



SAFE WORK METHOD STATEMENT (SWMS) – ROOF EDGE PROTECTION



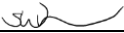

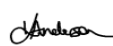
ACTIVITY: ROOF EDGE PROTECTION	SWMS #: 04
BUSINESS NAME: ANDERSON'S SCAFFOLDING	BUSINESS ABN #: 14142038113
BUSINESS ADDRESS: 49 CAMFIELD DRIVE, HEATHERBRAE NSW 2324.	
BUSINESS CONTACT: RICK ANDERSON	PHONE #: (02) 4964 9597

SWMS APPROVED BY: ANDERSONS' SCAFFOLDING.

NAME: RICK ANDERSON	
SIGNATURE: 	DATE: 01/04/22

ALL WORKERS ARE RESPONSIBLE FOR ENSURING THEIR OWN COMPLIANCE WITH THIS SWMS. ANDERSONS SCAFFOLDING SUPERVISORS CONDUCT REGULAR SWMS SAFETY OBSERVATIONS TO CHECK WORKER KNOWLEDGE AND THAT WORK IS CONDUCTED IN COMPLIANCE WITH SWMS.

PERSON/S RESPONSIBLE FOR REVIEWING THE SWMS: RICK ANDERSON, JOSHUA PRIOR, SCOTT WILLIS, GERARD HINGERTY, KIM ANDERSON (IN CONSULTATION WITH ALL RELEVANT WORKERS)

RELEVANT WORKERS CONSULTED IN THE DEVELOPMENT, APPROVAL AND COMMUNICATION OF THIS SWMS.			ALL PERSONS INVOLVED IN THE TASK MUST HAVE THIS SWMS COMMUNICATED TO THEM BEFORE WORK COMMENCES.
NAME	SIGNATURE	DATE	<p>In addition to this SWMS, daily Job Safety Analysis (Risk Assessment)/Tool Box Talks will be undertaken to identify, control and communicate additional site specific hazards.</p> <ul style="list-style-type: none"> • Work must cease immediately if incident or near miss occurs. SWMS must be amended in consultation with relevant persons. • Amendments must be approved by Rick Anderson and communicated to all affected workers before work resumes. • SWMS must be made available for inspection or review as required by WHS legislation. • Record of SWMS must be kept as required by WHS legislation (until job is complete or for 2 years if involved in a notifiable incident).
RICK ANDERSON		01/04/22	
JOSHUA PRIOR		01/04/22	
SCOTT WILLIS		01/04/22	
GERARD HINGERTY		01/04/22	
KIM ANDERSON		01/04/22	

PRINCIPAL CONTRACTOR DETAILS

PRINCIPAL CONTRACTOR (PC):	PROJECT NAME:	DATE SWMS PROVIDED TO PC:
PROJECT ADDRESS:		
PROJECT MANAGER (PM):	PM SIGNATURE:	CONTACT PH. #:

SWMS SCOPE: This SWMS covers general aspects associated with installation, use and subsequent dismantling of roof edge protection systems. Included is the use of safety harness, ladders, and mobile scaffolding.

THIS WORK ACTIVITY INVOLVES THE FOLLOWING “HIGH RISK CONSTRUCTION WORK”

- Confined Spaces Mobile Plant Demolition Asbestos
- Using explosives Diving work Artificial extremes of temperature Tilt up or pre-cast concrete
- Pressurised gas distribution mains or piping chemical, fuel or refrigerant lines energised electrical installations or services
- Structures or buildings involving structural alterations or repairs that require temporary support to prevent collapse
- Involves a risk of a person falling more than 2m, including work on telecommunications towers
- Working at depths greater than 1.5 Metres, including tunnels or mines Work in an area that may have a contaminated or flammable atmosphere
- Work carried out adjacent to a road, railway or shipping lane, traffic corridor In or near water or other liquid that involves risk of drowning

LIKELIHOOD	INSIGNIFICANT	MINOR	MODERATE	MAJOR	CATASTROPHIC	SCORE	ACTION	HIERARCHY OF CONTROLS
ALMOST CERTAIN	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4 ACUTE			
LIKELY	2 MODERATE	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4 ACUTE	DO NOT PROCEED.	
POSSIBLE	1 LOW	2 MODERATE	3 HIGH	4 ACUTE	4 ACUTE	3 HIGH	Review before commencing work.	
UNLIKELY	1 LOW	1 LOW	2 MODERATE	3 HIGH	4 ACUTE	2 MODERATE	Maintain control measures.	
RARE	1 LOW	1 LOW	2 MODERATE	3 HIGH	3 HIGH	1 LOW	Record and monitor.	

PERSONAL PROTECTIVE EQUIPMENT (PPE): ALL PPE MEETS RELEVANT AUSTRALIAN STANDARDS AND IS INSPECTED, AND REPLACED AS NEEDED.

FOOT PROTECTION	HEARING PROTECTION	HIGH VISIBILITY	HEAD PROTECTION	EYE PROTECTION	FACE PROTECTION	HAND PROTECTION	PROTECTIVE CLOTHING	BREATHING PROTECTION	SUN PROTECTION	HEIGHT SAFETY EQUIPMENT	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Rings, watches, jewellery that may become entangled in machines must not be worn. Long and loose hair must be tied back. <input checked="" type="checkbox"/>

JOB STEP	POTENTIAL HAZARD/S	CONTROL MEASURES TO REDUCE RISK	RISK RATING AFTER CONTROLS APPLIED
1. Planning & preparation	Lack of planning may lead to potential outcomes for personal injury, property damage &/or environmental incident.	<ul style="list-style-type: none"> • Andersons management are to liaise with Principal Contractor to establish the following on-site systems and procedures are in place and take note of: <ul style="list-style-type: none"> ○ WHS Rules and requirements ○ Induction for all workers – site specific and toolbox meetings ○ Supervisory arrangements ○ Communication arrangements ○ All relevant workers are appraised for required competencies & for any pre-existing medical conditions if working in remote or isolated locations. • Edge protection system – always consider: <ul style="list-style-type: none"> ○ Access points ○ Height and pitch of roof ○ Roofing materials, condition, and method of fixing ○ Obstructions under roof area ○ Batten type ○ Gutter and fascia types ○ Proximity to utilities and power lines ○ Presence of hazardous materials ○ Structural strength to support required load ○ Building materials and condition • Ensure edge protection system designed by suitably competent person. Include: <ul style="list-style-type: none"> ○ Construction sequence and detailed install instructions ○ Location of guardrails on structure – wherever a fall risk exists – includes edge, voids, stairwells, skylights, unsafe or brittle roof surface etc. <p>⚠️ Ensure all components of the edge protection system meet relevant Standards. ⚠️ Do not perform any work if the pitch of roof is more than 30 degrees ⚠️ Consult with Principal Contractor /Client regarding Falls Emergency Rescue Plan</p>	2

JOB STEP	POTENTIAL HAZARD/S	CONTROL MEASURES TO REDUCE RISK	RISK RATING AFTER CONTROLS APPLIED
2. Training and Capabilities	Personal injury, property damage &/or environmental incident.	Andersons Management will: <ul style="list-style-type: none"> • Ensure site-specific induction is undertaken (include location of amenities, first aid facilities, emergency plans and evacuation points, incident reporting, communication, contact persons etc.) • Ensure all persons entering site have a General Construction Induction Card (white card) • Ensure all relevant workers have undertaken training and/or received instruction in the installation, use and removal of edge protection systems, including control measures for use of height access equipment. Including: <ul style="list-style-type: none"> ○ Reporting procedures for incidents ○ Valid Working at Heights Ticket ○ Construction sites - General Construction Induction Card (white card) ○ Correct use of height access equipment including selecting, fitting, use, care of and maintenance ○ Correct use of all tools used ○ Use of supervision where required (e.g. new starters or new equipment) ○ Ensure supervisors, foremen etc. are experienced in the type work to be conducted ○ All workers are trained in this SWMS. <p>⚠ Check workers are in fit condition to work – no signs of fatigue, alcohol, or drugs.</p>	2
3. Arrival at site	Hit by mobile plant/vehicles	Anderson’s workers must always: <ul style="list-style-type: none"> • Park work vehicle in driveway if possible, or allocated parking to avoid travelling across roads when loading/unloading materials for work • Erect any barriers & signage necessary to keep others safe and aware. • Follow traffic management requirements: <ul style="list-style-type: none"> ○ High visibility clothing worn at all times ○ Do not stand behind reversing vehicles ○ Allow sufficient distance from plant during operation (allow sufficient room for equipment failure – such as arm/boom failure or plant rollover) ○ Alertness at all times. Listen for: <ul style="list-style-type: none"> ▪ Reversing alarms/beepers and/or calls from plant operators ○ Work positions should be in clear sight of plant operators 	2
	Personal injury, property damage &/or environmental incident.	Anderson’s workers must: <ul style="list-style-type: none"> • Ensure Access /egress to site is clear and unobstructed prior to commencing work • Check the height and pitch of roof/structure to ensure the system will be compliant with the engineered design • Check the entire site for hazards and obstructions • Locate utilities and power lines to ensure work can be safely conducted within legal limits i.e. not within 4m of live power (low voltage). 	2

JOB STEP	POTENTIAL HAZARD/S	CONTROL MEASURES TO REDUCE RISK	RISK RATING AFTER CONTROLS APPLIED
		<ul style="list-style-type: none"> • Check for the presence of hazardous materials/conditions. <u>Example:</u> <ul style="list-style-type: none"> ○ Asbestos / Lead ○ Skylights, etc. ○ Algae /vegetation on roof/structure. ○ Building materials and condition ○ Structural strength and load bearing capacity to support required loads. 	
4. Work area set up	Manual handling tasks	<ul style="list-style-type: none"> • Movement of material from the delivery point to the installation area usually represents the greatest opportunity for damage or injury, particularly if being placed manually. • When unloading components from the vehicle, Andersons workers are to: <ul style="list-style-type: none"> ○ Lift within individual physical capabilities ○ Keep arms close to body (this excludes large/bulky items that are difficult to grasp, or hot/cold objects that cannot be held against body) ○ Ensure the surface is safe to walk on i.e. no obstructions or pits ○ Inspect roof rail components prior to lifting. Check they are in good condition and free from damage ○ Ensure you are equipped with correct PPE, if not advise management immediately ○ Seek assistance if the load is too heavy or break down the load to make it lighter ○ Use proper lifting techniques when loading and unloading ○ Bend your knees when lifting heavy items ○ If placing materials along roof perimeter, ensure loads remain stable. 	2
	Contact with electricity	<ul style="list-style-type: none"> • All workers must visually locate: <ul style="list-style-type: none"> ○ Any electrical cabling, power lines and other services prior to work commencing ○ Power should be isolated for the duration of the work when it is within 4m (low voltage) and 6m (high voltage) of the work zone, by the Principal Contractor. • Andersons management will ensure all power tools and leads including cordless equipment is Tested and Tagged current by licenced electrician • All workers must pre-inspect equipment prior to use - If equipment is damaged, take out of service and tag out using the tag out procedure. 	2
	Contact with asbestos	<ul style="list-style-type: none"> • If the presence of asbestos containing material (ACM) is determined: <ul style="list-style-type: none"> ○ A Competent person can identify if ACM is present (e.g. roof, eaves etc.) ○ Anderson’s workers should obtain as much information as possible on the location, type, and condition of ACM and notify the Principal Contractor and Anderson’s management immediately ○ If asbestos has already been identified, Anderson’s workers are to obtain a copy of the asbestos register for the site to ensure the asbestos will not be disturbed by the installation/dismantle of edge protection. <p>⚠ Do not drill or disturb asbestos unless completed by a qualified person.</p>	2

JOB STEP	POTENTIAL HAZARD/S	CONTROL MEASURES TO REDUCE RISK	RISK RATING AFTER CONTROLS APPLIED
	Falling objects	Anderson's workers are to: <ul style="list-style-type: none"> Isolate the area below roof work wherever there is any danger of people being struck by falling material or tools Roof must be declared a 'No Go' area for all persons who do not hold a current working at heights certificate When planning to store materials on the roof, check to ensure the gutter is structurally sound and the fittings are placed securely within the gutter When other trades are onsite, liaise to ensure that no work is undertaken underneath the area during install or dismantle Use barricades i.e. barrier tape, witches hats or spotter if required. 	2
	Falls	Anderson's workers must: <ul style="list-style-type: none"> Ensure height access and/or fall restraint/arrest systems are set and in place before starting work Inspect working surfaces: <ul style="list-style-type: none"> Check for moisture, dust or any other condition that may cause loss of stable footing Safe Access to the roof is available e.g. obstruction by trees, objects or other building materials Suitable weather conditions (no strong wind, rain, storms etc.) Ensure the roof height is no greater than 7m and the roof pitch is no more than 30 degrees as per the engineered design.	2
5. Harness / Lanyard / Anchors	Falls	Anderson's Scaffolding uses Fall Restraint systems and work positioning for all roof work as first priority. These systems involve the use of a full body harness, a lanyard with a rope grab that will limit the length of the line as determined by the worker; and safe positioning on the roof that prevents a worker from falling over an exposed edge. In addition, a fall arrest line will be in place along with trauma straps that can be used to protect a worker from suspension trauma in the event of a fall. <p>Fall Restraint/Arrest Systems:</p> <ul style="list-style-type: none"> Fall arrest system and restraints must comply with relevant Australian Standards Formal inspection by a competent person as per manufacturer (6 monthly or more if exposed to hazardous environment) Workers must inspect all fall arrest equipment before each use Whenever any person is using a fall arrest line, a rescue plan will be in place and discussed in the daily prestart/JSA, as suspension trauma can occur to persons who fall and remain in the harness for more than 5 minutes. The Rescue plan involves the use of a trauma strap that is fitted to the harness which enables the suspended worker to place their foot inside the loop and stand to alleviate the pressure from the harness and allow the worker on the ground to place a ladder for the suspended worker to be able to safely climb down. All equipment identified in any Rescue Plan as being required for a rescue must be available on the job before any worker uses fall arrest equipment. 	2

JOB STEP	POTENTIAL HAZARD/S	CONTROL MEASURES TO REDUCE RISK	RISK RATING AFTER CONTROLS APPLIED
		Anchor Points: <ul style="list-style-type: none"> Workers must attach a temporary roof mounted anchor point load rated at a minimum of 15Kn (1500kg) at various locations on the roof, dependant on the size of the work area. The lanyard must then be connected to the anchor point, and to the worker wearing the full body harness. 	
6. Installation of Roof Edge Protection -	Manual Handling Injuries	<ul style="list-style-type: none"> Workers must follow the Safe Work Instruction (SWI) for safe installation and dismantle of edge protection in accordance with the engineered design. Workers must also ensure that correct manual handling techniques are adhered to at all times. These include: <ul style="list-style-type: none"> Only lift within the capabilities of the individual Identify the weight of the object before lifting Assess the walking surface and distance to identify and eliminate trip hazards or fatigue Ensure sufficient lighting to be able to carry out the work safely When lifting bend the knees and maintain a straight back Always lift the object close to the body Ensure the weight of any object is evenly dispersed Avoid repetitive lifting, twisting or bending at the hip Do not overreach Always use correct PPE for the task <p>⚠ If you have a known injury or impairment that may impact your ability to safely carry out the work tasks, you must advise Anderson's management immediately to avoid risk of further injury to yourself and others.</p>	2
	Falls/hit by falling objects	<p>All Anderson's workers are to:</p> <ul style="list-style-type: none"> Wear head protection at all times Set up exclusion zones Inspect edge protection system components: <ul style="list-style-type: none"> Prefabricated components are in good as new condition and meet manufacturer's quality specifications Tubes have square cut ends Free of oil, grease, or paint Nuts and hinges run and turn freely No missing / damaged end fixings No corrosion, flattened components etc. Follow engineered design for installing the roof edge protection Holes or other openings through which a person can fall. Workers must ensure: <ul style="list-style-type: none"> All holes or openings are protected/closed from falls immediately after creating Ensure the cover is secured to prevent movement Use signage or other clearly marked hazard alert to identify hazard. 	2

JOB STEP	POTENTIAL HAZARD/S	CONTROL MEASURES TO REDUCE RISK	RISK RATING AFTER CONTROLS APPLIED
		<ul style="list-style-type: none"> • Ensure that persons accessing the roof can pass through the roof edge protection without having to climb over the top or midrail • If ladders are to be used for access after the edge protection is in place, ensure it is securely fixed to prevent movement. 	
	Falls – suspension trauma	<ul style="list-style-type: none"> • Fall prevention systems such as a lanyard with rope grab to limit the line length, and work positioning is the preferred control measure for working at heights with an exposed edge. As a secondary measure, fall arrest lines are used. • Andersons management are to ensure workers are trained and instructed in the safe use of fall restraint/arrest equipment and emergency rescue procedures. • Fall restraint/arrest system: <ul style="list-style-type: none"> ○ Must comply with relevant Australian Standard ○ Formal inspection by competent person per manufacturer (6 monthly or more if exposed to hazardous environment) ○ Inspect all fall arrest equipment before each use. ○ Ensure a trauma strap is fixed to the harness prior to use. 	2
	Falls – Use of Ladders	<p>Use of Ladders to access height –</p> <ul style="list-style-type: none"> • When erecting ladders, workers must inspect the ladder as per manufacturers’ instructions: <ul style="list-style-type: none"> ○ Ladder extends at least 1m past the roof edge ○ Ladders be set up on a level area on firm footing with the base located approximately a quarter of the vertical height of the ladder from the wall ○ Secured against movement ○ Metallic or conductive ladders should be avoided around live electrical equipment ○ Face the ladder when ascending/descending. Ensure 3 points of contact remain on the ladder at all times ○ Load rating of at least 120kg ○ Correct size and length for the job ○ No damage and is clean and dry ○ Ensure no more than one person is using the ladder at all times 	2
	Working with hand & power tools	<ul style="list-style-type: none"> • Workers are to pre-inspect and operate tools as per manufacturer’s instructions • Ensure operations manual is available, read and understood • Ensure all handheld battery power drills are tested and tagged as required for use • Always ensure that the drill is switched off and power isolated before pre-start check, adjusting, changing set-ups • Stay alert – concentrate on what you are doing at all times and be aware of kickback <p>Drill, ensure:</p> <ul style="list-style-type: none"> ○ Do not carry with finger on starting switch 	1

JOB STEP	POTENTIAL HAZARD/S	CONTROL MEASURES TO REDUCE RISK	RISK RATING AFTER CONTROLS APPLIED
		<ul style="list-style-type: none"> ○ Keep all fingers clear during operation ○ Do not attempt to exceed rated capacity of the drill ○ Use correct drill and bit for type of material ○ Hold drill so that it can be released if the bit grabs & drill body continues to rotate • Ensure tool suitable for task: <ul style="list-style-type: none"> ○ Not too powerful for task i.e. do not use larger tool than needed ○ Sufficient power for task – excessive force should not be required • Safety Devices: <ul style="list-style-type: none"> ○ Low impact tools where possible ○ Single operation when trigger pressed • Ensure tools are not carried in pockets or clothing (use sheaths, tool belts, etc.) • PPE worn as per manufacturers recommendations. 	
	Fatigue i.e. Heat stroke/ sunburn and dehydration	<p>All workers must:</p> <ul style="list-style-type: none"> • Wear suitable protective clothing provided by Andersons • Use Sun brim on hard hat • Safety glasses - UV Rated • Use 50+ sunscreen on exposed skin areas • Workers and Andersons Management are to regularly communicate to ensure that the risk of fatigue remains low. <ul style="list-style-type: none"> • Have access to adequate drinking water • Use hydrolytes provided by Anderson's when needed • Access shade during breaks • Take adequate breaks during extreme heat • Check weather conditions – do not work in extreme weather such as storms, high winds and rain. 	1
7. Handover	Falls/collapse/ personal injury	<p>⚠ Inspection of the completed installation must be done before issuing a handover certificate. The Principal Contractor must be advised that if impact is experienced during use of the system then Anderson's Scaffolding must be immediately contacted in order to revisit and recheck structural integrity of the system.</p> <p>⚠ The principal contractor must not alter or remove the edge protection system. This must only be completed by a trained and competent Anderson's employee.</p> <ul style="list-style-type: none"> • Items to be checked whilst remaining : <ul style="list-style-type: none"> ○ All fittings are tight and secured ○ Access/egress clear and unobstructed • Certification must be provided. Ensure it contains: <ul style="list-style-type: none"> ○ Location ○ Time/date handed over ○ Compliant with relevant Standards. ○ Name of installer • Regular visual inspections will undertaken at every 30 days. 	1



JOB STEP	POTENTIAL HAZARD/S	CONTROL MEASURES TO REDUCE RISK	RISK RATING AFTER CONTROLS APPLIED
8. Dismantling Edge protection	Hit by falling objects/Falls	<ul style="list-style-type: none"> Surrounding persons are made aware that dismantling operations are about to commence Immediate area below must be cordoned off as a designated exclusion zone, all items must be placed in the designated exclusion zone The method of dismantling edge protection is carried out in the reverse process of installation, as per the Safe Work Instruction. Dismantling is carried out in a systematic and progressive manner. All workers must wear a hard hat when dismantling 	2
9. On completion	Slips, trips, falls causing injury	<ul style="list-style-type: none"> Clean up tools, components and any waste ensuring the site is left in a clean and tidy condition Advise the principal contractor or occupant that the works are completed and the area is safe for use 	1

EMERGENCY RESPONSE - CALL 000 IMMEDIATELY.

<p>If work is to be conducted on a construction site (or a site controlled by another Employer / PCBU) follow the site-specific Emergency Management Plan. Ensure:</p> <ul style="list-style-type: none"> Adequate numbers of first aid trained staff are on site when working at heights occurs First aiders are trained and competent in managing injuries associated with demolition until emergency services arrive All rescue equipment is in good condition, available for use and in close proximity to the work site. 	<p>Ensure workers have access to:</p> <ul style="list-style-type: none"> First aid kit/supplies First Aid trained personnel familiar with Resuscitation and emergency response for electric shock Safety Data Sheet (SDS) Communication devices (check mobile phones will have service in area) Suitable fire protection equipment.
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REVIEW No.	1	2	3	4	5	6	7	8	9	10
NAME:	Rick Anderson	Rick Anderson	Rick Anderson	Rick Anderson						
INITIAL:	RA	RA	RA	RA						
DATE:	01/06/19	01/06/20	01/06/21	01/04/22						

PLANT/TOOLS/EQUIPMENT LIST FOR THE JOB

Scaffold Key	Spirit Level	Harness/Falls Arrest System	Battery Powered Drill	Barricades
Scaffold Ratchet	Pitch Finder	Ladder	Tape Measure	

Relevant Act & Regulations	Codes of Practice
<ul style="list-style-type: none"> Work Health and Safety Act 2011 (NSW) Work Health and Safety Regulation 2017 (NSW) 	<ul style="list-style-type: none"> First Aid in The Workplace Code of Practice How to Manage Work Health and Safety Risks Code of Practice Managing the Risk of Falls at Workplace Code of Practice Managing the Work Environment and Facilities Code of Practice Work Health and Safety Consultation, Coordination and Cooperation Code of Practice

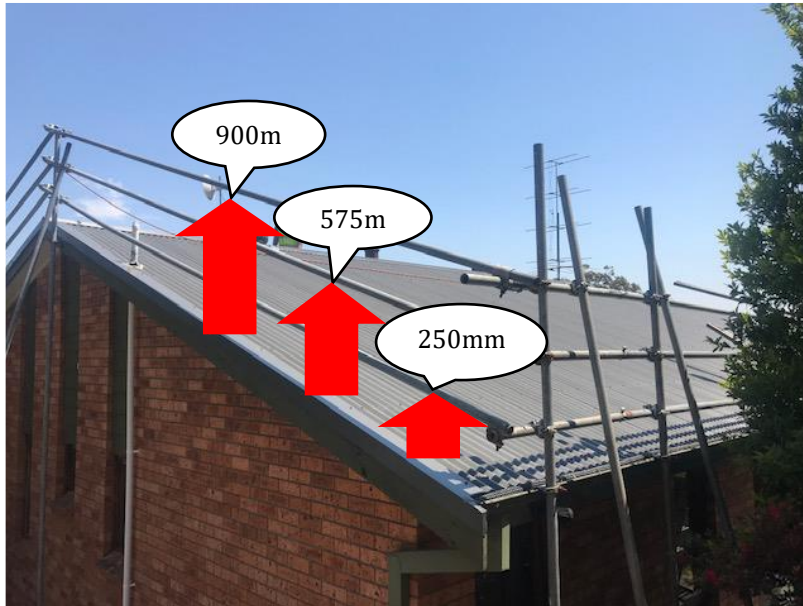


Figure 1 – Example of fixed handrail height.



Figure 2 – Example of correct PPE / fixing coupler.



Figure 3 – Example of erected roof rail.



Figure 4 – Example of erected roof rail / support brace



SAFE WORK METHOD STATEMENT (SWMS) – ROOF EDGE PROTECTION

This SWMS has been developed in consultation and cooperation with *employee/workers* and relevant *Employer/Persons Conducting Business or Undertaking (PCBU)*. I have read the above SWMS and I understand its contents. I confirm that I have the skills and training, including relevant certification to conduct the task as described. I agree to comply with safety requirements within this SWMS including risk control measures, safe work instructions and PPE described.

OVERALL RISK RATING AFTER CONTROLS

1 Low

2 MODERATE

3 High

4 ACUTE