duration on site. Additionally, a competent person shall visually inspect any fall protection equipment before and after each use.

b) An approved register is such when it contains the following information as a minimum:

- Dates indicating that a regular program of inspections exists and that an inspection interval of no more than six months has been adhered to.

- Serial numbers or unique identification of relevant items is present on the register.
- Clear identification on the register that supplied equipment is fit for service.
- Recognition that equipment has been inspected by competent personnel.
- Methodology for identification of tested equipment and its correspondence with the register.

c) At the beginning of each inspection period, the register shall be updated, any failed equipment destroyed and new equipment purchased as required by the responsible coordinator.

d) Fall protection equipment shall be made available to all employees that are required to utilise fall protection in controlling the risks of working at heights.

e) Fall protection equipment shall be stored in an appropriate, designated storage area containing instructions on care, fitting and maintenance of equipment. This includes personal lockers if such a person has been identified as being eligible for dedicated issue equipment.

f) Only fall protection equipment that is deemed suitable for the required task shall be used.

9.3.2 Use of fall protection equipment

a) Territory Generation employees and contractors shall use only equipment that has been inspected and deemed safe to use by a competent person and recorded in the Business Unit Work at Heights Equipment Register. Equipment used by contractors shall be maintained on an approved register and made available to Territory Generation representatives on request for the duration of their time on site.

b) No person shall use fall protection equipment unless s/he has received the appropriate training detailed in this procedure, and has been assessed as competent and is using the appropriate equipment correctly as provided.

c) Any work that requires fall protection shall be conducted by a minimum of two fully trained and competent people.

d) A Rescue Plan shall be developed for all work at heights.

e) The Rescue Plan shall detail the steps to be taken by those involved in the work if a person or people become suspended in a harness or incapacitated in another way. All steps in the rescue plan shall be focused on rescuing a person from a location in a timely fashion so as to avoid injury resulting from suspension trauma.

f) If insufficient steps are detailed in the rescue plan then the work shall not continue.

g) A minimum of one person shall be in the role of the safety observer and will not be working at heights but will oversee the task and initiate the steps of the Rescue Plan if the situation requires.

9.3.3 Removal of Fall Protection Equipment from Service

a) Fall protection equipment shall not be used in service until checked by authorised personnel. Additionally, items shall be removed from service if it is deemed that they do not conform to any pre and/or post use checks, regular inspections, having been involved in a fall or have been worn during a drop from a heights of more than 1 metre.

NOTE: Under no circumstances shall equipment that has been identified as having failed an inspection be allowed back into service or to be stored in the same locations as “In Service” equipment.

9.3.4 Elevating Work Platforms

a) The operator of the elevating work platform shall be trained and deemed competent to do so.

b) Elevating work platforms (including Scissor Lifts, Crane Workboxes, Forklift Workboxes and IT Attachments) shall not be used without additional fall protection measures being in place during operation.

c) Elevating Work Platforms shall have complete toe boards fitted and all tools and equipment shall be secured in such a way that will prevent items from falling.

9.4 Anchor Points

a) Anchor points must, where practicable, be above the head of the worker and must ensure that in the event of a fall the worker will neither swing nor touch the ground.

b) Dedicated anchor points shall not be used unless a compliance plate has been attached immediately adjacent too it. These anchor points must not be used for any other lifting purposes.

c) All dedicated anchor points shall be tested and approved in accordance with the relevant Australian Standard.

d) Where no such dedicated anchor points exist, an engineered anchor point, (such as a structural beam), shall be used. Only personnel who have been trained and deemed competent in Power Network's Work at Heights procedures shall be allowed to construct such anchor points.

e) Typically the following can be used as anchor points:
- Beams and hoist rails specifically rated for lifting (e.g. 'come-along' beams)
- Structural steel supporting beams (braces, cross members purlins etc.)
- Points or brackets specifically designed for fall arrest devices to Australian Standards, and
- The primary hook of a fixed overhead crane may be used as an anchor point provided that the crane has been isolated correctly.

f) Points that shall NEVER be used for anchor points:
- Guard or hand rails of walkways or stairways
- Structures that may become mobile (mobile scaffolds / trestles)
- Cable trays
- Grid or Tread Mesh on walkways
- Areas remote to mobile elevated working platforms (e.g.. anchoring outside the basket of a 'cherry picker' or 'boom lift' except when preparing to egress from the work platform provided such an action has been identified as the safest course in the JSEA or equivalent risk assessment)
- Portable ladders
- Steps on stairways

g) When creating an anchor point from beams and structural supports, approved and tagged slings shall be used in conjunction with karabiners as per work at heights training.

h) When attaching fall protection devices to an anchor point, double acting hooks or karabiners shall be attached directly.

NOTE: When lanyards are to be used, they are NOT to be 'Choked Down' on themselves under any circumstances.

9.5 Emergency Response

a) Emergency Response plans involved in working at heights shall be tested at twelve (12) monthly intervals and involve all parties including (but not limited to) users of Work at Height equipment service workers, coordinators and managers.

b) Such tests shall cover the steps detailed in a rescue plan and the actions to be taken by those conducting the work.

9.6 Training

a) Territory Generation shall provide approved training to all personnel that are required to use fall protection as per this procedure. Employee training records shall be recorded in the Training Management System.

b) Only personnel that are deemed competent with the selected criteria shall be considered as having completed an approved training program for the use of fall protection.

c) Territory Generation shall provide working at heights awareness training to personnel that are required to work at heights

9.7 Contractors Working at Heights

The responsible Project Manager/Coordinator shall ensure that:

a) All working at heights hazards have been identified and ranked according to risk using a task based risk assessment process for the work to be performed.

b) The most relevant control measures for working at heights hazards are utilised and that all contractors are aware of their roles and responsibilities in implementing these controls.

c) All contractors are appropriately trained and authorised to conduct work at heights and to use fall protection, prior to the commencement of the work

9.8 Barricades

a) Where "overhead work" is being conducted, barricades shall be erected around an area below the work area to protect others below from falling objects.

9.9 Design and Construction

a) All equipment and construction referred to in this procedure must comply as a minimum with the relevant Regulations and Australian Standards (see References).

10 Falling Object Control

a) Wherever practicable, falling object hazards are to be managed and controlled in accordance with the ordered preferences in the table below. Specific consideration is to be given to the potential for objects to bounce and reflect whilst falling when establishing boundaries of exclusion zones.

Control Option	Examples
1 Preventing objects from falling	▪ Toe boards or kick boards on work platforms and scaffolds ▪ Containment sheeting on work platforms and scaffolds ▪ Tool restraints ▪ Use of lift boxes to crane materials throughout a turbine hall
2 Excluding an area or catching an object once it has fallen	▪ Overhead/catch platform ▪ Establishing an exclusion zone ▪ Using signs and other warning devices ▪ Erection of gantries and other overhead protective structures for major construction/demolition activities
3 Providing personal protective equipment (PPE) for personnel	▪ Safety helmets ▪ Safety boots ▪ Safety glasses

11 Basic Principles for the inspection of Fall-arrest Equipment

11.1 Pre Use

a) Before each use, the fall-arrest equipment shall be visually inspected to determine if there are any signs of damage.

b) Should any Industrial Fall-arrest equipment be found to be faulty the:

- The equipment shall be removed from service and replacement ordered; and,
- An Out of Service Tag shall be attached to the equipment it is defective; or,
- The equipment shall be destroyed and disposed of.

11.2 Periodic Inspections

a) Industrial Fall-arrest equipment should be thoroughly examined at intervals by a *Height Safety Equipment Inspector* in accordance with the manufacturer's instructions and AS/NZS

1891.4:2009 – Industrial Fall-arrest systems and devices, Part 4: Selection, use and maintenance.

11.3 Cleaning

a) Basic care of all safety equipment will prolong the life of the equipment and will help maintain its vital safety function. As such, fall-arrest equipment should be cleaned as per below:

- **Nylon or Polyester** – Remove all surface dirt with a sponge dampened in plain water. Then, with a mild solution of commercial soap or detergent and a sponge, work up a thick lather with vigorous forward and back motions. Then wipe dry with a clean cloth. Hang freely to dry, but away from excess heat.
- **Inertia Reel housing** – Periodically clean the unit using a damp cloth and mild detergent. Towel Dry.
- **Drying** – Equipment should be allowed to dry thoroughly without exposure to heat, steam or long periods of sunlight.

11.4 Storage

a) Conditions of storage and transport should ensure that no part of the equipment is subjected to unnecessary strain or pressure or to excessive heat, humidity or moisture and that the equipment is protected from contact with sharp edges, corrosive substances and other possible causes of damage.

b) Equipment should be air-dried at ambient temperature before being stored.

c) Items made from synthetic materials should be stored away from direct sunlight in a cool dry place

12 Inspection of the Harness or Body Belts

12.1 To inspect your harness or body belt, perform the following procedures:

(a) Webbing
Grasp the webbing with your hands 6 inches (152mm) to 8 inches (203mm) apart. Bend the webbing in an inverted “U” as shown. The surface tension resulting makes damaged fibres or cuts easier to detect. Follow this procedure the entire length of the webbing, inspecting both sides of each strap. Look for frayed edges, broken fibres, pulled stitches, cuts, burns and chemical damage.

(b) D-Rings/Back Pads
Check D-rings for distortion, cracks, breaks, and rough or sharp edges. The D-ring should pivot freely. Inspect for any unusual wear, frayed or cut fibres, or broken stitching of the D-ring attachments. Pads should also be inspected for cracks, excessive wear, or other signs of damage.

(c) Buckles
Inspect for any unusual wear, frayed or cut fibres, or broken stitching of the buckle attachments.

(d) Tongue Buckles/Grommets
Buckle tongues should be free of distortion in shape and motion. They should overlap the buckle frame and move freely back and forth in their socket. Roller should turn freely on frame. Check for distortion or sharp edges. Inspect for loose, distorted or broken grommets. Webbing should not have additional punched holes.

(e) Friction and Mating Buckles
Inspect the buckle for distortion. The outer bars and centre bars must be straight. Pay special attention to corners and attachment points at the centre bar.

(f) Quick-Connect Buckles
Inspect the buckle for distortion. The outer bars and centre bars must be straight. Make sure dual-tab release mechanism is free of debris and engages properly.

(g) Harness Fall Arrest Indicators
Inspect fall arrest indicators (located on the back D-ring pad) for signs of activation. Remove from service if broken or stretched between any of the four (4) pairs of arrows.

13 Inspection of Lanyards

13.1 When inspecting *Lanyards*, begin at one end and work to opposite end, slowly rotating the *lanyard* so that the entire circumference is checked.

13.2 To inspect lanyards, perform the following procedures:

(a) Hardware
Snaps: Inspect closely for hook and eye distortions, cracks, corrosion, or pitted surfaces. The keeper (latch) should seat into the nose without binding and should not be distorted or obstructed. The keeper spring should exert sufficient force to firmly close the keeper. Keeper locks must prevent the keeper from opening when the keeper closes.

(b) Thimbles: The thimble must be firmly seated in the eye of the splice, and the splice should have no loose or cut strands. The edges of the thimble must be free of sharp edges, distortion, or cracks.

(c) Wire Rope Lanyard
Always wear appropriate gloves when inspecting a wire rope lanyard; broken strands can cause injury. While rotating the wire rope lanyard, watch for cuts, frayed areas or unusual wearing patterns on the wire. Broken strands will separate from the body of the lanyard.

(d) Web Lanyard
While bending webbing over a pipe or mandrel, observe each side of the webbed lanyard. This will reveal any cuts, snags or breaks. Swelling, discoloration, cracks and charring are obvious signs of chemical or heat damage. Observe closely for any breaks in stitching. Inspect lanyard warning flag for signs of activation. Titan tubular lanyards must be measured to determine activation.

(e) Rope Lanyard
Rotate the rope lanyard while inspecting from end-to-end for any fuzzy, worn, broken or cut fibres. Weakened areas from extreme loads will appear as a noticeable change in original diameter. The rope diameter should be uniform throughout, following a short break-in period.

(f) Shock Absorber Pack
The outer portion of the pack should be examined for burn holes and tears. Stitching on areas where the pack is sewn to D-rings, belts or lanyards should be examined for loose strands, rips, deterioration or other signs of activation.

(g) Shock-Absorbing Lanyard
Shock-absorbing lanyards should be examined as a web lanyard (described in item (c) above). However, also look for the warning flag or signs of deployment. If the flag has been activated, remove this shock-absorbing lanyard from service.

14 Inspection of Inertia Reels

14.1 To inspect your inertia reel, perform the following procedures:

(a) Check Housing
Before every use the unit's housing is to be inspected for loose fasteners and bent, cracked, distorted, worn, malfunctioning or damaged parts.

(b) Lifeline
Test the lifeline retraction and tension by pulling out several feet of the lifeline and allow it to retract back into the unit. Always maintain a light tension on the lifeline as it retracts.

The lifeline should pull out freely and retract all the way back into the unit. Do not use the unit if the lifeline does not retract. The lifeline must be checked regularly for signs of damage. Inspect for cuts, burns, corrosion, kinks, frays or worn areas. Inspect any sewing (web lifelines) for loose, broken or damaged stitching.

(c) Braking Mechanism
The braking mechanism can be tested by grasping the lifeline above the load indicator and applying a sharp steady pull downward which will engage the brakes. There should be no slippage of the lifeline while the brakes are engaged. Once tension is released, the brakes will disengage and the unit will return to the retractable mode. Do not use the unit if the brakes do not engage.

Check the hardware as directed in (a) under *Lanyard* Inspection. The snap hook load indicator is located in the swivel of the snap hook. The swivel eye will elongate and expose a red area when subjected to fall arresting forces. Do not use the unit if the load impact indicator has been activated.

(d) Snap Hook
Check the snap hook to be sure that it operates freely, locks, and the swivel operates smoothly. Inspect the snap hook for any signs of damage to the keepers and any bent, cracked, or distorted components.

(e) Anchorage Connection
Make sure the karabiner is properly seated and in the locked position between the attachment swivel/point on the device and the anchor point.

15 Summary of Inspection Frequencies

Items	**Inspection Frequency** (Where used in harsh conditions, more frequent inspection may be required)
Personal equipment including harnesses, *lanyards*, connectors, *fall arrest devices* including common use devices.	Inspection by *competent* user before and after each use.
Harnesses, *lanyards*, associated personal equipment. *Fall-arrest devices* (external inspection only) Ropes and Slings	6 Monthly inspections by a *Height Safety Equipment Inspector*.
Anchorages – Drilled-in type or attached to timber frames *Anchorages* – Other types	12 Monthly inspections by *height safety equipment inspector*. Frequency of inspection by *height safety equipment inspector* as recommended by the manufacturer to a maximum of 5 yearly, 12 monthly inspection in the Absence of such recommendations.
Fall-arrest devices – Full service	Frequency of inspection by *height safety equipment inspector* as recommended by the manufacturer to a maximum of 5 yearly, 12 monthly inspection in the Absence of such recommendations.
Horizontal and vertical lifelines – Steel rope or rail	Frequency of inspection by *height safety equipment inspector* as recommended by the manufacturer to a maximum of 5 yearly, 12 monthly inspection in the Absence of such recommendations.
Horizontal or vertical lifelines – Fibre rope or webbing	6 Monthly inspections by *a height safety equipment inspector*.
All items of personal and common use equipment	Inspection by a *height safety equipment inspector* on entry or re-entry into service
All items which have been stressed as a result of a fall.	Inspection by a *height safety equipment inspector* before further use.

16 Attachment 1 – WHS-12A Working at Heights Checklist

TERRITORY GENERATION	WHS-12A **WORKING AT HEIGHTS CHECKLIST: PART A**	This hazard control checklist shall be completed if working at heights is identified in the preparation of a Job Safety and Environment Analysis (JSEA).

Description of work at heights task:	**Work order number:**	
Location:	**Asset name:**	
EWP, Crane, Scissor lift, Forklift type:	**Pre-start Log Book completed by:**	
Work at heights type:	☐ 2m or greater fall height possible	☐ <2m into an area containing a hazard
Means of access to location at height:	☐ Existing platform, walkway, access way	☐ Erection of scaffolding
	☐ Fixed ladder, stairway or portable ladder	☐ Elevated work platform (EWP), including scissor lift
	☐ Other (crane or forklift work box, etc.):	

WORKING AT HEIGHT CONTROLS:

BARRICADE	**PREVENTION OF FALLING OBJECTS**
☐ Solid barrier with top rail, mid rail and kick boards (*mandatory above 2m*)	☐ Erection of toe boards, infill, mesh guards, etc on all edge protection
☐ Soft barrier wet and slippery surfaces accounted for	☐ Erection of containment sheeting on work platforms and scaffolds
PERSONAL FALL PROTECTION	☐ Erection of overhead protection
☐ Fall restraint system	☐ Establishment of an exclusion zone below the work area via barricades and signs
☐ Fall arrest system	☐ Fragile and wet surfaces/rooftops
☐ Anchorage inspected and approved for use	☐ Other:
☐ Safety observer	**PERSONAL PROTECTIVE EQUIPMENT (PPE)**
☐ Tool restraints	☐ Safety helmet ☐ Safety glasses ☐ Safety Harness ☐ Lanyard

RESCUE/RETRIEVAL CONSIDERATIONS: The following controls should be considered in situations involving the use of fall arrest harness systems

☐ Personnel involved in the work are competent to perform rescue/retrieval	☐ Any additional requirements for rescue/retrieval are able to be enacted immediately
☐ Additional retrieval/rescue equipment is available at the immediate work location	☐ Other:

Prepared/Authorised by	Name:	Signed:	Date:
	Supervisor:	Signed:	Date:
	Safety Observer:	Signed:	Date:

	WORKING AT HEIGHTS CHECKLIST: PART B			This equipment Inspection checklist shall be filled out covering all Working at Heights equipment to be used. **Any Defective equipment shall be removed from service and tagged immediately**	
Type of equipment: (Harness, lanyard etc.)		**Equipment Manufacturer:**	**Serial Number**	**Year of Manufacture:**	**Remove from service date:**
Harnesses, Lanyards and associated equipment					
Webbing:	☐ No cuts or tears	☐ No abrasion damage	☐ No damage due to contact with heat, oils or chemicals.	☐ No deterioration due to rotting, mildew or UV exposure	☐ No activation of fall indicators where fitted.
Snap Hooks and Carabiners:	☐ No distortion of hook or latch.	☐ Free from dirt or other obstructions.	☐ No cracks or wear at swivels and latch points.	☐ No free movement of the latch over its full travel.	☐ No broken, weak or missing latch springs.
D-Rings:	☐ No excessive vertical movement of the D-ring	☐ No cracks, especially at the joins of straight and curved sections.	☐ No distortion or other physical damage of the D-ring	☐ No excessive loss of cross section due to wear.	
Buckles and adjusters:	☐ No distortion or other physical damage	☐ No cracks	☐ No bent tongues		
Stitching:	☐ No broken, cut or worn threads.	☐ No damage or weakening of threads.	☐ No signs of contact with heat, oils or other chemicals.		
Ropes:	☐ No cuts	☐ No abrasion or fraying	☐ No stretching	☐ No damage due to contact with heat, oils or chemicals.	☐ No deterioration due to UV's or mildew
Fall Arrest Devices					
Rope or Webbing:	☐ No cuts	☐ No Fraying or abrasion	☐ No damage due to contact with heat, oils or chemicals.	☐ No excessive dirt or grease/oil impregnation	☐ No activation of fall indicators where fitted.
Mounting Ring:	☐ No physical damage or wear	☐ No cracks, especially in corners	☐ Check mounting security	☐ No wear or damage around pivot points	
Device Body:	☐ No significant dents, distortion, corrosion or cracks	☐ No loose or missing screws, nuts or bolts (external check only)	☐ No foreign bodies such as small stones within the body (To be checked without dismantling)	☐ Correct use labels and service label/tag is present and legible.	
Hardware:	☐ Check the condition and locking action of any associated snap hooks, links and the condition of anchorage points to be used.				