FALL PREVENTION PROCEDURE (25) V2

PURPOSE

To provide guidance in the management of falls prevention.

RESPONSIBILITIES

Persons Conducting a Business or Undertaking (PCBU) must ensure so far as is reasonably practicable:

- a hazard management approach to risks arising from exposure to falls is adopted (identification, assessment, control and review)
- that any work involving the risk of a fall is carried out on the ground or on a solid construction
- risk assessments are conducted for identified working at heights tasks
- effective control measures are in place to minimise exposure to falls
- a fall prevention device, work positioning system or a fall arrest system is provided
- compliance with legislation relating to working at heights
- information, instruction and supervision is provided to workers as required for protection from falls
- consultation, coordination and cooperation occurs with other duty holders, workers and worker representatives about fall exposure in order to monitor the risk and the effectiveness of controls.

Officers

Officers must exercise due diligence to ensure that the PCBU meets their responsibilities as above.

Workers must:

- take reasonable care for their own safety and avoid adversely affecting the health and safety of others through any act or omission
- identify and report any concerns relating to the risk of falls
- consult and communicate regarding the identification and control of falls
- comply with all reasonable instructions and procedure relating to fall exposure
- use and maintain PPE as instructed.

DEFINITIONS

Definitions of terms can be found on the Catholic Safety website or via this link here.

ACTIONS

INFORMATION
Falls are a major cause of death and serious injury in Australian workplaces. Fall hazards are found in many workplaces where work is carried out at height, for example stacking shelves, working on a roof, unloading a large truck. Falls can also occur at ground level into holes, for example trenches or service pits.

HAZARD IDENTIFICATION	
Identify all locations and tasks that could cause injury due to a fall	Tasks that need particular attention are those carried out: • on any structure or plant being constructed or installed, demolished or dismantled, inspected, tested, repaired or cleaned • on fragile surfaces – cement sheeting roofs, fibreglass sheeting roofs and skylights • on a potentially unstable surface – areas where there is potential for unstable ground. • using equipment to work at the elevated level – portable ladders or using elevated work platforms • on a slope or slippery surface where it is difficult for people to maintain their balance

	• near unprotected open edge – near incomplete stairwell • near a hole, shaft or pit into which a worker could fall – trenches or service pits. INSPECT THE WORKPLACE – walk around and talk to your workers. Key things to look for include: • Surfaces. o The stability, fragility or brittleness. o The potential to slip where surface are wet, polished or glazed. o The safe movement of workers where surfaces change. o The strength or capability to support loads. o The slope of work surface – where they exceed 7 degrees. • Levels – where levels change and workers may be exposed to a fall from one level to another. • Structures – the stability of temporary or permanent structures. • Grounds – the evenness and stability of the ground for safe support of scaffolding or a work platform. • Work Area – whether it is crowded or cluttered. • Entry and exit from the working area. • Edges – protection for open edges of floors, working platforms, walkways, walls or roofs. • Holes, openings or excavations – which require guarding. • Hand grip – places where hand grip may be lost. REVIEW AVAILABLE INFORMATION, INCLUDING INCIDENT REPORTS – check your records of previous injuries and 'near miss' incidents related to falls.
RISK ASSESSMENT	
Risk Assessments (Documented for scheduled and high risk activities)	When assessing the risk of each fall hazard, the following matters should be considered: • The design and layout of elevated work areas, including the distance of a potential fall. • The number and movement of all people in the workplace. • The proximity of workers to unsafe areas where loads are placed on elevated working areas, and where work is to be carried out above people and there is a risk of falling objects. • The adequacy of inspection and maintenance of plant and equipment e.g scaffolding. • The adequacy of lighting. • Weather conditions – rain, wind, extreme heat or cold. • The suitability of footwear and clothing for conditions. • The suitability and condition of ladders, including where and how they are being used. • The adequacy of current knowledge and training to perform the task safely. • The adequacy of procedures for potential emergency situations.
CONTROLS	
Control Measures	Using the 'Hierarchy of Controls' that most effectively eliminates or minimises the risk: • Can the need to work at height be avoided or eliminate the risk of a fall? • Can the fall be prevented by working from a solid construction? • Can the risk of a fall be minimised by providing and maintaining a safe system of work, including: o Providing a fall protection device e.g installing guard rails o Providing a work positioning system e.g industrial rope access system

	○ Providing a fall arrest system so far as reasonably practicable ○ Otherwise provide a fall prevention device or a work positioning system
Review of Control Measures	Controls must be reviewed and as necessary revised: • when the control measure does not control the risk so far as reasonably practicable • before a change at the workplace that is likely to give rise to a new or different health and safety risk that the control measure may not effectively control • if a new hazard or risk is identified • if the results of consultation indicate that a review is necessary • if a health and safety representative requests a review. Consult with workers and health and safety representatives and consider the following: • Are the control measures working effectively in both their design and operation? • Are all fall hazards being identified? • Are workers using control measures in accordance with instruction and training that has been provided?
Falls on the same level	To control slips, trips and falls consider the following: • Environment (floor, steps, slopes etc). • Contamination (water, food, litter etc). • Organisation (task, safety culture etc). • Footwear appropriate for the task. • Equipment (steps, ladders, harnesses etc). • Individual factors (e.g. information and training, supervision, pedestrian behavior, vision etc). A range of measures will be required to control the hazards.
Work on the ground or on a solid construction	Eliminating the need to work at heights is the most effective way of protecting workers from the risk of falls. Eliminating the risk by working on the ground may include but not limited to: • reducing shelving height so that workers can access items from ground level • using tools with extendable handles, such as paint rollers. Working on a solid construction 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 • has a safe means of entry and exit.
Licence to Perform High Risk Work	A Licence to Perform High Risk Work is required for the following kinds of work: • Crane and hoist operation. • Dogging and rigging work. • Forklift operation. • Pressure equipment operation. • Scaffolding work. Further information can be found on the SafeWork SA website.
Fall Prevention Devices	A fall prevention device is any equipment that is designed to prevent a fall for temporary work at heights, and once in place does not require any further adjustment by workers using the device.

SCAFFOLDING

A person with management or control of a scaffold must not allow the use of a scaffold from which a person or object could fall more than 4 meters unless a competent person provides written confirmation that the scaffold has been completed. The person must also ensure that:

- The scaffold and its supporting structures is inspected by a competent person before use, after any incident that could affect its stability (such as a severe storm), after any repairs, and at least every 30 days.
- Unauthorized access is prevented on scaffolding that is incomplete and left unattended.

Scaffolding work platforms are rated as light, medium or heavy duty. Safety considerations include:

- Scaffolding must conform to *AS/NZS 4576 Guidelines for scaffolding* and the *AS/NZS 1576 Scaffolding* series.
- All scaffolding is erected, altered and dismantled by competent persons. Any scaffold from which a person could fall more than 4 meters must be erected, altered and dismantled by or under the direct supervision of a licensed scaffolder.
- Prefabricated scaffolds are of the same type and not mixed components, unless the mixing of components has been approved by the manufacturer.
- Safe access to and egress from the scaffold is provided.
- Edge protection (hand rails, mid rails and toe boards) is provided at every open edge of a work platform.

Information, instruction and training for workers using scaffolds

Where a scaffold is used workers must:

- be aware of what loads the scaffolds can safely take
- not make any unauthorised alterations to the scaffold
- ensure working platforms are kept clear of debris and obstructions along their length
- never access incomplete or defective scaffolds.

When using a mobile scaffold, workers should ensure it:

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

See Mobile Scaffold Safety Checklist.

FIXED PLATFORMS AND WALKWAYS

Where there are steps, stairways and walkways, appropriate handrails/balustrades must be installed as per the AS 1657 Fixed platforms, walkways, stairways and ladders – design, construction and installation. Also, must be compliant with the Building Code of Australia.

Some workplaces have temporary building structures (e.g. transportable buildings). Often there will be 2 or 3 steps. Based on a risk assessment, some form of grab rail (normally affixed alongside the door) or hand rail shall be installed.
Key points to take into consideration with stair design:

- Ensure the stair treads are uniform throughout a flight of stairs .
- Applying non-slip edges (nosings). This will also give visual definition to the edge of the stairs. Be careful with metal nosings as they can create a lip if not blended smoothly with carpet.
- Provide clear visual cues for the start and finish of the stairs.
- Ensure there is ample lighting.

- Provide handrails (between 900mm and 1100mm as per AS 1657).
- Ensure they are free of grease, oil and obstacles which could cause slips and trips.

ELEVATING WORK PLATFORMS

Elevating Work Platforms (EWPs) include scissor lifts, cherry pickers, boom lifts and travel towers. Safety considerations include that:

- workers operating the platform are trained and instructed in the safe operating procedures for the particular brand and type of equipment, as well as the safe use of fall-arrest equipment and emergency rescue procedures
- All workers operating EWP's must meet the minimum standard of training as set out in the Elevating Work Platforms - minimum standard of training document produced by SafeWork
- the platforms are only used as working platforms and not as a means of entering and exiting a work area
- platforms are only used on a solid level surfaces (unless designed for rough terrain)
- the surface area is checked to make sure that there are no penetrations or obstructions that could cause uncontrolled movement or overturning of the platform
- the manufacturers or suppliers instructions are consulted for information on safe operation
- persons working in travel towers, boom lifts or cherry pickers wear properly anchored safety harness
- workers are licensed when operating boom- type elevating work platforms with a boom length of 11 metres or more.

FRAGILE ROOFING/SKYLIGHTS

Where there is a skylight or other fragile roofing material (e.g. fibreglass or asbestos sheeting), safety wire mesh **MUST** be securely fixed immediately above or below OR securely fixed and adequately maintained barriers must be installed (particularly around the skylight).

Safety mesh should comply with AS/NZS 4389 *Safety Mesh*, which specifies the minimum requirements for the design, construction, testing and installation of safety mesh for use in domestic, commercial and industrial building applications. The mesh should be:

- formed from 2mm diameter wire of not less than 450MPa tensile strength
- welded into a mesh with the longitudinal wires not more than 150mm apart and the cross wires not more than 300mm apart
- installed in accordance with the manufacturer's instructions by competent persons, who should be protected against the risk of falling by using appropriate control measures such as scaffolding, elevated work platforms or fall arrest systems.

TABLE 1

REQUIREMENTS FOR SAFETY MESH AND FASTENING OF LONGITUDINAL WIRES

Minimum nominal diameter of wire mesh	Spacing of longitudinal wires		Spacing of transverse wires	Minimum mass of zinc coating	Minimum nominal diameter of staple wire	Minimum length of staple		Maximum spacing of staples or other fastening
	mm					Fastening onto side of timber rafter	Fastening onto top of timber rafter	
mm	Min.	Max.	mm	g/m²	mm	mm	mm	mm
2.00	145	155	300 ±5	38	3.15	30	40	155
3.15	145	305	300 ±5	48	3.15	30	40	305

Safety mesh does not prevent falls from the edge of a roof or through holes in a roof, so it should always be used in conjunction with appropriate edge protection, guard rails or fall arrest systems.

	AS/NZS 1562.3 *Design and installation of sheet roof and wall cladding*, states roofs with a pitch 40 degrees or more do not require safety mesh. Signage may be used as an additional administrative control to support other measures such as safety mesh. 
Fall Arrest Systems	***ANCHORAGE POINTS*** Any site must have anchor points and any other part of a fall arrest system inspected by a competent person. The Code of Practice (COP) 2012 for Managing the risk of Falls in the Workplace states: *Inspect the system components* *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 • immediately *after it has been used to arrest a fall.* *Inspection of all components should be conducted in accordance with the* ***manufacturer's specifications and the relevant standards****. If any signs of wear or weakness are found during the inspection, the components or means of attachment should be withdrawn from use until they are replaced with properly functioning components.* The Australian/New Zealand Standard (AS/ANS)1891.4 Industrial fall-arrest systems and devises Part 4: Selection, use and Maintenance states in Table 9.1 Anchorages—drilled-in type or attached to timber frames — Clause 9.3.3 — 12-monthly inspection by a height safety equipment inspector (see Note 3) Anchorages—other types — Clause 9.3.3 — Frequency of inspection by a height safety equipment inspector as recommended by the manufacturer to a maximum of 5-yearly. 12-monthly inspection in the absence of such recommendations (see Note 3) NOTES: 1 Where used in harsh conditions, more frequent inspection may be required. 2 If the user or operator of the equipment is not competent to carry out this inspection it is to be undertaken by another person who is competent, see Clause 9.2. 3 All inspections except those by the operator are to be documented (see Clause 9.10). ***ENSURE PROMPT RESCUE IN EVENT OF FALL*** If a fall arrest system has been installed as a control measure all sites must establish emergency and rescue procedures. Refer to Emergency Rescue Procedures.
Portable Ladders	Selecting Ladders If ladders are used they must be selected to suit:

- the task to be undertaken
- the duration of the task
- the physical surroundings of where the task is to be undertake
- the prevailing weather conditions

In a low risk environment such as an office or classroom, a 2 step domestic ladder with a minimum load rating of 120kg and made to Australian Standards is acceptable. A 3 step or above ladder must be industrial rated with a minimum load rating of 120kg.

Positioning of Ladders

Any ladder used at a workplace must be:

- set up on a solid and stable surface
- set up to prevent slipping
- placed at a slope of 4:1, and setting up stepladders in the fully opened position
- secured at the top or the bottom, or if necessary both ends
- extended at least one (1) metre above the stepping-off point on the working platform, and fall protection at the stepping-off point where people access the working platform.

Safe Use of Ladders

See Appendix 2 for parts of ladder. When a ladder is used check:

- for faults (broken rungs, stiles and footing)
- the ladder is the correct height for the task to avoid reaching or stretching
- the ladder is not placed so that the weight of the ladder and any person using the ladder is supported by the rungs
- all the locking devices on the ladder are secure
- materials or tools are not carried while climbing the ladder
- only light work is undertaken while on the ladder, where three points of contact can be maintained and tools can be operated safely with one hand
- slip resistant base, rungs or steps are provided
- slip resistant shoes are worn
- that it is not placed in access areas or doorways, on scaffolding or an elevated work platform for extra height
- for overhead power lines
- the ladder is not placed next to traffic areas unless barricaded
- damaged ladders are removed from service.

When using ladders do not:

- use any ladder containing metal when working on live electrical installations
- carry out such work as arc welding or oxy cutting
- work over other people
- allow anyone else to be on the ladder at the same time
- use a stepladder near the edge of an open floor, penetration or beside any railing
- over reach
- use any power or hand tools requiring two hands to operate, such as circular saws
- use tools that require a high degree of leverage force which, if released may cause the user to over balance or fall from the ladder
- face away from the ladder when going up or down, or when working from it
- stand on a rung closer than 900mm to the top of a single or extension ladder
- stand higher than the second tread below the top plate of any stepladder (with the exception of three-rung step ladders).

Guidance on the selection, safe use and care of potable ladders is set out in AS/NZS 1892 *Portable ladders series.*

Ladder Maintenance

	Ladders must be checked annually by a competent person in accordance with the manufacturer's recommendations. See Ladder Inspection Register.
Administrative Controls	Restricted Areas – can be an effective method of making sure people are not exposed to hazards. They require clear signs warning people not to access the hazardous area. They can be used to highlight the risks of entry to an area where there is an unguarded hazard, or to areas where work is being undertaken overhead and there is a risk of falling objects. Permit Systems – allow only competent persons trained in the use of relevant control measures to work in an area where there is a hazard. Organising and Sequencing of Work – work should be organised so that people do not interfere with other workers or increase the risk to themselves or others. Plan the work so tasks are not performed for extended periods from a ladder, or so that work at height is minimised in extremely hot or cold weather. Safe Work Procedures – which will describe the steps involved in safely undertaking the task. It may also include any particular training, instruction and the level of supervision required.
Emergency Rescue Procedures	**A PCBU who implements a fall-arrest system as a measure to control risk must establish emergency and rescue procedures.** Workers must be provided with: • information on emergency rescue procedures • procedures in the event of different emergencies such as rescues, accidents or injuries • an induction on the emergency rescue procedures • training in the emergency rescue procedures • training in the use of fall-arrest systems (where used). The procedures should take into the account the need for: • a plan and timeframe to carry out any rescues • the immediate rescue of a person after an arrested fall, without the need to rely on emergency services • the necessary equipment required to carry out a rescue (refer to AS 4142.3 Man-made fibre rope for static life rescue lines) • ensuring that any persons using a fall-arrest system or industrial rope access are not working alone • the availability of access to first aid facilities or services, including trained first aiders. The rescue team should include a person or people trained in the provision of first aid so that it can be administered to the fall victim in the event of an injury occurring during a fall • the details of additional support facilities, including the location, contact information and availability (open hours) of emergency services, such as fire brigade, ambulance and hospitals • an effective and readily available means of communication The procedures must be tested so that they are effective. Workers must be provided with suitable and adequate information, instruction and training in relation to the emergency procedures. **Further information for developing a procedure will assist in this task (Refer to Appendix 1).**
INFORMATION, INSTRUCTION AND TRAINING	
	• Inform workers of this procedure at induction. • Provide training specific to workers defined roles.

DOCUMENT CONTROL	
	Risk assessments and all other related documents for this procedure must be kept for 7 years.
MONITOR AND REVIEW	
	This procedure will be monitored for compliance and effectiveness by Catholic Safety Health & Welfare SA as per the CCSM Audit Procedure 7.

RELATED DOCUMENTS

External Documents

SA Work Health and Safety Act 2012
SA Work Health and Safety Regulations 2012
Managing the Risk of Falls at Workplaces (Code of Practice December 2012)

Internal Documents

Work Health & Safety and Injury Management Policy
CCES Procedures No 1-31

APPENDICES

Appendix 1 – Consideration for developing Emergency Procedures
Appendix 2 – Parts of Ladders
Appendix 3 – Instructions for Employees on Use of Ladders

FORMS

Ladder Inspection Register
Mobile Scaffold Safety Checklist

VERSION CONTROL AND CHANGE HISTORY

Version	Approved By	Approved Date	Reason for Development of Review	Review Date
4	Sector Forums	March 2014	Legislation – New WHS Act	2017
April 2015 – Document consolidated across CCES sectors				
V1	Executive Manager CSHW	24/04/2015	Procedure consolidation and reviewed	2018
V2	Executive Manager CSHW	03/05/2017	Add information about EWP training	2018

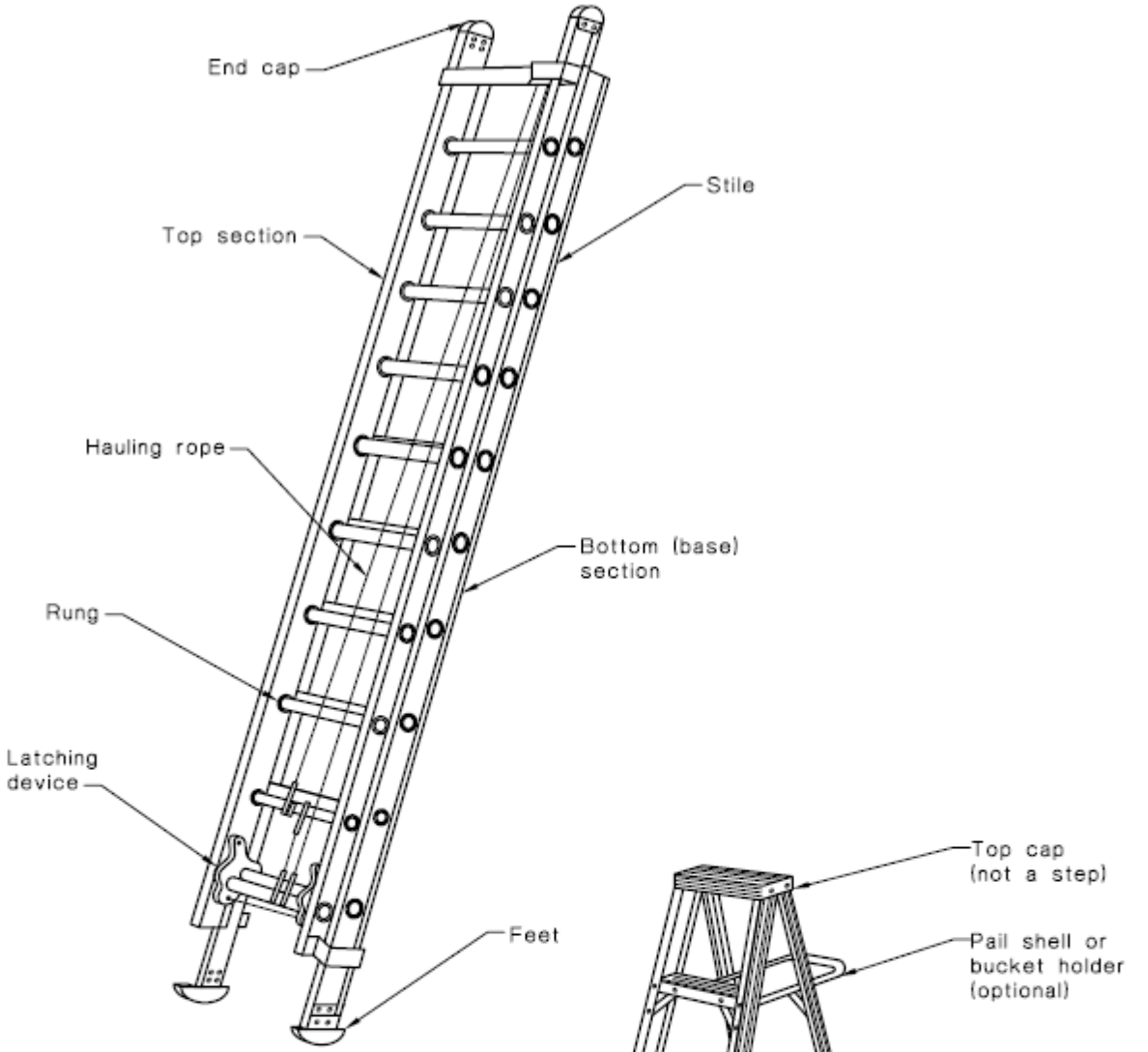
Approved for Publication: _____ **Date: 3 May 2017** _____
Kathy Grieve

APPENDIX 1 – CONSIDERATION FOR DEVELOPING EMERGENCY PROCEDURES

When establishing emergency procedures, you should take into account the following:

RELEVANT CONSIDERATIONS	QUESTIONS
Location of the work area	Is the work at height being undertaken in a remote or isolated place? How accessible is it in an emergency and how far away is it from appropriate medical facilities? Can the rescue of a person after an arrested fall be provided immediately, without the need to rely on emergency services?
Communications	How can workers working at height communicate in an emergency?
Rescue equipment	What kinds of emergencies may arise? The provision of suitable rescue equipment will depend on the nature of the work and the control measures used, for example, an emergency rapid response kit with man-made fibre rope, according to AS/NZS 4142.3 *Fibre ropes—Man-made fibre rope for static life rescue lines*. Selected rescue equipment should be kept in close proximity to the work area so that it can be used immediately.
Capabilities of rescuers	Are rescuers properly trained, sufficiently fit to carry out their task and capable of using any equipment provided for rescue (e.g. breathing apparatus, lifelines and fire-fighting equipment)? Have emergency procedures been tested to demonstrate that they are effective?
First aid	Is appropriate first aid available for injuries associated with falls? Are trained first aiders available to make proper use of any necessary first aid equipment?
Local emergency services— if they are to be relied on for rescue	How will the local emergency services (e.g. ambulance) be notified of an incident? What is the likely response time?

APPENDIX 2 – PARTS OF LADDERS

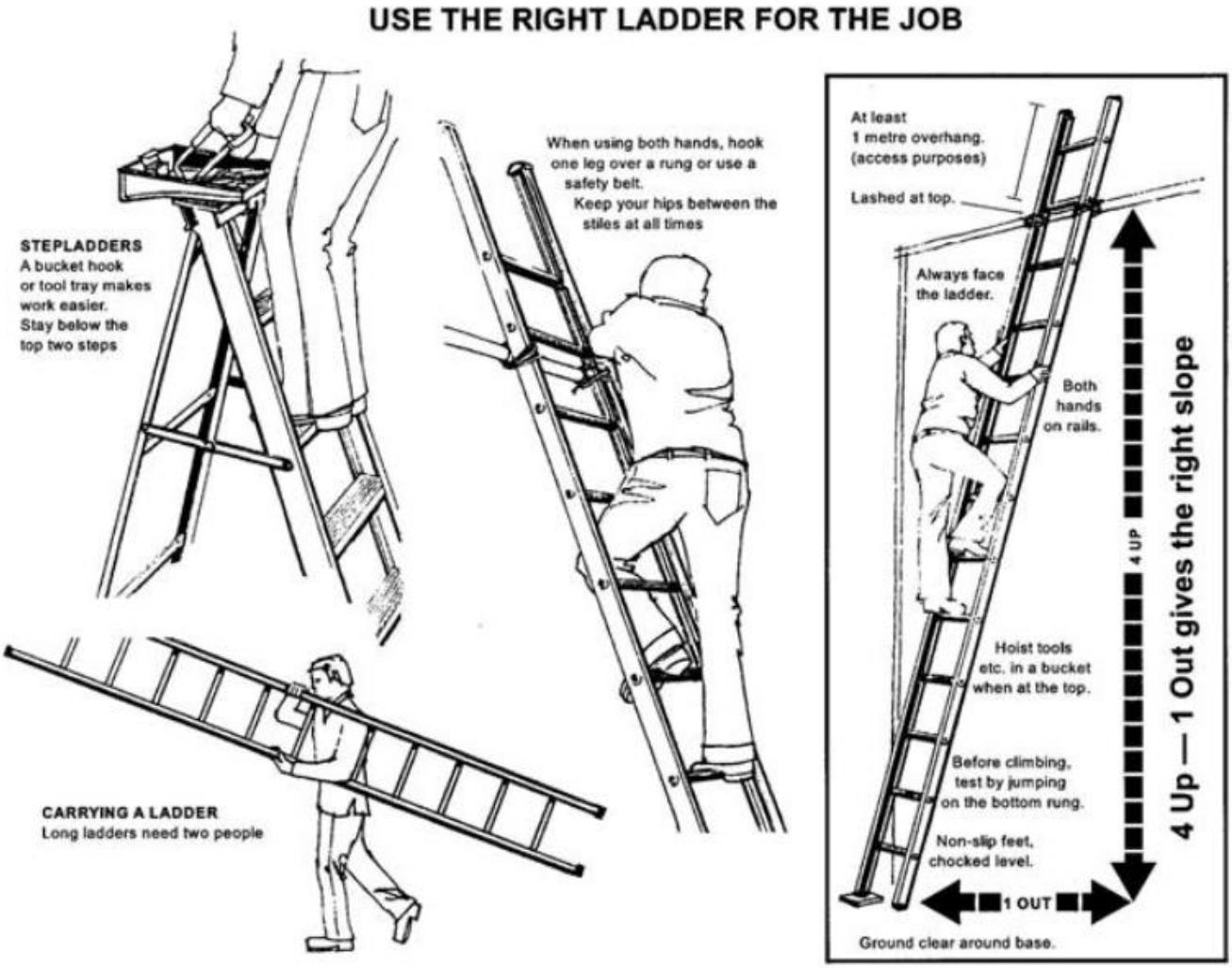


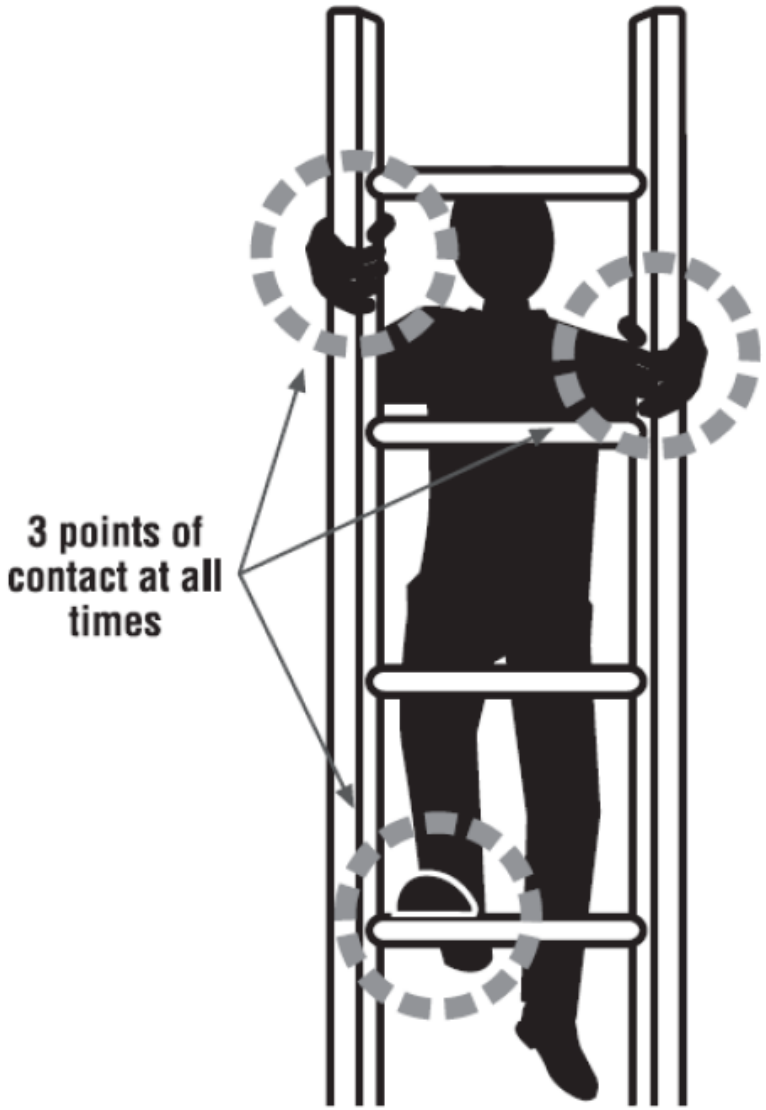
APPENDIX 3 – INSTRUCTIONS FOR EMPLOYEES OF USE OF LADDERS

EMPLOYEES:

If you must use a ladder, before you start work:

- conduct a hazard identification and risk assessment
- install a barricade or warning signs if there is a hazard to persons in proximity of the work area
- ensure that the ladder has an angle or pitch of about 1:4
- ensure that the ladder extends at least one metre above the landing
- ensure that the ladder is installed on a firm footing
- secure the top and bottom of the ladder against displacement
- ensure that a non-conductive, insulated ladder is used for electrical work or near electrical hazards
- ensure that the ladder will not be used in a manner that endangers any person.





Three points of contact with the ladder should be maintained at all time, i.e. two feet and one hand, two hands and one foot or two fee and the frontal D ring on the harness attached to the arrest/restraint line or inertia reel. Tools and materials should not be carried by hand, They should be in a tool belt or side pouch.