

ACS

AIR CONDITIONING SERVICES (NZ) LTD

This manual
belongs to

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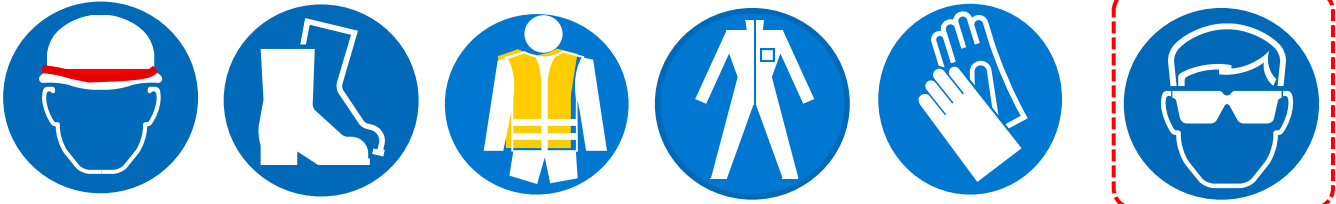
Vehicle SWMS Manual 2023/2024 Version

	Page (s)
Wellbeing Helpful Hints	3
Personal Protective Equipment Selection	4
Safety steps for working on site	5
Some Valuable Risk Reduction Tips	6
Safe work method statement (SWMS) index	7
Safe Work Method Statements #01 - 12	(8-44)
SWMS Risk Review – Site Specific (Instructions)	45
SWMS Site Specific - Risk Review (Form)	46
High Risk Checklists & Other ACS Document Forms - Index	47
Tool Box Talk Record	52
Safety Issue Notice (SIN)	53
Risk Assessment Tracking	54
Accident Report Form	55-56
First Aid Requirements	57
Emergency Response Guide	58
Emergency Plans for Evacuation Situations	59
Rescue Plan	60
Nationwide Hospital Locations	61
Basic Life Support	62
Vehicle PPE & Equipment List	63
ACS & Customer Acronyms	64
ACS Personnel Contact Details	65

SAFETY FIRST..... *Engage the Brain Before the Hands*

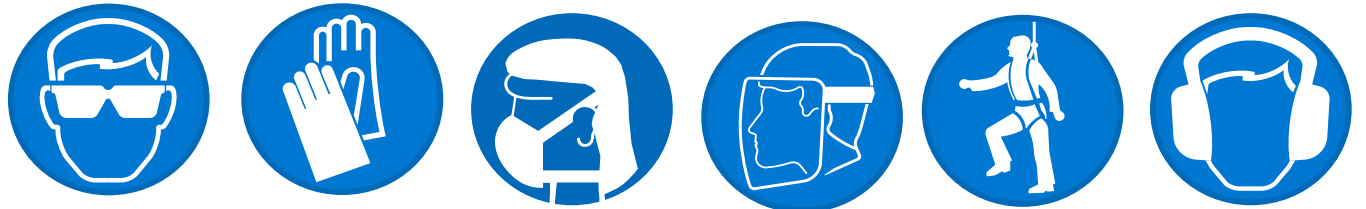
WELLBEING HELPFUL HINTS

ALWAYS WEAR:



Carry with you

JOB SPECIFIC:



ALWAYS:

>85dB(A)

- Follow the ACS Wellbeing Helpful Hints
- LOTO (Lock Out Tag Out) to isolate electrical circuitry to a piece of equipment, machinery or system
- Comply with generic SWMS, and perform site specific SWMS for each task
- Make housekeeping your responsibility
- Conduct a risk assessment before you start work. Consider – “What things do you think could go wrong” when doing the job
- Report & record near misses & hazards, on the ACS SIN form, or download details <https://www.airconcentre.co.nz>



Personal Protective Equipment Selection

The following personal protective equipment (PPE) selection are to be applied when working on behalf of Air Conditioning Services NZ Ltd at any client or customer workplace. There are no exceptions to the rules unless you have assessed the risk to have increased or the task cannot be performed when wearing or using PPE as prescribed by the generic SWMS so as to minimise the risk. Any exemption will only be considered if the action applied has been recorded on the Safe Risk Review – Site Specific paperwork.



Hard Hat with Chin Strap

Hard hat will be worn at all times, chin strap will be worn when working at any height or when hard hat poses risk of falling off. You must put this on immediately after stepping out of your vehicle – If your job does not enable you to continue carrying out your task with your hard hat on then you must contact your ACS representative prior to removing for authorisation. There is a 3 year expiry from date of issue on standard hard hats and must not be defective in anyway.



Safety Footwear

Will be worn at all times, you must put this on immediately after stepping out of your vehicle – Your safety footwear must not have any signs of metal showing, have plenty of tread and must be clean at all times.



Hi-Vis Vest

Will be worn at all times, you must put this on immediately after stepping out of your vehicle – your hi-viz vest / work wear must be rated for night and day use, fully zipped/ buttoned up and clean, no tears or rips..



Full Body Cover

Will be worn at all times, you must put this on immediately after stepping out of your vehicle – DO NOT roll up sleeves, must be clean and in good condition with no tears or rips present. Fire resistant overalls with hi-viz are the best protection on site.



Eye Protection

Will be worn as is required by the SWMS Job Step, you must keep them on your person immediately after stepping out of your vehicle – the compliance rating is AS/NZS 1337.1 with side protection. You can use either tinted, clear or low visibility eye protection but don't forget this requirement is task dependant.



Gloves

Will be worn at all times, you must put these on immediately after stepping out of your vehicle – Minimum rating will be 4543 for all ACS work conducted, you may require a different type of glove to carry out your task safely, gloves can only be removed if it makes your task too difficult to do or increases the risk of injury e.g. completing paperwork or dexterity type tasks. Chemical rated gloves shall be issued and worn as per SWMS.

Safety Steps for Working on Site

Work request received from Service or Contracts Department via Purchase Order

Arrive at site. Put on PPE (Hi-vis vest, safety footwear, long sleeves/ trousers, hard hat with chin strap & safety glasses/ safety gloves (minimum 4543 rating) as per ACS PPE minimum requirements

Sign in visitor's book. Inform Site Representative of what work is to be performed, location and task duration. Ensure they sign off your paperwork to verify site attendance

Take a moment to review your LPSA card. Assess –
What could go wrong?
What is the worst thing that could happen if something does go wrong?
Now Analyse how to reduce and act to eliminate or minimize the risk to ensure safe operations

Conduct a toolbox talk; discuss SWMS's to be used , HRC'S & safety steps to be followed. Make any changes to SWMS or record new hazards on the SWMS – Site Specific form (pages 46)

Yes

No

Assess whether a high risk checklist (in conjunction – see page #7), is required, select from:
Working @ Heights – LOTO (page 48)
Hot Work (page 49)
Non-power (page 50)
Working a@ Heights – EWP (page 51)
Lifting (page 52)
DO NOT fill out checklist until work has been safely isolated, set-up or authorised

Contact the client ACS Account Manager or H&S Manager (see ACS personnel contact details on page #65) if you have any issues relating to the job or health and safety concerns simply STOP work & don't proceed unless everything is safe

STOP !! If a Hi-Ab crane or Mobile Elevated Work Platform (e.g. scissor lift, cherry picker) is required to perform the respective task, you must have an approved HEEZ plan. If in doubt contact the client ACS Account Manager before you proceed any further

Remove all waste from the site, maintain high standard of housekeeping at all times

Finally you must update the job status with the Site Representative & if complete get them to sign off your ACS service form (page 53). Now you can sign out in the visitor's book & leave site.

SOME VALUABLE RISK REDUCTION TIPS



Don't forget to conduct your tool box talk (Read the generic SWMS you have selected for the task and complete the Site Specific – SWMS Risk Review)



Always wear your PPE, safely cordon off your designated work zone 3m from the work focal point – using (cones, tiger tails, caution signage). Prior to working on the unit LOTO the isolator switch using padlock and tag. Remember to fill out a LOTO HRC after your safety devices are applied



When working outside whether it be at ground level or on the roof always secure your work area safely (use cones, tiger tails, caution signage) and your work vehicle where applicable. Appoint a Spotter to control traffic & pedestrians. All work using a hi-ab crane or an Elevated Work Platform e.g. scissor lift is deemed notifiable, whereby you must seek prior approval from ACS who will deal with the creation of a SSSP and Site Specific SWMS for the project

SAFE WORK METHOD STATEMENT (SWMS) Revision Index

SWMS #	Job Title	Rev #	Issue Date	Expiry Date	Page #	Consult High Risk Checklist
01	Maintenance & Filters	06	1/01/23	31/12/24	8-10	Working at Heights Lock Out Tag Out
02	Service & Repairs	03	1/01/23	31/12/24	11-14	Working at Heights Lock Out Tag Out
03	Air Conditioning & Refrigeration Installation	06	1/01/23	31/12/24	15-18	Hot Work Lock Out Tag Out Working at Heights
04	Decommissioning	04	1/01/23	31/12/24	19-21	Working at Heights Lock Out Tag Out
05	Cabinet Doors & Lighting	06	1/01/23	31/12/24	22-24	Working at Heights Lock Out Tag Out
06	Condensing Unit Repair	06	1/01/23	31/12/24	25-27	Hot Work Lock Out Tag Out
07	Fans	06	1/01/23	31/12/24	28-30	Lock Out Tag Out
08	Coil Cleaning	05	1/01/23	31/12/24	31-33	Working at Heights Lock Out Tag Out
09	Working at Heights (2m & above)	06	1/01/23	31/12/24	34-37	Working at Heights Lock Out Tag Out
010	Hot Work Brazing	06	1/01/23	31/12/24	38-40	Hot Work Lock out Tag Out
011	Site Visit	06	1/01/23	31/12/24	41-42	
012	Delivering & Installing Chillers & Fridges	02	1/01/23	31/12/24	43-44	Lock Out Tag Out

SAFE WORK METHOD STATEMENT (SWMS)

SWMS No: 01	Title: MAINTENANCE/ FILTERS	Reviewed By: Gordon Knowles	Revision No: 06	Issue Date: 1/01/2023	Expiry Date: 31/12/2024
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Minimum PPE Requirements:	
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Job Steps	Hazards Identified	Initial Risk Level	Risk Control Measures	Residual Risk Level
1: Arrival to Site	1: Traffic congestion	3	1:1:1 Park your vehicle in designated parking spaces, reverse vehicle accurately within marked parking bays.	1
	2: Pedestrian movements	2	1:2:1 Wear all PPE as per specified minimum requirements above.	1
	3: Distraction from using mobile phone	2	1:2:2 Keep to the designated walkways, walk with head up to reduce interactions between pedestrians and vehicles or machinery.	1
	4: Poor communication	2	1:3:1 If you will be in and/ or working in a designated safety critical area leave mobile phone in your vehicle or switch off on your person to limit distractions. 1:4:1 Brief responsible site contact on scope of work, risks to site staff and the work area required. 1:4:2 Conduct toolbox talk & review SWMS, note any site-specific hazards <u>NOT</u> already linked to this SWMS, new job steps, risk score changes; on the SWMS Risk Review - Site Specific. Note closest Medical Centre to the work site location.	1
2: Set-up Work Area	1: Sharp Objects	2	2:1:1 Wear appropriate cut-resistant gloves minimum rated 4543.	1
	2: Pedestrians/ Traffic	2	2:2:1 Barricade agreed work area using cones, barriers & caution safety signage. 2:2:2 Make sure you have ample work space, position barriers over 2m from work focal point.	1
	3: Line of Fire	3	2:3:1 Use your vehicle as line of fire if working outdoors and appropriate for work undertaken.	1
	4: Electricity	4	2:4:1 Apply LOTO to isolate units to be worked on at the switchboard using circuit breaker lock and personal lock out system (consisting of padlock & tag). 2:4:2 Ensure you have filled out on the personal tag out, your name, date and mobile phone details. <u>If ducted unit LOTO is not required as there are no moving or dangerous parts.</u> 2:4:3 Use a calibrated testing instrument to apply PROVE-TEST-PROVE method according to industry best practice to verify power source is isolated safely. 2:4:4 Fill out LOTO Higher Risk Checklist after safety devices are secured & equipment is safely isolated to work on.	2
3: Remove/Replace filters (Indoor/outdoor units)	1: Falling from Lower Height	4	3:1:1 Use step ladder platform for working at lower heights indoors (below 2m). 3:1:2 Wear a hard hat & chin strap compliant with standard AS/NZS 1801:1997 (or equivalent).	2
	2: Sharp Edges	2	3:2:1 Wear cut-resistant gloves (minimum 4543 rating) for protection against sharp objects or edges.	1
	3: Dust	2	3:3:1 Wear dust mask if exposed to excessive airborne dust when opening cassettes. 3:3:2 Wear safety glasses with side shields or goggles – standard AS/NZS 1337.1 to protect eyes from airborne dust. 3:3:3 Dust sheet to be covered over merchandise shelving to prevent food or product contamination.	1

SWMS No: 01	Title: MAINTENANCE & FILTERS			Cont'd
Job Steps	Hazards Identified	Initial Risk Level	Risk Control Measures	Residual Risk Level
3: Remove & Replace Filters Cont'd	4: Overreaching	3	3:4:1 Position platform in a safe location whereby you do not have to stretch or overreach to open cassette or hi-wall cover or remove/ replace filters.	1
	5: Posture	2	3:5:1 Come down using 3 points of contact to reposition the step ladder platform if work posture affects your comfort zone.	1
	6: Pedestrians	3	3:6:1 Identify drop zone and keep unauthorised personnel from entering.	1
	7: Handling objects	4	3:7:1 Pop the filter out or unclip it, place it safely on the platform surface and descend from the step ladder platform. Use hand tools where appropriate (see Job Step: 7).	2
	8: Falling from heights	4	3:8:1 For outdoor packing unit, <u>apply SWMS#09 – Working at Heights</u> to safely access the building roof to perform this step.	2
	9: Lifting & Lowering	3	3:9:1 To lower or lift roof package unit filters, use a rope or similar means to secure & safely manoeuvre between height levels.	1
4: Cleaning Air Filters	1: Uneven surface	2	4:1:1 Ensure that all filters (includes roof packaging unit) are cleaned in a suitable area at ground level.	1
	2: Slips or falls	3	4:2:1 Make sure the soles on safety footwear is slip-resistant and in good order.	1
	3: Dust	2	4:3:1 Use a brush or vacuum cleaner to free dust entrapment in the filter, wear a dust mask standard AS/NZS 1716 Class P1.	1
	4: Flying particles	2	4:4:1 Wear eye protection standard AS/NZS 1337 and safety gloves rated 4543.	1
	5: Pressurised Energy	2	4:5:1 Use a hose with a pressure nozzle to wash-down the filters in conjunction with an eco-friendly cleaning product. Wear chloronite chemical safety gloves rated EN 374, AS/NZS2161.10.14543 and safety goggles.	1
	6: Slippery surface	2	4:6:1 Contain the water and cleaning solution used and don't flush dirt or grim (sludge) down storm-water drain. 4:6:2 Use slippery surface caution signage if necessary, post for best visual affect.	1
	7: Spills	2	4:7:1 Be aware of a spill kit location if there is a need to contain waste residue from entering drains.	1
5: Preventative Maintenance on Air Conditioning Units	1: Sharp Edges	2	5:1:1 Check all portions of the unit which air flows for cleanliness as required, check for leaks, uncontrolled sources of water; wear safety gloves rated 4543.	1
	2: Refrigerant	2	5:2:1 Check the condensing unit refrigeration lines and other components associated to the indoor or outdoor unit, wear safety glasses standard AS/NZS 1337 when doing this task.	1
	3: Hazardous Substances	2	5:3:1 Consult relevant SDS prior to handling & wear chemical resistant gloves as protection against any hazardous substances used, includes AeriGuard HVAC protection products.	1
	4: Chemicals	2	5:4:1 Make sure a AeriGuard biodegradable tablet is placed in the pan if due on the scheduled maintenance plan.	1
	5: Visual	2	5:5:1 Important when you inspect each unit item, that you tick the appropriate maintenance checklist box on the ACS Service Form, to validate that each item has been assessed.	1
6: Chillers/Freezers Maintenance	1: Temperature	2	6:1:1 Check temperature and defrost frequency settings are not too high or too low for the type of unit and products inside.	1
	2: Sharp Edges	2	6:2:1 Inspect and clean each unit's condensing & evaporator coils, remove any build-up of dirt, dust or grime from fins, fans & grilles.	1
	3: Moving Parts	3	6:3:1 Compressor and fan motor operation should be checked, to ensure it is not working too hard.	1

SWMS No: 01	Title: MAINTENANCE/ FILTERS		Cont'd	
Job Steps	Hazards Identified	Initial Risk Level	Risk Control Measures	Residual Risk Level
6: Cont'd	4: Caught between	2	6:3:2 Ensure any machinery or equipment guards removed are repositioned prior to restarting the unit.	1
	5: Refrigerant Gas	4	6:4:1 Check gaskets/ magnets are applying a tight seal & hinges lubricated to close doors properly.	1
	6: Slippery Surface	2	6:5:1 Check refrigerant levels and signs of leaks within the refrigeration equipment.	1
	7: Hazardous Substances	1	6:6:1 Remove ice build-up around door seals, post caution signage if floors become wet or icy. 6:7:1 Important when you inspect each unit item, that you tick the appropriate maintenance checklist box on the ACS Service Form, to validate each assessed item.	1
7: Hand Tools	1: Sharp Objects	2	7:1:1 When using any tool, always wear safety gloves rated 4543 and safety glasses compliant with AS/NZS1337.1. 7:1:2 Only use hand tools that you have been trained on & authorised to use. 7:1:3 Always ensure hand tools are safe to use, fit for purpose & suitable for the task.	1
	2: Puncture	2	7:2:1 Never carry a screwdriver in your pocket.	1
	3: Line of Fire	2	7:2:2 If a tool is broken, dull or damaged, take it out of service. 7:3:1 Never hold the piece you're working on in your hand while driving or loosening screws or bolts.	1
	4: Electricity	4	7:4:1 Use a 1000V insulated screwdriver to protect user from electric current.	2
8: Tidy Work Area	1: Slips, trips & falls	2	8:1:1 Apply 360° hazard awareness when removing waste, & equipment from the work zone.	1
	2: Sharp Objects	2	8:2:1 Ensure safety gloves rated 4543 are worn at all times.	1
	3: Lifting	2	8:3:1 Do not lift more than 25 kgs by yourself, if exceeded use team lifting or mechanical device.	1
	4: Traffic & Pedestrians	3	8:4:1 Don't remove traffic management until the area is clean and tidy. 8:4:2 Inform site management of job status and sign-out visitors book.	1



Risk Ranking Calculator						Risk Response		
Likelihood	Consequence					Low 1	Proceed with the job using SWMS & wearing prescribed PPE - worst scenario First Aid	
	Minor (FAI)	Moderate (MTI)	Serious (LTI)	Very Serious (Hospitalised)	Disaster (Fatalities)			
	Almost Certain	High 3	High 3	Extreme 4	Extreme 4	Extreme 4	Moderate 2	Immediate action required – worst scenario Doctor Visit
	Likely	Moderate 2	High 3	High 3	Extreme 4	Extreme 4		
	Possible	Low 1	Moderate 2	High 3	High 3	Extreme 4	High 3	Method of risk management to be specified – worst scenario Hospital Admittance
	Remotely Possible	Low 1	Low 1	Moderate 2	Moderate 2	High 3		
	Practically Impossible	Low 1	Low 1	Low 1	Moderate 2	Moderate 2	Extreme 4	Work not to proceed, contact your Manager or ACS for action required – worst scenario <u>DEATH</u>

Before you commence the job you MUST fill out a **SWMS Risk Review – Site Specific** to assess & record site specific hazards, controls or risk scores. Use the Risk Matrix to recalculate the risk scores (Likelihood x Potential Consequences) to determine that controls have eliminated or minimized any risk

SAFE WORK METHOD STATEMENT (SWMS)

SWMS No: 02	Title: SERVICE & REPAIRS	Reviewed By: Gordon Knowles	Revision No: 04	Issue Date: 1/01/2023	Expiry Date: 31/12/2024
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Minimum PPE Requirements:

Job Steps	Hazards Identified	Initial Risk Level	Risk Control Measures	Residual Risk Level
1: Arrival to Site	1: Traffic congestion	3	1:1:1 Park your vehicle in designated parking spaces, reverse vehicle accurately within marked parking bays.	1
	2: Pedestrian movements	2	1:2:1 Wear all PPE as per specified minimum requirements above. 1:2:2 Keep to the designated walkways, walk with head up to reduce interactions between pedestrians and vehicles or machinery.	1
	3: Distraction from using mobile phone	2	1:3:1 If you will be in and/ or working in a designated safety critical area leave mobile phone in your vehicle or switch off on your person to limit distractions.	1
	4: Poor communication	2	1:4:1 Brief responsible site contact on scope of work, risks to site staff and the work area required. 1:4:2 Conduct toolbox talk & review SWMS, note any site-specific hazards <u>NOT</u> already linked to this SWMS, new job steps, risk score changes; on the SWMS Risk Review - Site Specific. Note closest Medical Centre to the work site location.	1
2: Set-up Work Area	1: Traffic	3	2:1:1 Establish work area and apply traffic management using cones, barriers, caution signage and work vehicle (where applicable). 2:1:2 Create ample work space, position cones more than 2 metres from the work focal point.	1
	2: Electricity	4	2:2:1 For fixed wiring, apply LOTO to isolate electrical circuitry using personal lock out system (consisting of padlock and tag), use circuit breaker lock to secure at board. 2:2:2 If applying LOTO to isolate a cabinet or chiller power plug, use an electrical plug lockout cover unit, padlock & tag, to prevent accidental reconnection. 2:2:3 Ensure you have filled out on the personal tag out; your name, date and mobile phone details. 2:2:4 Use a calibrated testing instrument to apply PROVE-TEST-PROVE method according to industry best practice. 2:2:5 Fill out LOTO Higher Risk Checklist after safety devices are secured & equipment is safely isolated.	2
	3: Sharp Objects	2	2:3:1 Remove equipment from vehicle to work area, always wearing safety gloves rated 4543, only take off if gloves prevent or increase the risk from doing the job safely.	1
	4: Lifting & Carrying	2	2:4:1 Do not lift more than 25kgs by yourself, if exceeded use mechanical lifting device or team lift.	1
	5: Trips & Falls	2	2:5:1 Safely position equipment for use, tool bag, brazing set, manifold gauges etc to avoid trips and falls.	1
3: Fault Finding	1: Noise	2	3:1:1 Check for operating defects to get the air conditioning system working again e.g. compressor or fan noises, failure to start, and inadequate cool air volume. 3:1:2 Whenever noise levels exceed 85dB(A) wear class 5 hearing protection. As a rule of thumb, if you cannot hear normal conversation at 1m distance the noise level generated may be too high and hearing protection used to reduce noise exposure.	1
	2: Heat & Cold	2	3:2:1 Check that the equipment temperature and operation mode is properly set by the remote controller.	1
	3: Falling from Lower Heights	4	3:3:1 Use a step ladder platform (follow Job Step:4) to check if aircon filters are clean, as this could affect air flow & refrigerant levels.	2

SWMS No: 02	Title: SERVICE & REPAIRS	Cont'd
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Job Steps	Hazards Identified	Initial Risk Level	Risk Control Measures	Residual Risk Level
3: Fault Finding Cont'd	4: Overheating	2	3:4:1 Check that air conditioner is not blocked by furniture or other objects impairing flow that can cause system to overheat or under perform.	1
	5: Ventilation	2	3:5:1 Has the ventilation (outdoor units) fan stopped?	1
	6: Gas Leaks	2	3:6:1 Check for any refrigerant leaks within the system.	1
	7: Water Leaks	2	3:7:1 Look for any water leaks pooling caused by cracks, holes or leaks.	1
	8: Moving parts	2	3:8:1 While the unit is running listen for any squealing or knocking of the unit motor or belts.	1

STOP!! IF HEAVY EQUIPMENT ACTIVITY (E.G. MOBILE ELEVATED WORK PLATFORM OR HI-AB CRANE) IS NEEDED TO SAFELY DO THE WORK A TASK SPECIFIC SWMS MUST BE CREATED AND APPROVED BY ACS.

4: Working at Lower Heights	1: Falls	4	4:1:1 Use structurally sound & stable Step Ladder Platform (SLP) for lower heights elevation for indoor unit and/or duct repairs. 4:1:2 Locate suitable even surface to place SLP. 4:1:3 Do not rush & maintain 3 point contact on SLP.	2
	2: Falling objects	3	4:2:1 Never carry tools or equipment up or down SLP get the spotter to hand the items up to you.	1
	3: Overreaching	3	4:3:1 Do not lean outside the platform structure if you cannot reach your work, get down and move SLP.	1
	4: Falling from Lower Heights	4	4:4:1 If the outdoor unit is on the roof follow the working at height steps in (SWMS #09). Remember you must have working at heights certification to access the roof.	2

5: Repairing Air Conditioner (Indoor/Outdoor)	1: Electricity	4	5:1:1 Apply personal LOTO (consisting of padlock and tag) to the outdoor unit isolator switch to isolate electrical circuitry to the equipment you are working on (refer to Job Steps:2). 5:1:2 Use a testing instrument to apply PROVE-TEST-PROVE method according to industry best practice.	2
	2: Equipment Sharp Edges	2	5:2:1 Wear safety gloves rated 4543, to take the cover off the outdoor unit, inspect and repair compressor/ condensing unit to work effectively (Refer to SWMS#06).	1
	3: Hand Tools	2	5:3:1 If replacing any moving parts use fit for purpose hand tools (follow Job Step#8).	1
	4: Dust	3	5:4:1 Use a soft brush to clear any dirt and debris off the outside cover, place a plastic sheet over the motor and wiring, wear a dust mask if airborne dust particles are excessive.	2
	5: Slippery Surface	3	5:5:1 Hose down the fins, coils and inside of the unit. Ensure safety footwear soles are slip-resistant to avoid slips and falls.	1
	6: Moving Parts	4	5:6:1 Make sure that the unit cover is replaced before testing equipment.	1
	7: Falling from Heights	4	5:7:1 Use a step ladder platform (Follow Job Step #4) for fixing collapsed or damaged sections of flexi-ducting in the ceiling cavity.	1
	8: Drain Blockage	4	5:8:1 Use an industrial type wet/dry vacuum cleaner to clear any obstructions in the drain lines.	1
	9: Lighting	2	5:9:1 Use a flashlight to inspect for holes or cracks in the drain pan and replace if necessary.	1
	10: Slips & Falls	2	5:10:1 If evaporator coil has become coated in dust, dirt, mold, ice or other debris, clean and mop up any water pooling on the floor. 5:10:2 If water has leaked onto the floor surface, post "wet floor" caution signage.	1

SWMS No: 02	Title: SERVICE & REPAIRS		Cont'd	
Job Steps	Hazards Identified	Initial Risk Level	Risk Control Measures	Residual Risk Level
6: Repairing Chillers/ Freezers	1: Temperature	2	6:1:1 Locate the thermostat and check that it is set to the appropriate temperature.	1
	2: Refrigerant	3	6:2:1 Check the refrigerant levels, if refilling is required follow (Job Step:#7).	1
	3: Moving Parts	2	6:3:1 Examine all parts for wear and tear before a minor problem becomes a big problem, if you remove guards or panels ensure safety devices are refitted when job is completed.	1
	4: Slips & Falls	3	6:4:1 Check suction line insulation for traces of condensation and drips from the lines onto the floor, mop up where necessary.	1
			6:4:2 Clean drain lines that may have blocked with sludge & check for discharged water on the floor.	
			6:4:3 If water/ice has leaked onto the floor surface, post "wet floor" caution signage.	
5: Electricity	2	6:5:1 Inspect compressor operation, check electrical connections are safe and not exposed.	2	
6: Chemicals	3	6:6:1 Clean condenser coils, evaporator coils and fans and fan grills with eco-friendly substance, ensure a SDS is readily available for cleaning product used.	1	
7: Refrigerant Leak Detection	1: Refrigerant handling	4	7:1:1 Technician must be licensed to recover or recycle devices that meet EPA standards for such devices.	2
			7:1:2 Consult relevant SDS before you handle or use refrigerant.	
			7:1:3 Charging to be carried out in compliance with AS/NZS 1677.2:1998	
	2: Oil Contaminant	2	7:2:1 Check visually for contaminants (such as oil traces) which could indicate the actual leakage point.	1
	3: Pressurised gas	4	7:3:1 Conduct leak test if leak cannot be identified through pressurising the existing system with nitrogen.	2
	4: Nitrogen cylinder falling over	4	7:4:1 Secure nitrogen cylinder in an upright position within a trolley or chained or strapped to a wall to prevent the bottle from falling or being knocked-over inadvertently.	2
7:4:2 Keep cylinder stored in a well-ventilated location, away from sources of heat, ignition and direct sunlight. Protect cylinders against physical damage.				
7:4:3 Fit gauges to the system and manifold hose to the nitrogen cylinder.				
5: Refrigerant discharge	4	7:5:1 Follow manufacturers instructions for charging the system, make sure suction and discharge pressure is set using the refrigerant charging procedure.	2	
		7:5:2 Use bubble leak detector solution on copper pipes to determine leak source, focus on threaded connections, joints and valve location(s). Use Big Blu leak detection solution, make sure you have a current SDS readily available.		
		7:5:3 Put on cut resistant gloves & safety glasses/goggles/ full face shield if there are doubts over PPE use refer to your SDS.		
		7:5:4 Test that there are no leaks in the system and the equipment is functioning correctly & efficiently. Then the system can be recharged with refrigerant.		
6: Electricity	4	7:6:1 Reinstate the electrical flow to the units and remove your LOTO. Prove-Test-Prove	2	

SWMS No: 02	Title: SERVICE & REPAIRS		Cont'd	
Job Steps	Hazards Identified	Initial Risk Level	Risk Control Measures	Residual Risk Level
8: Hand Tools	1: Sharp Objects	2	8:1:1 When using any tool, always wear safety gloves rated 4543 and safety glasses compliant with AS/NZS1337.1. 8:1:2 Only use hand tools that you have been trained on & authorised to use 8:1:3 Always ensure hand tools are safe to use, fit for purpose & suitable for the task.	1
	2: Puncture	2	8:2:1 Never carry a screwdriver in your pocket. 8:2:2 If a tool is broken, dull or damaged, take it out of service. 8:2:3 Never hold the piece you're working on in your hand while driving or loosening screws or bolts.	1
	3: Electricity	4	8:3:1 Use a 1000V insulated screwdriver to protect user from electric current.	1
9: Tidy Work Area	1: Slips, trips & falls	2	9:1:1 Apply 360° hazard awareness when removing waste, & equipment from the work zone.	1
	2: Sharp Objects	2	9:2:1 Ensure safety gloves rated 4543 are worn at all times.	1
	3: Lifting	2	9:3:1 Do not lift more than 25 kgs by yourself, use team lifting or mechanical device.	1
	4: Traffic & Pedestrians	3	9:4:1 Don't remove traffic management until the area is clean and tidy. 9:4:2 Inform site contact of job status and sign-out visitors book.	1



Risk Ranking Calculator						
Consequence						
	Minor (FAI)	Moderate (MTI)	Serious (LTI)	Very Serious (Hospitalised)	Disaster (Fatalities)	
Likelihood	Almost Certain	High 3	High 3	Extreme 4	Extreme 4	Extreme 4
	Likely	Moderate 2	High 3	High 3	Extreme 4	Extreme 4
	Possible	Low 1	Moderate 2	High 3	High 3	Extreme 4
	Remotely Possible	Low 1	Low 1	Moderate 2	Moderate 2	High 3
	Practically Impossible	Low 1	Low 1	Low 1	Moderate 2	Moderate 2

Risk Response	
Low 1	Proceed with the job using SWMS & wearing prescribed PPE - worst scenario First Aid
Moderate 2	Immediate action required – worst scenario Doctor Visit
High 3	Method of risk management to be specified – worst scenario Hospital Admittance
Extreme 4	Work not to proceed, contact your Manager or ACS for action required – worst scenario DEATH

Before you commence the job you MUST fill out a **SWMS Risk Review – Site Specific** to assess & record site specific hazards, controls or risk scores. Use the Risk Matrix to recalculate the risk scores (Likelihood x Potential Consequences) to determine that controls have eliminated or minimized any risk

SWMS No: 03	Title: AIR CONDITIONING & REFRIGERATION INSTALLATION	Reviewed By: Gordon Knowles	Revision No: 06	Issue Date: 1/01/2023	Expiry Date: 31/12/2024
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Minimum PPE Requirements:	
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Job Steps	Hazards Identified	Initial Risk Level	Risk Control Measures	Residual Risk Level
1: Arrival to Site	1: Traffic congestion	3	1:1:1 Park your vehicle in designated parking spaces, reverse vehicle accurately within marked parking bays.	1
	2: Pedestrian movements	2	1:2:1 Wear all PPE as per specified minimum requirements above. 1:2:2 Keep to the designated walkways, walk with head up to reduce interactions between pedestrians and vehicles or machinery.	1
	3: Distraction from using mobile phone	2	1:3:1 If you will be in and/ or working in a designated safety critical area leave mobile phone in your vehicle or switch off on your person to limit distractions.	1
	4: Poor communication	2	1:4:1 Brief responsible site contact on scope of work, risks to site staff and the work area required. 1:4:2 Conduct toolbox talk & review SWMS, note any site-specific hazards <u>NOT</u> already linked to this SWMS, new job steps, risk score changes; on the SWMS Risk Review - Site Specific. Note closest Medical Centre to the work site location.	1

STOP!! IF HEAVY EQUIPMENT ACTIVITY (E.G. MOBILE ELEVATED WORK PLATFORM OR HI-AB CRANE) IS NEEDED TO SAFELY DO THE WORK A TASK SPECIFIC SWMS MUST BE CREATED AND APPROVED BY ACS.

2: Set-up Work Area	1: Sharp Objects	2	2:1:1 Wear appropriate cut-resistant gloves minimum rated 4543 to protection against sharp objects or edges.	1
	2: Traffic – Line of fire	3	2:2:1 Establish work area and apply traffic management using cones, barriers, caution safety signage. Use your vehicle as line of fire if working outdoors and appropriate for work undertaken.	1
			2:2:2 Make sure you have ample work space, position barriers over 2m from work focal point.	
	3: Electrical	4	2:3:1 Apply LOTO to isolate units to be worked on at the switchboard using circuit breaker lock and personal lock out system (consisting of padlock & tag).	1
			2:3:2 Ensure you have filled out on the personal tag out, your name, date and mobile phone details.	
			2:3:3 Use a calibrated testing instrument to apply PROVE-TEST-PROVE method according to industry best practice.	
4: Sharp Edges	2	2:3:4 Fill out LOTO Higher Risk Checklist after safety devices are secured & equipment is safely isolated.		
		2:4:1 Remove equipment from vehicle to work area, always wearing safety gloves rated 4543, only take off gloves if they prevent you from doing the job safely.	1	
5: Lifting & Carrying	2	2:5:1 Do not lift more than 25kgs by yourself, if exceeded use mechanical lifting device or team lift.	1	
6: Trips & Falls	2	2:6:1 Safely position equipment for use, manifold gauges, hand tools etc. to avoid trips and falls.	1	

3: Working at Lower Heights	1: Falls	4	3:1:1 Use structurally sound & stable Step Ladder Platform (SLP) for 2m height elevation for unit installation & ducting. 3:1:2 Locate suitable even surface to place SLP. 3:1:3 Do not rush & maintain 3 point contact on SLP.	2
	2: Falling objects	3	3:2:1 Never carry tools or equipment up or down SLP get the spotter to hand the items up to you.	1
	3: Overreaching	3	3:3:1 Do not lean outside the platform structure if you cannot reach your work, get down and move SLP.	1

SWMS No: 03		Title: AIR CONDITIONING & REFRIGERATION INSTALLATION		Cont'd	
Job Steps	Hazards Identified	Initial Risk Level	Risk Control Measures		Residual Risk Level
3: Cont'd	4: Falling from heights	4	3:4:1 If the unit is on the roof follow the working at height steps in (SWMS #09). Remember you must have working at heights certification to access the roof.		2
4: Installing Indoor Unit	1: Sharp Edges	3	4:1:1 When unpacking units use a retractable knife and wear gloves rated 4543. 4:1:2 Refer to the manufacturers manual for installation instructions to ensure safe trouble-free operation.		1
	2: Pedestrians	2	4:2:1 Select an unobstructed location on the internal wall that is strong enough to mount a hi-wall or cassette into the ceiling. 4:2:2 Use traffic management 2m away from the work focal point, include cones, barriers & post caution signage.		1
	3: Falling from heights	4	4:3:1 Use step ladder platform for elevation to perform the work in a safe manner (Follow Job Step #3). Get spotter to hand up equipment to enable you to maintain 3 points of contact.		2
	4: Electricity	4	4:4:1 Make sure there's no service activities that will prevent you from being able to fix the unit e.g. electrical wiring/ plumbing. 4:4:2 Use an electronic stud/wire detector to trace electrical wiring behind the wall. 4:4:3 Secure wall mounting brackets for the hi-wall, using fit for purpose hand tools (Follow Job Step: 8).		2
	5: Overreaching	4	4:5:1 Do not overreach when working on the SLP, come down to the ground and move the SLP to a safer location.		2
	6: Manual Handling	2	4:6:1 Get the spotter to support indoor unit flush to the wall before connecting to mounting bracket. Don't lift above 25kgs, use team lifting techniques. Do not attempt if an object is beyond your lifting capacity.		1
	7: Dust	3	4:7:1 If drilling a hole through a drywall or concrete for piping or electrical cables use the correct tool e.g. reciprocating saw or drill, wear safety goggles & dust mask.		1
	8: Electricity	4	4:8:1 Electrical wiring to be terminated to the switchboard by only an electrical practicing license holder. Provide a circuit breaker between power source and outdoor unit.		2
5: Genie Hoist Set-Up	1: Lifting unit into ceiling cavity	3	5:1:1 If the air conditioner system is to be mounted in the ceiling, a genie hoist may be necessary to lift the unit for installing. 5:1:2 Set up the Genie Hoist within the work zone on level surface.		1
	2: Unstable hoist tip-over	3	5:2:1 Retract genie hoist base legs and lock wheels in place and attach the load platform to stabilise hoist.		1
	3: Fire/Explosion	3	5:3:1 Ensure the CO2 cylinder is securely fitted to the mounting bracket. Ensure SDS is readily available.		1
	4: Lifting	2	5:4:1 Lift the load onto the platform, make sure that the unit load does not exceed the genie hoist lifting and height capacity.		1
	5: Falling objects from unsecured load	3	5:5:1 Secure the load to the platform using webbing straps. Attach secondary strops around the unit and fasten to the ceiling strut for additional protection from falling objects. 5:5:2 The load is to be slowly raised using the remote control to a safe level e.g. 1m off the ground, Then check- <ul style="list-style-type: none"> Is the load all OK and safe? Is the load balanced evenly? Did the genie hoist lift the load OK and does it hold the load without creeping? Is the genie hoist stable? Base wheels must not be sinking into the ground. 		1

SWMS No: 03	Title: REFRIGERATION & AIR CONDITIONING INSTALLATION		Cont'd	
Job Steps	Hazards Identified	Initial Risk Level	Risk Control Measures	Residual Risk Level
5: Cont'd	6: Caught in between or against	4	5:6:1 If all is OK carefully continue the lift, ensure the raised unit does not come into contact with ceiling obstructions. 5:6:2 When the unit has been securely fastened in the ceiling, lower the genie hoist lifting ram into its resting position.	2
6: Installing Condensing Unit	1: Cutting & deburring pipe sharp edges	3	6:1:1 Measure the distance between the indoor and outdoor units and cut pipes and cable with correct cutting tool. 6:1:2 Remove all burrs around the cuts across section of the pipe/tube. Always wear gloves rated 4543. 6:1:3 Put the end of the copper tube/pipe in a downward direction as you remove burrs in order to avoid dropping burrs into tubing.	1 1
	2: Electrical wiring overheating	4	6:2:1 No wiring should be allowed to touch refrigerant tubing, the compressor or any moving parts. 6:2:2 Loose wiring may cause the terminal to overheat or result in unit malfunction. A fire hazard may also exist, therefore be sure all wiring is tightly connected.	2
	3: Lifting outdoor unit	3	6:3:1 Do not lift a load more than 25kgs by yourself, use a hand trolley or team lifting if practicable.	1
	4: Sharp Edges on condenser fins	2	6:4:1 When unpacking condensing unit wear gloves rated 4543 to protect from sharp edges in particular be careful edges and fins on the condenser. 6:4:2 After unpacking, check carefully for possible damage to the AC condenser. 6:4:3 Refer to the manufacturers manual for installation instructions to ensure trouble free operation.	1 1
	5: Unit vibration	2	6:5:1 Select installation location for the unit base, ensure mounting supports (e.g. monkey toe) is adequate for the unit location and limit equipment vibration e.g. ground, wall or roof.	1
	6: Hand Tools	2	6:6:1 Use correct hand tools for installing and securing condenser to support frame, wear gloves rated 4543 for hand protection.	2
	7: Falling from heights connecting capping	4	6:7:1 Run capping down the exterior wall to safely secure piping and cables from the indoor to connect outdoor unit. Use a step platform if elevation is required to secure unit to the wall.	2
	8: Electrical wiring	4	6:8:1 Electrical wiring to be terminated at the board by only an electrical practicing license holder.	2
	9: Working at heights	4	6:9:1 If the unit is to be located on the roof or side wall (Follow SWMS #09) working at heights.	2
	10: Hot Work	4	6:10:1 Brazing of HVAC piping is to be done with oxy-acetylene torches (Follow SWMS#10) to keep yourself safe.	2
7: Refrigerant Use	1: Handling refrigerant gases	3	7:1:1 Technician must have a current Approved Filler Licence to decant or fill cylinders that meet EPA standards for such devices. 7:1:2 Consult relevant SDS before you handle or use refrigerant, ensure documents are readily available.	2
	2: Charging refrigerant	3	7:2:1 Put on gloves & safety glasses/goggles/full face shield if there is doubt refer to your SDS. 7:2:2 Charging to be carried out in compliance with AS/NZS 1677.2:1998. 7:2:3 Follow manufacturers instructions for charging the system, make sure suction and discharge pressure is set using the refrigerant charging procedure.	1
	3: Gas Leak detection	3	7:3:1 Conduct leak test as required on new system and equipment is functioning correctly and efficiently.	1
	4: Refrigerant contamination	2	7:4:1 Check for contaminants (such as refrigerant oil).	1
	5: Electricity	4	7:5:1 Reinstate the electrical circuit to the units & remove your LOTO. Use testing instrument to Prove-Test-Prove, to verify isolation.	2

SWMS No: 03	Title: REFRIGERATION & AIR CONDITIONING INSTALLATION		Cont'd	
Job Steps	Hazards Identified	Initial Risk Level	Risk Control Measures	Residual Risk Level
8: Hand Tools	1: Sharp edges	2	8:1:1 When using any tool, always wear safety gloves rated 4543 and safety glasses compliant with AS/NZS1337.1. 8:1:2 Use screwdriver of the proper size to fit snugly into the slot or recessed portion of the fastener head.	1
	2: Puncture	2	8:2:1 Never carry a screwdriver in your pocket. 8:2:2 If a tool is broken, dull or damaged, take it out of service.	1
	3: Line of Fire	2	8:3:1 Never hold the piece you're working on in your hand while driving or loosening screws or bolts.	1
	4: Electricity	4	8:4:1 Use a 1000V insulated screwdriver to protect user from electric current.	2
9: Tidy Work Area	1: Slips, trips & falls	2	9:1:1 Apply 360° hazard awareness when removing waste, & equipment from the work zone.	1
	2: Sharp Objects	2	9:2:1 Ensure safety gloves rated 4543 are worn at all times.	1
	3: Lifting	2	9:3:1 Do not lift more than 25 kgs by yourself, use team lifting or mechanical device.	1
	4: Traffic & Pedestrians	3	9:4:1 Don't remove traffic management until the areas is clean & tidy. 9:4:2 Inform site management of job status and sign-out visitors book.	1



Risk Ranking Calculator						Risk Response		
Likelihood	Consequence					Low 1	Proceed with the job using SWMS & wearing prescribed PPE - worst scenario First Aid	
		Minor (FAI)	Moderate (MTI)	Serious (LTI)	Very Serious (Hospitalised)			Disaster (Fatalities)
	Almost Certain	High 3	High 3	Extreme 4	Extreme 4	Extreme 4	Moderate 2	Immediate action required – worst scenario Doctor Visit
	Likely	Moderate 2	High 3	High 3	Extreme 4	Extreme 4		
	Possible	Low 1	Moderate 2	High 3	High 3	Extreme 4	High 3	Method of risk management to be specified – worst scenario Hospital Admittance
	Remotely Possible	Low 1	Low 1	Moderate 2	Moderate 2	High 3		
	Practically Impossible	Low 1	Low 1	Low 1	Moderate 2	Moderate 2	Extreme 4	Work not to proceed, contact your Manager or ACS for action required – worst scenario DEATH

Before you commence the job you MUST fill out a **SWMS Risk Review – Site Specific** to assess & record site specific hazards, controls or risk scores. Use the Risk Matrix to recalculate the risk scores (Likelihood x Potential Consequences) to determine that controls have eliminated or minimized any risk

SAFE WORK METHOD STATEMENT (SWMS)

SWMS No: 04	Title: DECOMMISSIONING	Reviewed By: Gordon Knowles	Revision No: 04	Issue Date: 1/01/2023	Expiry Date: 31/12/2024
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Minimum PPE Requirements:

Job Steps	Hazards Identified	Initial Risk Level	Risk Control Measures	Residual Risk Level
1: Arrival to Site	1: Traffic congestion	3	1:1:1 Park your vehicle in designated parking spaces, reverse vehicle accurately within marked parking bays.	1
	2: Pedestrian movements	2	1:2:1 Wear all PPE as per specified minimum requirements above. 1:2:2 Keep to the designated walkways, walk with head up to reduce interactions between pedestrians and vehicles or machinery.	1
	3: Distraction from using mobile phone	2	1:3:1 If you will be in and/ or working in a designated safety critical area leave mobile phone in your vehicle or switch off on your person to limit distractions.	1
	4: Poor communication	2	1:4:1 Brief responsible site contact on scope of work, risks to site staff and the work area required. 1:4:2 Conduct toolbox talk & review SWMS, note any site-specific hazards <u>NOT</u> already linked to this SWMS, new job steps, risk score changes; on the SWMS Risk Review - Site Specific. Note closest Medical Centre to the work site location.	1

STOP!! IF HEAVY EQUIPMENT ACTIVITY (E.G. MOBILE ELEVATED WORK PLATFORM OR HI-AB CRANE) IS NEEDED TO SAFELY DO THE WORK A TASK SPECIFIC SWMS MUST BE CREATED AND APPROVED BY ACS.

2: Set-up Work Area	1: Traffic	3	2:1:1 Establish work area and apply traffic management using cones, barriers, caution signage. 2:1:2 Create ample work space, position cones more than 2 metre from the work focal point. 2:1:3 Use your vehicle as line of fire if working outdoors and appropriate for work undertaken.	1
	2: Electrical	4	2:2:1 Apply LOTO to isolate units to be worked on at the switchboard using circuit breaker lock and personal lock out system (consisting of padlock & tag). 2:2:2 Ensure you have filled out on the personal tag out; your name, date and mobile phone details. 2:2:3 Use a testing instrument to apply PROVE-TEST-PROVE method according to industry best practice. 2:2:4 Fill out LOTO Higher Risk Checklist after safety devices are secured & equipment is safely isolated.	2
	3: Sharp Objects	2	2:3:1 Remove equipment from vehicle to work area, always wear safety gloves rated 4543, only take off if gloves prevent you from doing the job safely. Remember to note this action on Site Specific SWMS.	1
	4: Lifting & Carrying	2	2:4:1 Do not lift more than 25kgs by yourself, if exceeded use mechanical lifting device or team lift.	1
	5: Trip and falls	2	2:5:1 Safely position equipment for use, i.e. manifold gauges, hand tools, refrigerant recovery equipment; to avoid trips and falls.	1
3: Refrigerant Recovery	1: Refrigerant Gas	3	3:1:1 Technician must have a current Approved Filler Licence to decant or fill cylinders that meet EPA standards for such devices. 3:1:2 Wear safety goggles and chemical gloves when recovering refrigerant. 3:1:3 Ensure an SDS for the refrigerant type is readily available and the issue date is current. 3:1:4 Connect to unit, manifold gauge hoses, vacuum pump and recovery tank to recover refrigerant.	1

SWMS No: 04	Title: DECOMMISSIONING		Cont'd	
Job Steps	Hazards Identified	Initial Risk Level	Risk Control Measures	Residual Risk Level
3: Cont'd			3:1:5 After the lines are purged the recovery equipment is ready to be turned on, together with recovery tank valves. 3:1:6 Gauges will drop as the refrigerant enters the recovery cylinder. Recovery vacuum pump should automatically turn off when reaching 0 psi. 3:1:7 The recovery machine needs to be purged, shut off all valves, including the recovery cylinder.	
4: Pipework & Electrical Disconnection	1: Pressurised Energy	3	4:1:1 If piping systems are to be removed, make sure lines are depressurised and drained before disassembly and removal of any fitting.	1
	2: Sharp Edges on piping	2	4:2:1 Wear safety gloves rated 4543 for hand protection when pulling and removing piping.	1
	3: Electricity	4	4:3:1 Use correct insulated hand tools, 1000v to disconnect wiring, only a qualified electrician may disconnect circuitry at the switchboard.	2
			4:3:2 Use testing instrument to PROVE-TEST-PROVE for verify that wiring and electrical connects are turned off & circuitry isolated.	
5: Removal of Indoor Unit	1: Falling from Heights	4	5:1:1 Use structurally sound & stable Step Ladder Platform (SLP) for lower heights elevation for indoor unit, and ducting removal.	2
	2: Overreaching	4	5:2:1 Locate suitable even surface and position SLP so that overreaching is not necessary, such an act may cause the SLP to tip over or you may fall.	2
	3: Tip Over	3	5:3:1 Do not rush & maintain 3-point contact on SLP to prevent falling or platform tipping over.	1
	4: Falling objects	3	5:4:1 Never carry tools or equipment up or down SLP, get the spotter to hand the items up to you. Use a genie hoist to lower cassette.	1
	5: Hand Tools	2	5:5:1 Use correct hand tools e.g. spanner to disconnect refrigeration piping and retractable stanley knife to cut wiring or conduit. 5:5:2 To remove unit from the wall bracket or in ceiling, use hand tools fit for purpose and wear safety gloves rated 4543.	1
	6: Lifting	3	5:6:1 Do not lift above 25kgs, identify drop zone, hand the unit, end first to the spotter on the ground, don't let other end go until safely brought down to ground level.	1
	7: Sealant	2	5:7:1 Determine whether the wall or ceiling hole/gap is to be reused or blocked with builder's putty or cement. Refer to product SDS before you handle or use filler; and always readily available.	1
6: Removal of Outdoor Unit	1: Refrigerant Gas	3	6:1:1 Check that all refrigerant pressure has been fully recovered from the system (Follow Job Step#3).	1
	2: Electricity	4	6:2:1 Perform PROVE-TEST-PROVE that wiring and electrical connects are turned off and circuitry isolated.	2
	3: Hand Tools	2	6:3:1 Use correct hand tools e.g. spanner to disconnect refrigeration piping and retractable stanley knife to cut wiring or conduit. Wear 4543 rated gloves.	1
			6:3:2 Disconnect the unit from monkey toe or other foundation pad/ base or bracket using appropriate hand tools.	
	4: Falling from Heights	4	6:4:1 Where elevation is necessary up to 2m to reach the unit e.g. located on building side wall, use a step ladder platform.	2
			6:4:2 If unit is to be removed from the roof use a hi-ab crane or similar, ACS will arrange heavy equipment plan for roof lift.	
5: Sealant	2	6:5:1 Determine whether the wall hole is to be reused or blocked with builder's putty or cement. Refer to product SDS before you handle or use filler, ensure documents are readily available.	1	

SWMS No: 04		Title: DECOMMISSIONING		Cont'd	
Job Steps	Hazards Identified	Initial Risk Level	Risk Control Measures	Residual Risk Level	
7: Hand Tools	1: Sharp Objects	2	7:1:1 When using any tool, always wear safety gloves rated 4543 and safety glasses compliant with AS/NZS1337.1. 7:1:2 Only use hand tools that you have been trained on & authorised to use. 7:1:3 Always ensure hand tools are safe to use, fit for purpose & suitable for the task.	1	
	2: Puncture	2	7:2:1 Never carry a screwdriver in your pocket. 7:2:2 If a tool is broken, dull or damaged, take it out of service.	1	
	3: Line of Fire	2	7:3:1 Never hold the piece you're working on in your hand while driving or loosening screws or bolts.	1	
	4: Electricity	4	7:4:1 Use a 1000V insulated screwdriver to protect user from electric current.	2	
	5: Noise	2	7:5:1 If noise generated from process e.g. hammering steel, exceeds 85dB(A), wear correct class of hearing protection to reduce the noise levels recorded.	1	
8: Tidy Work Area	1: Slips, trips & falls	2	8:1:1 Apply 360° hazard awareness when removing waste, & equipment from the work zone.	1	
	2: Sharp Objects	2	8:2:1 Ensure safety gloves rated 4543 are worn at all times.	1	
	3: Lifting	2	8:3:1 Do not lift more than 25 kgs by yourself, use team lifting or mechanical device.	1	
	4: Traffic & Pedestrians 	3	8:4:1 Don't remove traffic management until the areas is clean & tidy. 8:4:2 Inform site management of job status and sign-out visitors book.	1	

Risk Ranking Calculator						Risk Response		
		Consequence						
		Minor (FAI)	Moderate (MTI)	Serious (LTI)	Very Serious (Hospitalised)	Disaster (Fatalities)		
Likelihood	Almost Certain	High 3	High 3	Extreme 4	Extreme 4	Extreme 4	Low 1	Proceed with the job using SWMS & wearing prescribed PPE - worst scenario First Aid
	Likely	Moderate 2	High 3	High 3	Extreme 4	Extreme 4		Moderate 2
	Possible	Low 1	Moderate 2	High 3	High 3	Extreme 4	High 3	
	Remotely Possible	Low 1	Low 1	Moderate 2	Moderate 2	High 3		Extreme 4
	Practically Impossible	Low 1	Low 1	Low 1	Moderate 2	Moderate 2		

Before you commence the job you MUST fill out a **SWMS Risk Review – Site Specific** to assess & record site specific hazards, controls or risk scores. Use the Risk Matrix to recalculate the risk scores (Likelihood x Potential Consequences) to determine that controls have eliminated or minimized any risk

SWMS No: 05	Title: CABINET DOORS & LIGHTING	Reviewed By: Gordon Knowles	Revision No: 06	Issue Date: 1/01/2023	Expiry Date: 31/12/2024
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Minimum PPE Requirements:

Job Steps	Hazards Identified	Initial Risk Level	Risk Control Measures	Residual Risk Level
1: Arrival to Site	1: Traffic congestion	3	1:1:1 Park your vehicle in designated parking spaces, reverse vehicle accurately within marked parking bays.	1
	2: Pedestrian movements	2	1:2:1 Wear all PPE as per specified minimum requirements above.	1
	3: Distraction from using mobile phone	2	1:2:2 Keep to the designated walkways, walk with head up to reduce interactions between pedestrians and vehicles or machinery.	1
	4: Poor communication	2	1:3:1 If you will be in and/ or working in a designated safety critical area leave mobile phone in your vehicle or switch off on your person to limit distractions.	1
2: Set-up Work Area	1: Sharp Edges on equipment	2	1:4:1 Brief responsible site contact on scope of work, risks to site staff and the work area required.	1
	2: Lifting & Carrying excessive weights	2	1:4:2 Conduct toolbox talk & review SWMS, note any site-specific hazards <u>NOT</u> already linked to this SWMS, new job steps, risk score changes; on the SWMS Risk Review - Site Specific. Note closest Medical Centre to the work site location.	1
	3: Pedestrians entering work zone without authority	3	2:1:1 Remove equipment from vehicle to work area, always wearing safety gloves rated 4543.	2
	4: Electricity circuit to chiller	2	2:2:1 Do not lift more than 25kgs by yourself, if exceeded use mechanical lifting device or team lift.	1
3: Position Step Ladder Platform		2	2:3:1 Establish work area and apply traffic management using cones, barriers, and caution signage.	2
		4	2:3:2 Create ample work space, position cones more than 2 metres from the work focal point.	2
	1: Falls from height	4	2:4:1 For fixed wiring, apply LOTO to isolate electrical circuitry using personal lock out system (consisting of padlock and tag), use circuit breaker lock to secure at board.	2
	2: Uneven Surface	3	2:4:2 If applying LOTO to isolate a cabinet or chiller power plug, use an electrical plug lockout cover unit, padlock & tag, to prevent accidental reconnection.	1
	3: Overreaching outside ladder structure	4	2:4:3 Ensure you have filled out on the personal tag out; your name, date and mobile phone details.	2
4: Fault Finding		2	2:4:4 Use a calibrated testing instrument to apply PROVE-TEST-PROVE method according to industry best practice.	1
	1: Slips, Trips & Falls from wet or icy floor surfaces	2	2:4:5 Fill out LOTO Higher Risk Checklist after safety devices are secured & equipment is safely isolated.	1
		4	3:1:1 If you cannot reach the light fitting or fixture comfortably from ground level use a step ladder platform for elevation up to 2m.	2
		3	3:2:1 Position the stepladder platform on an even surface underneath the fixture to safely replace the lamps using comfortable postures.	1
		4	3:3:1 If there is a need to overreach during the process, stop work and climb down and move the platform to a safe work location to avoid stretching outside of your comfort zone.	2
		2	4:1:1 Identify the fault, store removed or dismantled components or parts safely.	1
		2	4:1:2 Examine the door heaters and temperature controller, if floor is wet or icy, mop up to create a non-slip environment, check you have slip-resistant soles on footwear & prominently display a "WET FLOOR" sign.	1

SWMS No: 05		Title CABINET DOORS & LIGHTING		Cont'd	
Job Steps	Hazards Identified	Initial Risk Level	Risk Control Measures	Residual Risk Level	
4: Fault Finding Cont'd	2: Entrapment	2	4:2:1 Check door automatically closes (snap shut) when released to its resting position.	1	
	3: Sharp Objects & Edges	2	4:3:1 Wear cut-resistant gloves (minimum 4543 rating) for protection against sharp objects and edges. 4:3:2 Visually check the chiller/ cabinet door handle, hinges and rubber gaskets for signs of deterioration; ripped, torn or cracked. 4:3:3 Test that the cabinet is operating safely, effectively and complies with relevant requirements.	1	
5: Removing & Replacing Lighting & Reinstatement	1: Sharp Edges	2	5:1:1 Wear cut resistant gloves (minimum 4543 rating) for handling lamps or florescent tubes. 5:1:2 Remove any lens cover using hand tools (see Job Step:#6) and store in a safe location to avoid tripping over. 5:1:3 Remove the tube rotating it 90° supported by both hands at the ends. 5:1:4 Place the expired tube in a spare cardboard tube cover and place out of the way where it cannot be disturbed. 5:1:5 Lift the new light in place, push into sockets and rotate 90° until you feel it is firmly locked into place.	1	
	2: Trips & Slips	2	5:2:1 Never walk or rush around when holding an unprotected florescent tube, always safeguard tube in a cardboard sleeve or cover.	1	
	3: Sharp Edges	2	5:3:1 Replace the lens cover if you have not already done so, wear safety gloves rated 4543 to protect hands from sharp edges.	1	
	4: Electricity	4	5:4:1 Remove all locks and tags from the appropriate energy source. Prove – Test – Prove using your testing instrument to verify safe isolation. 5:4:2 Reinstate the power supply to the equipment and check that the cabinet is running safe and sound.	2	
6: Hand Tools	1: Sharp Objects	2	6:1:1 When using any tool, always wear safety gloves rated 4543 and safety glasses compliant with AS/NZS1337.1. 6:1:2 Only use hand tools that you have been trained on & authorised to use. 6:1:3 Always ensure hand tools are safe to use, fit for purpose & suitable for the task.	1	
	2: Puncture	2	6:2:1 Never carry a screwdriver in your pocket to avoid the sharp end penetrating sharp force trauma. 6:2:2 If a tool is broken, dull or damaged, take it out of service.	1	
	3: Line of Fire	2	6:3:1 Never hold the piece you're working on in your hand while driving or loosening screws or bolts.	1	
	4: Electricity	4	6:4:1 Use a 1000V insulated screwdriver to protect user from electric current.	2	
7: Tidy Work Area	1: Slips, Trips & Falls	2	7:1:1 Apply 360° hazard awareness when removing waste, & equipment from the work zone. 7:1:2 Ensure safety gloves rated 4543 are worn at all times.	1	
	2: Sharp Edges	2	7:2:1 Do not lift more than 25 kgs by yourself, use team lifting or mechanical device.	1	
	3: Manual Handling	2	7:3:1 Don't remove traffic management until the area is clean and tidy.	1	
	4: Traffic & Pedestrians	3	7:4:1 Inform site management of job status and sign-out visitors book.	1	



SWMS No: 05	Title CABINET DOORS & LIGHTING			Cont'd
Job Steps	Hazards Identified	Initial Risk Level	Risk Control Measures	Residual Risk Level

Risk Ranking Calculator						Risk Response	
Consequence							
	Minor (FAI)	Moderate (MTI)	Serious (LTI)	Very Serious (Hospitalised)	Disaster (Fatalities)		
Likelihood	Almost Certain	High 3	High 3	Extreme 4	Extreme 4	Low 1	Proceed with the job using SWMS & wearing prescribed PPE - worst scenario First Aid
	Likely	Moderate 2	High 3	High 3	Extreme 4	Moderate 2	Immediate action required – worst scenario Doctor Visit
	Possible	Low 1	Moderate 2	High 3	High 3	High 3	Method of risk management to be specified – worst scenario Hospital Admittance
	Remotely Possible	Low 1	Low 1	Moderate 2	Moderate 2	Extreme 4	Work not to proceed, contact your Manager or ACS for action required – worst scenario DEATH
	Practically Impossible	Low 1	Low 1	Low 1	Moderate 2	Moderate 2	
		Low 1	Low 1	Low 1	Moderate 2	Moderate 2	

Before you commence the job you MUST fill out a **SWMS Risk Review – Site Specific** to assess & record site specific hazards, controls or risk scores. Use the Risk Matrix to recalculate the risk scores (Likelihood x Potential Consequences) to determine that controls have eliminated or minimized any risk

SAFE WORK METHOD STATEMENT (SWMS)


SWMS No: 06	Title CONDENSING UNIT REPAIR	Reviewed by: Gordon Knowles	Revision No: 06	Issue Date: 1/01/2023	Expiry Date: 31/12/2024
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Minimum PPE Requirements:



Job Steps	Hazards Identified	Initial Risk Level	Risk Control Measures	Residual Risk Level
1: Arrival to Site	1: Traffic congestion	3	1:1:1 Park your vehicle in designated parking spaces, reverse vehicle accurately within marked parking bays.	1
	2: Pedestrian movements	2	1:2:1 Wear all PPE as per specified minimum requirements above.	1
		2	1:2:2 Keep to the designated walkways, walk with head up to reduce interactions between pedestrians and vehicles or machinery.	1
	3: Distraction from using mobile phone	2	1:3:1 If you will be in and/ or working in a designated safety critical area leave mobile phone in your vehicle or switch off on your person to limit distractions.	1
4: Poor communication	2	1:4:1 Brief responsible site contact on scope of work, risks to site staff and the work area required.	1	
		1:4:2 Conduct toolbox talk & review SWMS, note any site-specific hazards NOT already linked to this SWMS, new job steps, risk score changes; on the SWMS Risk Review - Site Specific. Note closest Medical Centre to the work site location.	1	
2: Set - up Work Area	1: Traffic	3	2:1:1 Establish work area and apply traffic management using cones, barriers, caution signage and work vehicle (if essential). 2:1:2 Create ample work space, position cones more than 2 metre from the work focal point.	1
	2: Sharp Objects	2	2:2:1 Remove equipment from vehicle to work area, always wearing safety gloves rated 4543.	1
	3: Lifting/ Carrying	2	2:3:1 Do not lift more than 25kgs by yourself, if exceeded use mechanical lifting device, hand trolley or team lift.	1
3: Fault Finding & Testing	1: Circuit overload	2	3:1:1 Firstly check to see if the circuit breaker has tripped or fuse has blown, ensure they're turned on & functioning correctly.	1
	2: Sharp edges	3	3:2:1 Wear cut-resistant gloves rated 4543 for protection from sharp sheet metal parts.	1
	3: Refrigerant leaks	4	3:3:1 Visually check, the unit compressor is working effectively, look for any refrigerant leaks along the condenser coil or connections to the unit, wear safety glasses compliant with AS/NZS1337.1.	2
	4: Electricity	4	3:4:1 Test condenser electrical circuitry that operates the fan and compressor, to determine they are working safely and efficiently.	2
	5: Moving Parts	4	3:5:1 Keep hands away from any moving parts, use correct hand tools or battery operated drills where needed.	2
4: Applying LOTO	1: Electricity	4	4:1:1 Apply Last Minute Risk Assessment to determine "What could go Wrong" when working on the condensing unit.	
			4:1:2 For fixed wiring, apply LOTO to isolate electrical circuitry using personal lock out system (consisting of padlock and tag), use circuit breaker lock to secure at board or isolator switch near outdoor unit.	
			4:1:3 If applying LOTO to isolate a cabinet or chiller power plug, use an electrical plug lockout cover unit, padlock & tag, to prevent accidental reconnection.	
			4:1:4 Use a calibrated testing instrument to apply PROVE-TEST-PROVE method according to industry best practice.	
			4:1:5 Ensure you have filled out on the personal tag out; your name, date and mobile phone details.	
			4:1:6 Fill out LOTO Higher Risk Checklist after safety devices are secured & equipment is safely isolated.	

SWMS No: 06	Title CONDENSING UNIT REPAIR		Cont'd	
Job Steps	Hazards Identified	Initial Risk Level	Risk Control Measures	Residual Risk Level
5: Refrigerant Leak Detection	1: Hazardous Substances	4	5:1:1 To handle refrigerants you must be properly trained and hold an Approved refrigerant filler compliance certificate. 5:1:2 Consult relevant refrigerant type SDS prior to handling, keep copy readily available.	2
	2: Contact with Pressurised Nitrogen	4	5:2:1 Wear chemical resistant gloves & safety goggles as appropriate when handling hazardous substances such as nitrogen. 5:2:2 If you have not detected the leak visually or with a leak detector device, pressurize the cooling system using nitrogen.	2
	3: High pressure cylinder falling over	4	5:3:1 Ensure nitrogen cylinder is secured in an upright position so that it cannot topple over.	2
	4: Stored energy	4	5:4:1 Cylinder should be fitted with a regulator and manifold hose, when pressurizing check gauges for any pressure loss.	2
	5: Oil Contamination	2	5:5:1 Check visually for contaminants (such as oil traces) which could indicate the actual leakage point.	1
	6: Leak Detector solution	2	5:6:1 Use bubble leak detector e.g. BIG BLU; coat all surfaces, focus on threaded connections, joins and valves. 5:6:2 Wear protective chemical gloves and goggles; if poorly vented use a suitable respirator. For further PPE information, consult the appropriate product SDS.	1
	7: Nitrogen charging	3	5:7:1 Follow manufacturers instructions for charging the system, make sure suction and discharge pressure is set using the refrigerant charging procedure.	1
	8: Refrigerant recovery	2	5:8:1 When you have detected the leak location using visual or leak test instrument you need to recover the refrigerant. 5:8:2 Hook up manifold gauges to condensing unit to evacuate refrigerant using recovery machine into the cylinder.	1
	9: Brazing Hot Work	4	5:9:1 Where brazing work is necessary to repair the leak go to <u>SWMS#10</u> and perform the task.	2
6: Hand Tools	1: Lack of skill	3	6:1:1 Only use hand tools that you have been trained on & authorised to use.	1
	2: Tool selection	2	6:2:1 Always ensure hand tools are safe to use, fit for purpose & suitable for the task.	1
	3: Sharp edges	2	6:3:1 Always wear safety gloves rated 4543 for hand protection when coming into contact with sharp edges.	1
	4: Flying projectiles	3	6:4:1 To protect eyes and face from flying projectiles wear safety glasses compliant with AS/NZS1337.1.	1
	5: Puncture	3	6:5:1 Never carry a screwdriver in your pocket, place the tool in your toolbox or work belt. 6:5:2 If a tool is broken, dull or damaged, take it out of service.	1
	6: Line of Fire	3	6:6:1 Never hold the piece you're working on in your hand while driving or loosening screws or bolts.	1
	7: Electrical	4	6:7:1 Use a 1000V insulated screwdriver to protect user from electric current when doing prescribed electrical work.	2
7: Electrical Reinstatement	1: Sharp edges	2	7:1:1 Ensure all equipment guards and covers are refitted, wear cut-resistant gloves rated 4543 for protection from sharp Sheetmetal parts.	1
	2: Electrical	4	7:2:1 Be sure that all electrical connections (condenser fan motor, compressor motor etc) are intact before reinstatement. 7:2:2 All LOTO safety devices can now be removed, and the system reinstated fit for operation.	2

SWMS No: 06	Title		Cont'd	
	CONDENSING UNIT REPAIR			
Job Steps	Hazards Identified	Initial Risk Level	Risk Control Measures	Residual Risk Level
8: Tidy Work Area 	1: Slips, trips & falls	2	8:1:1 Apply 360° hazard awareness when removing waste, tools or equipment from the work zone.	1
	2: Sharp Objects	2	8:2:1 Ensure safety gloves rated 4543 are worn at all times.	1
	3: Manual Handling	2	8:3:1 Do not lift more than 25 kgs by yourself, use team lifting or mechanical device	1
	4: Traffic & Pedestrians	3	8:4:1 Don't remove traffic management until the areas is clean & tidy 8:4:2 Instruct site management of job status and sign-out visitors book	1

Risk Ranking Calculator						Risk Response		
Consequence						Low 1	Proceed with the job using SWMS and wearing prescribed PPE - worst scenario First Aid	
	Minor (FAI)	Moderate (MTI)	Serious (LTI)	Very Serious (Hospitalised)	Disaster (Fatalities)			
Likelihood	Almost Certain	High 3	High 3	Extreme 4	Extreme 4	Extreme 4	Moderate 2	Immediate action required – worst scenario Doctor Visit
	Likely	Moderate 2	High 3	High 3	Extreme 4	Extreme 4		
	Possible	Low 1	Moderate 2	High 3	High 3	Extreme 4	High 3	Method of risk management to be specified – worst scenario Hospital Admittance
	Remotely Possible	Low 1	Low 1	Moderate 2	Moderate 2	High 3	Extreme 4	Work not to proceed, contact your Manager or ACS for action required – worst scenario DEATH
	Practically Impossible	Low 1	Low 1	Low 1	Moderate 2	Moderate 2		

Before you commence the job you MUST fill out a **SWMS Risk Review – Site Specific** to assess & record site specific hazards, controls or risk scores. Use the Risk Matrix to recalculate the risk scores (Likelihood x Potential Consequences) to determine that controls have eliminated or minimized any risk

SWMS No: 07	Title: FANS	Reviewed By: Gordon Knowles	Revision No: 06	Issue Date: 1/01/2023	Expiry Date: 31/12/2024
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Minimum PPE Requirements:

Job Steps	Hazards Identified	Initial Risk Level	Risk Control Measures	Residual Risk Level
1: Arrival to Site	1: Traffic congestion	3	1:1:1 Park your vehicle in designated parking spaces, manoeuvre vehicle accurately within marked parking bays, if assigned.	1
	2: Pedestrian movements	2	1:1:2 Wear all PPE as per specified minimum requirements above. 1:2:1 Keep to the designated walkways, apply 360° hazard awareness, do not enter where vehicles or machinery are being used unless authorised to do so.	1
	3: Distraction from using mobile phone	2	1:3:1 If you will be in and/ or working in a designated safety critical area leave mobile phone in your vehicle or switch off on your person to limit distractions.	1
	4: Poor communication	2	1:4:1 Brief responsible site contact on scope of work, risks to site staff and the work area required. 1:4:2 Conduct toolbox talk & review SWMS, note any site-specific hazards <u>NOT</u> already linked to this SWMS, new job steps, risk score changes; on the SWMS Risk Review - Site Specific. Note closest Medical Centre to the work site location.	1
2: Set-up Work Area	1: Congested space	2	2:1:1 Apply Last Minute Risk Assessment to determine “What could go Wrong” when working on the condensing unit.	1
	2: Sharp Objects	2	2:2:1 Wear safety gloves that are suitable for task, e.g. 4543 rated for sharp objects & edges.	1
	3: Pedestrians/ Traffic	3	2:3:1 Barricade work area using cones, barriers & caution signage. Position barriers 2m from work focal point for ample work space.	1
	4: Falling from Heights	4	2:4:1 If elevation is necessary to perform task below 2m, use a step ladder platform.	2
	5: Electrical	4	2:5:1 Apply LOTO, isolate electrical circuitry using personal lock out system (consisting of padlock and tag), use circuit breaker lock to secure at the board. 2:5:2 Use a calibrated testing instrument to carry out PROVE-TEST-PROVE to verify safe isolation according to industry best practice. 2:5:3 Ensure you have filled out on the personal tag out; your name, date and mobile phone details. 2:5:4 Fill out LOTO High Risk Checklist after safety devices are secured & unit is safely isolated.	2
3: Repair / Cleaning Fans	1: Sharp Edges	2	3:1:1 Wear cut-resistant gloves (minimum 4543 rating) for protection against sharp objects and edges.	1
	2: Dust	2	3:2:1 Dust sheet to be used to cover product, fittings or furnishings, to protect from dust dispersing over items.	1
	3: Falling from Heights	4	3:3:1 Position step ladder platform on an even surface and climb using 3 points of contact.	2
	4: Electricity	4	3:4:1 Check that the fan is correctly isolated before starting work. Use testing instrument to PROVE-TEST-PROVE (Follow Job Step 2:4:1) industry best practice method.	2
	5: Hand Tools	2	3:5:1 Use hand tools correctly (Follow Job Step#7) to remove grille retaining screws, hand down to spotter (if necessary) to thoroughly clean grille.	1
	6: Airborne contaminant	2	3:6:1 Wear a dust mask to prevent inhalation of airborne contaminants.	1
	7: Hazardous Substances	2	3:7:1 Clean the interior housing by either vacuuming or with a damp rag with a cleaning solution to remove excess grit or dust build up.	1

SWMS No: 07		Title FANS		Cont'd	
Job Steps	Hazards Identified	Initial Risk Level	Risk Control Measures		Residual Risk Level
3: Cont'd	8: Congested Space	3	3:7:2 Consult relevant SDS, & wear chemical resistant gloves & safety goggles as appropriate for cleaning hazardous substances used. 3:8:1 Inspect the ductwork inside the ceiling, verify that duct is not torn, rusted through, obstructed, crimped or crushed.		1
4: Installation of Toilet Extract Fan/ Ducting	1: Falling from heights	4	4:1:1 Use structurally sound & stable step ladder platform for height elevation for the ventilation extract fan and/or ducting installation into the ceiling space.		2
	2: Overreaching	4	4:2:1 Place the Step Ladder Platform in a position whereby you don't have to overreach above your head.		2
	3: Hand tools	2	4:3:1 Gather required tools to install the extract fan, keep them close at hand but away from feet to avoid trip hazard.		1
	4: Falling Objects	2	4:4:1 Ensure a spotter keeps watch for pedestrians, and hands up tools and equipment to the installer as required. All technicians to wear a hard hat and chin strap.		1
	5: Electricity	4	4:5:1 Before you cut a hole in the ceiling be sure there are no obstructions or service activities along the way. Make sure electrical circuitry is isolated safely, (follow Step: 2:5:1)		2
	6: Kick back from saw	3	4:6:1 Use a reciprocating saw to cut ceiling hole, hold the saw firmly with both hands, wear safety gloves rated 4543 and safety glasses compliant with standard AS/NZS1337.1. 4:6:2 Reciprocating saws can kick back and throw scraps of material. Put on a full face shield so you can stand protected.		1
	7: Noise levels when cutting	2	4:7:1 The saw can be loud while cutting through material, (i.e. noise generated exceeds 85dB(A), put on appropriate class of hearing protection.		1
	8: Pressure on cutting blade	2	4:8:1 When cutting let the saw do most of the work and keep the blade straight as you make your cut so you don't bend or break the blade.		1
	9: Congested space inside ceiling cavity	2	4:9:1 Run the flexible ducting inside the ceiling, use spotter to hand up materials to the installer.		1
	10: Fan assembly falling from above	2	4:10:1 Position the fan assembly correctly to the joists and run an electrical cable through the roof cavity for an electrician to terminate at the board or an existing connection. Wear safety gloves rated 4543. 4:10:2 Connect diffusers into flexible ducting as designed on the project plans.		1
5: Install Roof / Wall Fan Cowl Kit	1: Falling from heights	4	5:1:1 If there is no internal roof access, use an extension ladder, to access roof (refer to SWMS#09) for working at heights. 5:1:2 Worker on the roof must have working at heights certification, and shall wear a travel restraint harness connected to a static fixed line or a secure fixed asset.		2
	2: Falling Objects	3	5:2:1 Carry work tools in either a backpack or secure to a rope and lift manually up the side of the building, onto the roof.		1
	3: Sharp Edges	2	5:3:1 Use correct cutting tools e.g. jigsaw to penetrate the roof to create connection of the flexible ducting to the roof cowl, wear safety gloves rated 4543.		1
	4: Airborne flying projectiles	2	5:4:1 If drilling through a concrete wall ensure safety gloves and full-face shield is worn for protection against flying projectiles.		1
	5: Sealant	2	5:5:1 When connected use a sealing substance to prevent leaks into the ceiling, wear gloves and safety glasses when applying sealant, refer to product SDS for further information about the product.		1

SWMS No: 07	Title FANS	Cont'd			
Job Steps	Hazards Identified	Initial Risk Level	Risk Control Measures		Residual Risk Level
6: Cordless Drill & Tools	1: Flying Projectiles	2	6:1:1	Wear safety glasses and/or full-face shield compliant with AS/NZS1337.16:2:1 to protect eyes when drilling.	1
	2: Noise	2	6:2:1	Hearing protection shall be worn if noise levels generated exceed 85dB(A).	1
	3: Hot surfaces	2	6:3:1	Wear gloves rated 4543 to protection against hot metal bits and puncture injury.	1
	4: Entanglement with rotating shaft	3	6:4:1	Keep fingers, hands, clothing and hair etc. well clear of the rotating drill chuck & bit.	1
	5: Dust contaminant airborne	2	6:5:1	Wear a dust mask if airborne dust levels are considered too excessive.	1
7: Hand Tools	1: Lack of skill	3	7:1:1	Only use hand tools that you have been trained on & authorised to use.	1
	2: Tool selection	2	7:2:1	Always ensure hand tools are safe to use, fit for purpose & suitable for the task.	1
	3: Sharp edges	2	7:3:1	Always wear safety gloves rated 4543 for hand protection when coming into contact with sharp edges.	1
	4: Flying projectiles	3	7:4:1	To protect eyes and face from flying projectiles wear safety glasses compliant with AS/NZS1337.1.	1
	5: Puncture	3	7:5:1	Never carry a screwdriver in your pocket, place the tool in your toolbox or work belt.	1
	6: Line of Fire	3	7:5:2	If a tool is broken, dull or damaged, take it out of service.	1
	7: Electrical	4	7:6:1	Never hold the piece you're working on in your hand while driving or loosening screws or bolts.	1
8: Tidy Work Area	1: Slips, trips & falls	2	7:7:1	Use a 1000V insulated screwdriver to protect user from electric current when doing prescribed electrical work.	2
	2: Sharp objects	2	8:1:1	Apply 360° hazard awareness when removing waste, & equipment from the work zone.	1
	3: Manual Handling	2	8:2:1	Ensure safety gloves rated 4543 are worn at all times.	1
	4: Traffic & Pedestrians	3	8:3:1	Do not lift more than 25 kgs by yourself, use team lifting or mechanical device.	1
			8:4:1	Don't remove traffic management until the areas is clean and tidy.	1
			8:4:2	Inform site management of job status and sign-out visitors book.	1



Risk Ranking Calculator						Risk Response		
		Consequence				Low 1	Proceed with the job using SWMS and wearing prescribed PPE - worst scenario First Aid	
		Minor (FAI)	Moderate (MTI)	Serious (LTI)	Very Serious (Hospitalised)			Disaster (Fatalities)
Likelihood	Almost Certain	High 3	High 3	Extreme 4	Extreme 4	Extreme 4	Moderate 2	Immediate action required – worst scenario Doctor Visit
	Likely	Moderate 2	High 3	High 3	Extreme 4	Extreme 4	High 3	Method of risk management to be specified – worst scenario Hospital Admittance
	Possible	Low 1	Moderate 2	High 3	High 3	Extreme 4	Extreme 4	Work not to proceed, contact your Manager or ACS for action required – worst scenario DEATH
	Remotely Possible	Low 1	Low 1	Moderate 2	Moderate 2	High 3		
	Practically Impossible	Low 1	Low 1	Low 1	Moderate 2	Moderate 2		

Before you commence the job you MUST fill out a SWMS Risk Review to assess & record site specific hazards, controls or risk scores. Use the Risk Matrix to recalculate the risk scores (Likelihood x Potential Consequences) to determine that controls have eliminated or minimized any risk

SAFE WORK METHOD STATEMENT (SWMS)

SWMS No: 08	Title COIL CLEANING	Reviewed By: Gordon Knowles	Revision No: 05	Issue Date: 1/01/2023	Expiry Date: 31/12/2024
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Minimum PPE Requirements:

Job Steps	Hazards Identified	Initial Risk Level	Risk Control Measures	Residual Risk Level
1: Arrival to Site	1: Traffic congestion	3	1:1:1 Park your vehicle in designated parking spaces, reverse vehicle accurately within marked parking bays.	1
	2: Pedestrian movements	2	1:2:1 Wear all PPE as per specified minimum requirements above. 1:2:2 Keep to the designated walkways, walk with head up to reduce interactions between pedestrians and vehicles or machinery.	1
	3: Distraction from using mobile phone	2	1:3:1 If you will be in and/ or working in a designated safety critical area leave mobile phone in your vehicle or switch off on your person to limit distractions.	1
	4: Poor communication	2	1:4:1 Brief responsible site contact on scope of work, risks to site staff and the work area required. 1:4:2 Conduct toolbox talk & review SWMS, note any site-specific hazards <u>NOT</u> already linked to this SWMS, new job steps, risk score changes; on the SWMS Risk Review - Site Specific. Note closest Medical Centre to the work site location.	1
2: Set-up Work Area	1: Traffic	3	2:1:1 Establish work area and apply traffic management using cones, barriers & signage. 2:1:2 Create ample work space, position cones more than 2 metres from the work focal point.	1
	2: Electrical	4	2:2:1 Isolate units, apply LOTO using personal lock out system (consisting of padlock and tag) use circuit breaker lock where appropriate. Prove–Test– Prove to verify safe isolation. 2:2:2 Fill out LOTO Higher Risk Checklist after safety devices are secured & equipment is safely isolated.	2
	3: Sharp Objects	2	2:3:1 When removing unit side panels, wear gloves suitable for task minimum 4543 rating.	1
3: Applying Coil Cleaner	1: Hazardous Substances	3	3:1:1 Make sure there is a Safety Data Sheet (SDS) readily available for the Coil Cleaner product. 3:1:2 Spray cleaner solution from a pump type sprayer onto the intake side of the coil. 3:1:3 Never spray towards your eyes, always away from your body. Where safety glasses compliant with AS/NZS 1337.1.	1
	2: Compressed Air	3	3:2:1 Blow low pressure compressed air across the fins or the use of a soft bristle brush to remove light dust or dirt contamination to the fins.	1
	3: Chemicals	3	3:3:1 Wear chemical rated gloves and safety goggles when spraying cleaner or rinsing off residue. 3:3:2 Clean the condensate pan & check that the drain line is unblocked from grim, debris or microorganisms. 3:3:3 Make sure a AerisGuard biodegradable tablet is placed in the pan if due on the scheduled maintenance plan.	1
	4: Spills	2	3:4:1 Make sure you know the location of a spill kit with adequate supplies of absorbent materials to contain spills if necessary.	1
4: Applying Koil Kote	1: Hazardous Substances	3	4:1:1 Make sure there is a Safety Data Sheet (SDS) readily available for the Koil Kote or similar biodegradable product that washes down drains safely.	1
	2: Sharp edges on side panels	2	4:2:1 Remove side panels using fit for purpose hand tools, (Follow Job Step#5).	1

SWMS No: 08	Title COIL CLEANING		Cont'd		
Job Steps	Hazards Identified	Initial Risk Level	Risk Control Measures	Residual Risk Level	
4: Applying Coil Kote Cont'd	3: Electricity	4	4:3:1 Use testing instrument to Prove-Test-Prove to verify equipment power source is safely isolated	2	
	4: Entanglement by moving parts	3	4:4:1 Safe dress code, as loose clothing, neckties, watches, rings or other jewelry should not be worn around mechanical equipment.	2	
	5: Humidity	2	4:5:1 Ensure that the relative humidity is below 65% prior to application.	1	
	6: Airborne contaminants	3	4:6:1 Koil kote protects coils from corrosion, make sure all surface dirt is removed prior to application, brush or vacuum.	1	
	7: Electricity	4	4:7:1 If operating a wet vac in a damp location is unavoidable, use a residual current device (RCD) protected supply. Use of an RCD reduces the risk of electric shock.	2	
	8: Gases & vapours	3	4:8:1 Wear suitable chemical gloves & safety goggles, and a respirator for organic/particle vapours (AS1716). 4:8:2 Observe due care when spraying the aerosol can, the contents is a flammable gas "Class 2" dangerous goods classification.	1	
	9: Spills	2	4:9:1 Protect surrounding areas before applying the coating, use drop sheet if necessary.	1	
	10: Contact with side panel edges	2	4:10:1 When chemical application is complete, reattach side panels, wear cut-resistant gloves, (minimum rating 4543).	1	
	5: Hand Tools	1: Lack of skill	3	5:1:1 Only use hand tools that you have been trained on & authorised to use.	1
		2: Tool selection	2	5:2:1 Always ensure hand tools are safe to use, fit for purpose & suitable for the task.	1
3: Sharp edges		2	5:3:1 Always wear safety gloves rated 4543 for hand protection when coming into contact with sharp edges.	1	
4: Flying projectiles		3	5:4:1 To protect eyes and face from flying projectiles wear safety glasses compliant with AS/NZS1337.1.	1	
5: Puncture		3	5:5:1 Never carry a screwdriver in your pocket, the tool in your toolbox or work belt. 5:5:2 If a tool is broken, dull or damaged, take it out of service.	1	
6: Line of Fire		3	5:6:1 Never hold the piece you're working on in your hand while driving or loosening screws or bolts.	1	
7: Electrical		4	5:7:1 Use a 1000V insulated screwdriver to protect user from electric current when doing prescribed electrical work.	2	
6: Tidy Work Area	1: Slips, trips & falls	2	6:1:1 Apply 360° hazard awareness when removing waste, & equipment from the work zone.	1	
	2: Sharp Objects	2	6:2:1 Ensure safety gloves rated 4543 are worn at all times.	1	
	3: Lifting	2	6:3:1 Do not lift more than 25 kgs by yourself, use team lifting or mechanical device.	1	
	4: Traffic & Pedestrians	3	6:4:1 Don't remove traffic management until the areas are clean & tidy. 6:4:2 Inform site management of job status and sign-out visitors book.	1	



SWMS No: 08	Title COIL CLEANING	Cont'd
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Job Steps	Hazards Identified	Initial Risk Level	Risk Control Measures	Residual Risk Level
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Risk Ranking Calculator						
Consequence						
	Minor (FAI)	Moderate (MTI)	Serious (LTI)	Very Serious (Hospitalised)	Disaster (Fatalities)	
Likelihood	Almost Certain	High 3	High 3	Extreme 4	Extreme 4	Extreme 4
	Likely	Moderate 2	High 3	High 3	Extreme 4	Extreme 4
	Possible	Low 1	Moderate 2	High 3	High 3	Extreme 4
	Remotely Possible	Low 1	Low 1	Moderate 2	Moderate 2	High 3
	Practically Impossible	Low 1	Low 1	Low 1	Moderate 2	Moderate 2

Risk Response	
Low 1	Proceed with the job using SWMS and wearing prescribed PPE - worst scenario First Aid
Moderate 2	Immediate action required – worst scenario Doctor Visit
High 3	Method of risk management to be specified – worst scenario Hospital Admittance
Extreme 4	Work not to proceed, contact your Manager or ACS for action required – worst scenario DEATH

Before you commence the job you MUST fill out a **SWMS Risk Review – Site Specific** to assess & record site specific hazards, controls or risk scores. Use the Risk Matrix to recalculate the risk scores (Likelihood x Potential Consequences) to determine that controls have eliminated or minimized any risk

SAFE WORK METHOD STATEMENT (SWMS)

SWMS No:	Title	Reviewed By:	Revision	Issue Date:	Expiry Date:
09	WORKING AT HEIGHTS	Gordon Knowles	No: 06	1/01/2023	31/12/2024

Minimum PPE Requirements:

Job Steps	Hazards Identified	Initial Risk Level	Risk Control Measures	Residual Risk Level
1: Arrival to Site	1: Traffic congestion	3	1:1:1 Park your vehicle in the designated parking zones within the marked parking bays (if defined). 1:1:2 Wear all PPE as per specific minimum requirements above for risk exposure safeguard.	1
	2: Pedestrian movements	2	1:2:1 Keep to the designated walkways, apply 360° hazard awareness, do not enter where vehicles or machinery are being used without authorisation.	1
	3: Distraction from using mobile phone	2	1:3:1 If you will be in and/ or working in a designated safety critical area leave mobile phone in your vehicle or switch off on your person to limit distractions.	1
	4: Poor communication	2	1:4:1 Brief responsible site contact on scope of work, risks to site staff and the work area required. 1:4:2 Conduct toolbox talk & review SWMS, note any site-specific hazards <u>NOT</u> already linked to this SWMS, new job steps, risk score changes; on the SWMS Risk Review - Site Specific. Note closest Medical Centre to the work site location.	1
	5: Working at heights	4	1:5:1 Working at height is a high-risk activity that refers to work undertaken in any place where, if there were no safety precautions in place, a person could fall a certain distance e.g. 2m; resulting in personal injury (e.g. falling through a fragile roof, skylight, working within 2m of edge or opening). 1:5:2 Workers shall be adequately trained to work at heights and use a travel restraint safety harness validate training certification: NZQA Unit Standard 17600, 23229 & 25045.	2
	6: Extreme weather conditions	4	1:6:1 If the weather is inclement, i.e. heavy rain or high wind gusts, discontinue job until conditions improve to work at heights outdoors.	2
2: Set-up Work Area	1: Traffic	3	2:1:1 Remove & read your LPSA card to determine what could go wrong or the worst thing that could happen when doing the job. 2:1:2 Establish work area and apply traffic management using cones, barriers, caution signage and work vehicle (where applicable). 2:1:3 Create ample work space, position cones more than 2 metres from the work focal point.	1
	2: Sharp Edges	2	2:2:1 It is now safe to remove equipment and tools from vehicle to work area, always wear safety gloves rated 4543.	1
	3: Lifting & Carrying	2	2:3:1 Do not lift a load more than 25kgs by yourself, if exceeded use mechanical lifting device or team lift.	1
	4: Struck by falling ladder	2	2:4:1 Maintain 360° hazard awareness when removing ladder from roof-rack, use 2 men to ensure that you don't lose control when lifting to ground level.	1
3: Access Ladder Set-up	1: Load rating exceedance	3	3:1:1 Make sure that the ladder is certified as industrial type (standard AS/NZS 1892) and its weight capacity maximum load rating of 120kgs is not exceeded by the worker and the load e.g. tools carried up to the roof.	1
	2: Slippery surfaces causing overbalancing	3	3:2:1 Check the ladder condition for any defects such as broken rungs, split side rails, worn or broken safety feet, and oil or grease which can make climbing surfaces slippery.	1

SWMS No: 09	Title WORKING AT HEIGHTS		Cont'd	
Job Steps	Hazards Identified	Initial Risk Level	Risk Control Measures	Residual Risk Level
3: Access Ladder Set-up Cont'd	3: Uneven surface	2	3:2:2 Choose a pair of safety footwear with a strong grip on the soles to prevent slipping when climbing rungs. 3:3:1 When positioning ladder, stand the ladder on a firm, level base. If the ground is uneven or unstable, use a suitable block or board to keep the ladder upright and stable.	1
	4: Overextension above landing	2	3:4:1 Extend the ladder and position against the roof edge, at least 2 rungs above the roof landing. Worker ascending ladder shall lash a bungy cord or similar means to secure the ladder at the top to a tie-off bracket or secure fixed asset.	1
	5: Tipping over	4	3:5:1 Remember the 4:1 safety ratio when leaning the ladder; for every 4 metres in height the bottom should be 1 metre out.	2
	6: Falling objects	3	3:6:1 Before climbing the ladder the technician should put on his safety harness and worn as required on the roof of raised/ sloping surface.	1
			3:6:2 Use a back-pack to carry tools and/or other small equipment items up to the roof alternatively use a rope to pull up alongside the building.	
	7: Unstable ladder	4	3:7:1 When technician is ready to access the ladder, a second person (known as the spotter) shall secure the base of the ladder. 3:7:2 Spotter shall be trained and fully conversant with the emergency rescue plan.	2
	8: Falling from heights	4	3:8:1 Workmate scaling ladder shall maintain 3 points of contact throughout – using two hands and one foot, or two feet and one hand.	2
			3:8:2 Keep your body centred between the rails of the ladder at all times or you may lose your balance.	
3:8:3 When you have reached near the top of the ladder tie-off the ladder to the metal bracket using a bungy cord or other durable fastening strap.				
3:8:4 Never step up and over the top of the ladder. Hold onto the ladder with both hands and step around the ladder and onto the roof or landing.				
3:8:5 When you get off the roof, take the same approach, holding onto the ladder and stepping around it instead of over the top. Always apply and maintain 360° hazard awareness.				
4: Accessing Roof work area	1: Falling through roof	4	4:1:1 The first thing you should do before walking on the roof is to check the condition of its surface. As with any roof, check for any weak spots, holes, brittleness or other hazards such as skylights. If any of these poor conditions are identified, stop and come down from the roof.	2
	2: Trips or slips on roof surface	3	4:2:1 If there are no designated roof walkways, proceed to walk safely on the roof by staying on or at least near the middle of the roof, do not deviate from your direct travel to the outdoor units.	1
	3: Falling from heights	4	4:3:1 Use harness and accessories as a travel restraint only, to protect worker from approaching an unprotected edge (2m no-go zone) or opening thereby preventing a fall from occurring.	2
5: Working on the roof	1: Roof edges & openings	4	5:1:1 Where there is a risk of a fall from or through the structure of a roof where you are working and there are no other means to prevent a fall, consider installing temporary edge protection and/or scaffolding. Edge protection should comply with AS/NZS 4994.1 and 4994.2: Temporary edge protection.	2
	2: Falling through roof	4	5:2:1 Always be aware of the roof condition when working and the position of skylights, edges and openings.	2

SWMS No: 09		Title WORKING AT HEIGHTS		Cont'd	
Job Steps	Hazards Identified	Initial Risk Level	Risk Control Measures		Residual Risk Level
5: Working on the Roof Cont'd	3: Glare caused by light reflection	3	5:3:1 Glare from light reflectivity from the roof surface can cause temporary blindness, wear suitable tinted safety glasses or sunglasses.		1
	4: Trips or falls on same level	3	5:4:1 Keep tool bag or backpack in a safe location to avoid trips or falls.		1
	5: Lifting & lowering equipment from the roof	2	5:5:1 Identify & maintain a clear fall zone (exclusion zone) when removing equipment or materials from the roof, do not lift more than 25 kgs. 5:5:2 No body including the spotter may enter the exclusion zone without authorisation from the person on the roof.		1
	6: Falls when transitioning from roof to ladder	4	5:6:1 Always apply 360° hazard awareness when you get off the roof, hold onto the ladder and step around it instead of over the top.		2
6: Rescue Plan	1: Falling from heights	4	6:1:1 Check before the job starts whether rescue personnel are suitably trained in emergency response procedures. 6:1:2 Use step ladder platform or extension ladder to perform the rescue if self-rescue is not possible. 6:1:3 Make sure rescue equipment is readily available to use when you need it and is fit for purpose. 6:1:4 Rescue team will raise or lower the fallen worker to the appropriate platform or ground position. 6:1:5 Contact emergency services 111 if further medical assistance is necessary. 6:1:6 ACS Rescue Plan to be filled out by response team (refer to page 60).		2
	2: Fire	4	6:2:1 Ensure 9kg multipurpose fire extinguisher is located so that it is easily accessible in an emergency situation. 6:2:2 First aid supplies to be readily available for immediate first aid treatment.		2
7: Hand Tools	1: Lack of skill	3	7:1:1 Only use hand tools that you have been trained on & authorised to use.		1
	2: Tool selection	2	7:2:1 Always ensure hand tools are safe to use, fit for purpose & suitable for the task.		1
	3: Sharp edges	2	7:3:1 Always wear safety gloves rated 4543 for hand protection when coming into contact with sharp edges.		1
	4: Flying projectiles	3	7:4:1 To protect eyes and face from flying projectiles wear safety glasses compliant with AS/NZS1337.1.		1
	5: Puncture	3	7:5:1 Never carry a screwdriver in your pocket, keep the tool in your toolbox or work belt. 7:5:2 If a tool is broken, dull or damaged, take it out of service.		1
	6: Line of Fire	3	7:6:1 Never hold the piece you're working on in your hand while driving or loosening screws or bolts.		1
	7: Electrical	4	7:7:1 Use a 1000V insulated screwdriver to protect user from electric current when doing prescribed electrical work.		2
8: Tidy Work Area	1: Slips, trips & falls	2	8:1:1 Apply 360° hazard awareness to remove waste, tools or equipment from the work zone.		1
	2: Sharp Objects	2	8:2:1 Ensure safety gloves rated 4543 are worn at all times.		1
	3: Manual Handling	2	8:3:1 Do not lift more than 25 kgs by yourself, use team lifting or mechanical device.		1
	4: Traffic & Pedestrians	3	8:4:1 Don't remove traffic management until the area is clean and tidy. 8:4:2 Instruct site management of job status and sign-out visitors book		1

SWMS No: 09	Title WORKING AT HEIGHTS			Cont'd
Job Steps	Hazards Identified	Initial Risk Level	Risk Control Measures	Residual Risk Level

Risk Ranking Calculator						Risk Response	
Consequence						Likelihood	
	Minor (FAI)	Moderate (MTI)	Serious (LTI)	Very Serious (Hospitalised)	Disaster (Fatalities)		
Almost Certain	High 3	High 3	Extreme 4	Extreme 4	Extreme 4	Low 1	Proceed with the job using SWMS and wearing prescribed PPE - worst scenario First Aid
Likely	Moderate 2	High 3	High 3	Extreme 4	Extreme 4	Moderate 2	Immediate action required – worst scenario Doctor Visit
Possible	Low 1	Moderate 2	High 3	High 3	Extreme 4	High 3	Method of risk management to be specified – worst scenario Hospital Admittance
Remotely Possible	Low 1	Low 1	Moderate 2	Moderate 2	High 3	Extreme 4	Work not to proceed, contact your Manager or ACS for action required – worst scenario DEATH
Practically Impossible	Low 1	Low 1	Low 1	Moderate 2	Moderate 2		

Before you commence the job you MUST fill out a SWMS Risk Review to assess & record site specific hazards, controls or risk scores. Use the Risk Matrix to recalculate the risk scores (Likelihood x Potential Consequences) to determine that controls have eliminated or minimized any risk

SAFE WORK METHOD STATEMENT (SWMS)

SWMS No: 10	Title: HOT WORK BRAZING	Reviewed By: Gordon Knowles	Revision No: 06	Issue Date: 1/01/2023	Expiry Date: 31/12/2024
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Minimum PPE Requirements:



Job Steps	Hazards Identified	Initial Risk Level	Risk Control Measures	Residual Risk Level
1: Arrival to Site	1: Traffic congestion	3	1:1:1 Park your vehicle in designated parking spaces, reverse vehicle accurately within marked parking bays.	1
	2: Pedestrian movements	2	1:2:1 Wear all PPE as per specified minimum requirements above. 1:2:2 Keep to the designated walkways, walk with head up to reduce interactions between pedestrians and vehicles or machinery.	1
	3: Distraction from using mobile phone	2	1:3:1 If you will be in and/ or working in a designated safety critical area leave mobile phone in your vehicle or switch off on your person to limit distractions.	1
	4: Poor communication	2	1:4:1 Brief responsible site contact on scope of work, risks to site staff and the work area required. 1:4:2 Conduct toolbox talk & review SWMS, note any site-specific hazards <u>NOT</u> already linked to this SWMS, new job steps, risk score changes; on the SWMS Risk Review - Site Specific. Note closest Medical Centre to the work site location.	1
2: Set-up Work Area	1: Traffic	3	2:1:1 Remove & read your LPSA card to determine what could go wrong or the worst thing that could happen when doing the job. 2:1:2 Establish work area and apply traffic management using cones, barriers, caution signage and work vehicle (where appropriate). 2:1:3 Create ample work space, position cones more than 2 metres from the work focal point.	1
	2: Lifting & Carrying	4	2:2:1 Do not lift more than 25kgs by yourself, if exceeded use mechanical lifting device or team lift.	2
	3: Sharp Objects	2	2:3:1 Remove equipment from vehicle to work area, always wearing safety gloves rated 4543.	1
	4: Lifting & Carrying	3	2:4:1 Transport gas cylinders, fire extinguisher etc. in trolley, if equipment goes on roof use secure carrying or lifting equipment.	1
	5: Fire & explosion	4	2:5:1 Keep equipment away from other hazardous equipment or substances that are not compatible. 2:5:2 Hot work high risk checklist must be completed for all work locations even indoors. <u>REMEMBER</u> no hot work permit means <u>NO WORK</u> within a classified hazardous zone.	2
3: Cutting & cleaning copper piping	1: Sharp Edges	2	3:1:1 Use tubing cutters to make a smooth even trimmed end on the pipe.	1
	2: Abrasion	2	3:2:1 For best practice, remove oil from tubes, fittings and connections, use a cleaning pad, steel wool, or wire brush, wear safety gloves rated 4543.	1
	3: Contact against	2	3:3:1 When assembling, make sure there is full insertion of one tube into the other before brazing.	1
	4: Contamination	2	3:4:1 Once the parts are clean, it's recommended to braze as soon as possible so the parts won't have time to become re-contaminated.	1
4: Oxy Acetylene to braze Assembly	1: Airborne material or spark	3	4:1:1 Tinted welding goggles to be worn & welding gloves (fire retardant).	1
	2: Explosion or Fire	4	4:2:1 Check Oxy Acetylene cylinders and gauges visually, make sure the hoses have a flash back arrestor connected to prevent fire from flowing back into the cylinders.	2
	3: Trips & Falls	2	4:3:1 Check the location and position of hoses to avoid trips & falls, apply 360° hazard awareness.	1

SWMS No: 10	Title		Cont'd		
Job Steps	Hazards Identified	Initial Risk Level	Risk Control Measures	Residual Risk Level	
4: Oxy Acetylene to Braze Assembly Cont'd	4: Acetone leakage	3	4:4:1 Never turn the acetylene cylinder on its side, secure in a trolley or fasten cylinder to a wall using a chain in an upright position to avoid tipping over.	1	
	5: Gases & Fumes	3	4:5:1 Make sure area is free of flammable materials. 4:5:2 Use of Half Face respirator required, HEPA filter efficient in removing particles 0.3 micrometres in diameter and larger.	1	
	6: Ventilation	4	4:6:1 Perform task in a well-ventilated area, use ventilation fan where there is no suitable natural ventilation.	2	
	7: Fire & Explosion	4	4:7:1 Pass oxygen free nitrogen (OFN) through the pipework being joined while the brazing operation is taking place, this will reduce the scale build up on the inside of the pipework.	2	
	8: Pressurised gas	4	4:8:1 Never stand in front of, or behind a regulator when opening the cylinder valve. Always stand where the cylinder is between you and the regulator and wear suitable eye protection.	2	
	9: Contact with flame	3	4:9:1 Hold the gas torch securely when brazing, keep hands and gloves away from the naked flame.	1	
	10: Outgasses of volatile elements	3	4:10:1 Use the correct flux for brazing application, consult your SDS regarding specific hazards associated with brazing flux. 4:10:2 Let your braze work cool for a few minutes to avoid contaminating your joint, and then wipe the excess flux off with a wet rag.	1	
	11: Fire	4	4:11:1 Make sure fire extinguisher is close by, must be 9kg multi-purpose type. 4:11:2 An observer shall be appointed as work is classified high risk, ensure that the spotter stays on call watch until a half an hour after brazing work is completed in case of rouge sparks igniting.	2	
	12: Trips and Falls	2	4:12:1 Don't forget to protect the piping when finished brazing. Proper piping support & protection from others tripping or running over the pipe are necessary. Maintain high housekeeping standards.	1	
	5: Tidy Work Area	1: Slips, trips & falls	2	5:1:1 Apply 360° hazard awareness when removing waste, & brazing equipment from the work zone.	1
		2: Sharp Objects	2	5:2:1 Ensure safety gloves rated 4543 are worn at all times.	1
		3: Manual Handling	2	5:3:1 Do not lift more than 25 kgs by yourself, use team lifting or mechanical device.	1
4: Traffic & Pedestrians		3	5:4:1 Don't remove traffic management until the area is clean & tidy. 5:4:2 Inform site management of job status & sign-out visitors book.	1	



SWMS No: 10	Title HOT WORK BRAZING			Cont'd
Job Steps	Hazards Identified	Initial Risk Level	Risk Control Measures	Residual Risk Level

Risk Ranking Calculator						Risk Response	
Consequence						Likelihood	
	Minor (FAI)	Moderate (MTI)	Serious (LTI)	Very Serious (Hospitalised)	Disaster (Fatalities)		
Almost Certain	High 3	High 3	Extreme 4	Extreme 4	Extreme 4	Low 1	Proceed with the job using SWMS and wearing prescribed PPE - worst scenario First Aid
Likely	Moderate 2	High 3	High 3	Extreme 4	Extreme 4	Moderate 2	Immediate action required – worst scenario Doctor Visit
Possible	Low 1	Moderate 2	High 3	High 3	Extreme 4	High 3	Method of risk management to be specified – worst scenario Hospital Admittance
Remotely Possible	Low 1	Low 1	Moderate 2	Moderate 2	High 3	Extreme 4	Work not to proceed, contact your Manager or ACS for action required – worst scenario DEATH
Practically Impossible	Low 1	Low 1	Low 1	Moderate 2	Moderate 2		

Before you commence the job you MUST fill out a **SWMS Risk Review – Site Specific** to assess & record site specific hazards, controls or risk scores. Use the Risk Matrix to recalculate the risk scores (Likelihood x Potential Consequences) to determine that controls have eliminated or minimized any risk

SAFE WORK METHOD STATEMENT (SWMS)

SWMS No: 11	Title: SITE VISIT	Reviewed By: Gordon Knowles	Revision No: 06	Issue Date: 1/01/2023	Expiry Date: 31/12/2024
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Minimum PPE Requirements:

Job Steps	Hazards Identified	Initial Risk Level	Risk Control Measures	Residual Risk Level
1: Arrival to Site	1: Traffic congestion	3	1:1:1 Park your vehicle in designated parking spaces, reverse vehicle accurately within marked parking bays. 1:2:1 Wear all PPE as per specified minimum requirements above.	1
	2: Pedestrian movements	2	1:2:2 Keep to the designated walkways, walk with head up to reduce interactions between pedestrians and vehicles or machinery.	1
	3: Distraction from using mobile phone	2	1:3:1 If you will be in and/ or working in a designated safety critical area leave mobile phone in your vehicle or switch off on your person to limit distractions.	1
	4: Poor communication	2	1:4:1 Brief responsible site contact on scope of work, risks to site staff and the work area required. 1:4:2 Conduct toolbox talk & review SWMS, note any site-specific hazards <u>NOT</u> already linked to this SWMS, new job steps, risk score changes; on the SWMS Risk Review - Site Specific. Note closest Medical Centre to the work site location.	1
2: Control Measures for movement around site	1: Trips, slips & falls	3	2:1:1 Where possible have a site supervisor or representative to accompany you around the site. If not, inform the site representative location of your presence at site and return time. 2:1:2 For isolated situations report to your own supervisor on mobile phone at 3 hourly intervals. 2:1:3 Undertake a Last Minute Risk Assessment before entering the work area, firstly ask yourself "What things do you think could go wrong" during your stay at the site.	1
	2: Uneven or slippery surface	2	2:2:1 Take extra caution when walking around site, be aware of raised, uneven or slippery surfaces.	1
	3: Distraction from work activity	2	2:3:1 Never rush, maintain an orderly pace and posture, keep fully focused on the surrounding environment you are in. Apply 360° hazard awareness at all times.	1
	4: Falling objects	4	2:4:1 If you are walking in areas where work is performed overhead, be aware & keep away of the exclusion zone and wear a hard hat.	1
	5: Height entry	4	2:5:1 Never enter and access a roof or other raised space termed "work at heights" unless you have working at height certification and authorisation from the site representative to do so.	2
3: Specific Site Conditions	1: Manual handling	2	3:1:1 Make sure that you do not lift or carry objects or equipment in excess of 25kgs. Use team or mechanical lifting if needed.	1
	2: Site machinery & equipment	4	3:2:1 Do not use or operate any site machinery or equipment unless you are suitably trained and given authorisation from the site representative.	2
	3: Source of ignition	2	3:3:1 If you intend taking photos at site ensure you have prior approval to do so from site representative. Mobile phones are not to be used in a classified hazardous zone. 3:3:2 Take picture using either phone or camera in plane mode only.	1
	4: Personal or animal attack & harassment	3	3:4:1 Retreat from or avoid any confrontation with aggressive persons or animals.	1
	5: Noise from site work activities	2	3:5:1 If the noise levels at site exceeds 85dB(A) wear appropriate class hearing protectors when exposed to excessive noise level.	1
	6: Duct exposure from site work activity	2	3:6:1 If exposed to dust in the atmosphere, wear a suitable dust mask to protect from inhalation.	1

SAFE WORK METHOD STATEMENT (SWMS)

SWMS No: 11	Title		Cont'd	
	SITE VISIT			
Job Steps	Hazards Identified	Initial Risk Level	Risk Control Measures	Residual Risk Level
4: Emergency Response	1: Communication	2	4:1:1 Have suitable communication equipment for the area, e.g, mobile phone or 2-way radio. 4:1:2 Emergency contact list, nearest medical help and hospital or medical centre. 4:1:3 Notify the site supervisor to raise the alarm in an emergency response situation.	1
	2: Fire	4	4:2:1 Be aware of the site fire extinguisher location in case of fire	2
5: Tidy Work Area	1: Slips, trips & falls	2	5:1:1 Remove any waste, that you may have created at or brought to site. Leave a clean and tidy area before leaving site.	1
	2: Sharp Objects	2	5:2:1 Ensure safety gloves rated 4543 are worn at all times.	1
	3: Visitor sign-out	3	5:3:1 Inform site management of your site visit status and sign-out visitors book.	1



Risk Ranking Calculator						
Consequence						
	Minor (FAI)	Moderate (MTI)	Serious (LTI)	Very Serious (Hospitalised)	Disaster (Fatalities)	
Likelihood	Almost Certain	High 3	High 3	Extreme 4	Extreme 4	Extreme 4
	Likely	Moderate 2	High 3	High 3	Extreme 4	Extreme 4
	Possible	Low 1	Moderate 2	High 3	High 3	Extreme 4
	Remotely Possible	Low 1	Low 1	Moderate 2	Moderate 2	High 3
	Practically Impossible	Low 1	Low 1	Low 1	Moderate 2	Moderate 2

Risk Response	
Low 1	Proceed with the job using SWMS and wearing prescribed PPE - worst scenario First Aid
Moderate 2	Immediate action required – worst scenario Doctor Visit
High 3	Method of risk management to be specified – worst scenario Hospital Admittance
Extreme 4	Work not to proceed, contact your Manager or ACS for action required – worst scenario DEATH

Before you commence the job you MUST fill out a SWMS Risk Review to assess & record site specific hazards, controls or risk scores. Use the Risk Matrix to recalculate the risk scores (Likelihood x Potential Consequences) to determine that controls have eliminated or minimized any risk

SAFE WORK METHOD STATEMENT (SWMS)

SWMS No: 12	Title: FRIGDES/ CHILLERS DELIVERY & INSTALL	Reviewed By: Gordon Knowles	Revision No: 02	Issue Date: 1/01/2023	Expiry Date: 31/12/2024
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Minimum PPE Requirements:

Job Steps	Hazards Identified	Initial Risk Level	Risk Control Measures	Residual Risk Level
1: Arrival to Site	1: Traffic congestion	3	1:1:1 Park your vehicle in the designated parking zones as close to the building entrance doors as possible.	1
	2: Pedestrian movements	2	1:1:2 Wear all PPE as per specified minimum requirements above. 1:2:1 Keep to the designated walkways, apply 360° hazard awareness, do not enter where vehicles or machinery are being used.	1
	3: Distraction from using mobile phone	2	1:3:1 If you will be in and/ or working in a designated safety critical area leave mobile phone in your vehicle or switch off on your person to limit distractions.	1
	4: Poor communication	2	1:4:1 Brief responsible site contact on scope of work, risks to site staff and the work area required. 1:4:2 Conduct toolbox talk & review SWMS, note any site-specific hazards <u>NOT</u> already linked to this SWMS, new job steps, risk score changes; on the SWMS Risk Review - Site Specific. Note closest Medical Centre to the work site location.	1
2: Setting up delivery site	1: Traffic movement	3	2:1:1 To begin with undertake a last minute risk assessment, consider “What things do you think could go wrong” during your stay at the worksite. If you have a LPSA card, remove and read. 2:1:2 Establish work area and apply traffic management using cones, barriers, caution signage. 2:1:3 Create ample workspace, position cones more than 2 metre from the work focal point. 2:1:4 Use your vehicle as line of fire if working outdoors & appropriate for work undertaken. 2:1:5 Make sure that delivery vehicle door from where you will remove the equipment does not open directly into the path of traffic.	2
	2: Trips, slips or falls	2	2:2:1 Take a moment to check out the travel path to where the equipment is to be located, noting heights of doorways, ground and floor surface condition.	1
	3: Cramped space	2	2:3:1 Measure the space where the equipment is to be located, take into account height and door opening capacity.	1
3: Transporting chiller or fridge	1: Sharp edges	2	3:1:1 When removing equipment from the delivery vehicle wear safety gloves rated 4543 to protect hands against sharp edges.	1
	2: Awkward shape	2	3:2:1 As the unit may be of awkward shape, large size or in excess of 25kgs use a hand trolley to transport to the installation spot.	1
	3: Contact against	2	3:3:1 If the unit does not have adequate wrapping protection, cover the cabinet with blankets or padding to protect its outside finish.	1
	4: Falling object	3	3:4:1 Always transport the unit in an upright position and secure firmly to hand trolley using straps or bungee cords.	1
	5: Congested space	2	3:5:1 Take extra care when passing through doorways, if you can not see over the unit pull the hand trolley backwards or have a spotter direct you safely.	1
	6: Rushing	2	3:6:1 Never rush, maintain an orderly pace and posture.	1

SWMS No: 12	Title		Cont'd
	FRIDGES/ CHILLERS DELIVERY & INSTALL		
Job Steps	Hazards Identified	Initial Risk Level	Risk Control Measures
4: Setting up and installing the unit	1: Traffic & pedestrians	2	4:1:1 Apply your traffic management using set-up instructions from Job Steps: 2. Make sure your work area is fully isolated and safe from others. Keep fully focused.
	2: Sharp blade edge	2	4:2:1 To remove cardboard packaging and plastic strapping, use a knife with a blade that automatically retracts into the hand piece. Put on your safety gloves rated 4543.
	3: Contact against	3	4:3:1 Visually inspect the items to make sure there's no damage, if there is damage report it.
	4: Crushing & entrapment	3	4:4:1 Slide the unit into the recess to safely install the equipment, keep hands and fingers clear of trapping or crushing points when maneuvering into the space.
5: Tidy Work Area	1: Slips, trips & falls	2	5:1:1 Remove any wrapping waste, that you may have created at or brought to site. Leave a clean and tidy area before leaving site.
	2: Sharp Objects	2	5:2:1 Ensure safety gloves rated 4543 are worn at all times.
	3: Traffic & pedestrians	3	5:3:1 Remove hand trolley and traffic management.
	4: Visitor sign-out	2	5:4:1 Inform site management of your site visit status and sign-out visitors book.
			Residual Risk Level
			1
			1
			1
			1
			1
			1
			1



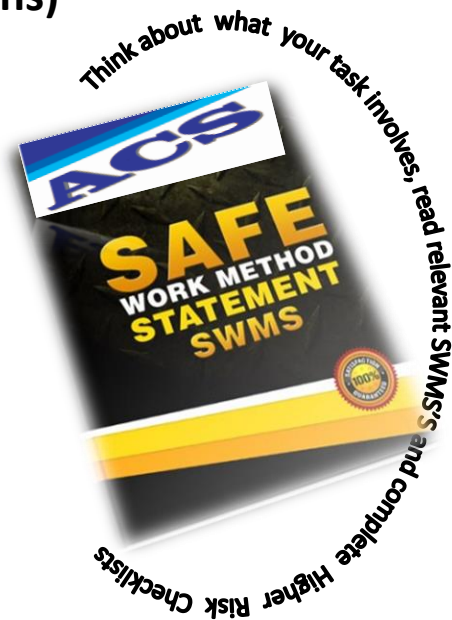
Risk Ranking Calculator						Risk Response		
Consequence						Low 1	Proceed with the job using SWMS and wearing prescribed PPE - worst scenario First Aid	
	Minor (FAI)	Moderate (MTI)	Serious (LTI)	Very Serious (Hospitalised)	Disaster (Fatalities)			
Likelihood	Almost Certain	High 3	High 3	Extreme 4	Extreme 4	Extreme 4	Moderate 2	Immediate action required – worst scenario Doctor Visit
	Likely	Moderate 2	High 3	High 3	Extreme 4	Extreme 4	High 3	Method of risk management to be specified – worst scenario Hospital Admittance
	Possible	Low 1	Moderate 2	High 3	High 3	Extreme 4		
	Remotely Possible	Low 1	Low 1	Moderate 2	Moderate 2	High 3	Extreme 4	Work not to proceed, contact your Manager or ACS for action required – worst scenario DEATH
	Practically Impossible	Low 1	Low 1	Low 1	Moderate 2	Moderate 2		

Before you commence the job you MUST fill out a SWMS Risk Review to assess & record site specific hazards, controls or risk scores. Use the Risk Matrix to recalculate the risk scores (Likelihood x Potential Consequences) to determine that controls have eliminated or minimized any risk

SWMS RISK REVIEW – SITE SPECIFIC (Instructions)

Arrive on site and put on all your PPE

Sign in with site manager and inform them of what you are doing and any hazards you may be introducing to site



- It is important to remember that these SWMS' documents are generic and are used broadly across our ACS client network. In which case when it comes to hazard management each site and task needs to be dealt with in a different way. This may mean new job steps added, new hazards identified, risk scores changed due to the increased risk and nature of the job
- Bearing this in mind it is mandatory to fill out a Safety Risk Review – Site Specific form to control the new safety danger by either eliminating or lastly minimising the risk

NOW FOLLOW THESE STEPS TO HELP YOU BETTER UNDERSTAND THE SITE RISKS & CONTROL MEASURES SO THAT YOU ARE ABLE TO SAFELY DO YOUR JOB!!

- Step 1**
IDENTIFY HAZARDS

Identify all those hazards that you are or potentially exposed to when performing the task that are **NOT** covered off in the generic SWMS. Tick them off in Step 1. You may require specific training to do the job, tick these from the list, if you are not trained for the task, pack up and leave site

- Step 2**
JOB STEPS & HAZARDS

Record job steps for the new hazards that you ticked off in Step: 1 which are not captured in the generic SWMS document that you are using for the job. Circle the SWMS job steps that the new hazard relates to

- Step 3**
ASSESS THE RISKS OF THE HAZARD

Use the Risk Matrix to calculate the risk score (Likelihood x Potential Consequences) for the identified hazards from Step:2 both before (Initial) and after (Residual). Remember that if the risk score increases when control measures are determined in Step: 4 then there is a need to reassess your control measures

- Step 4**
RISK CONTROL MEASURES

List the control measures required to eliminate or minimise the hazard identified from Step: 2

- Step 5**
MONITOR & RISK REVIEW SIGN-OFF

All those workers involved in the task/activity must sign to acknowledge that they have contributed to and understand the SWMS and there Review, and agree to follow the new risk control measures as prescribed. Circle all the SWMS job step numbers you are personally responsible for the job to confirm this understanding

Think... About all the SWMS'S and high risk checklists you may need to use to carry out the job safely

JOB SUMMARY

Site Location:	Your Name:	Date:	Generic SWMS #: _____
----------------	------------	-------	-----------------------

Task Training Requirements:
 Tick industry or risk training you require to do the job safely – if you are not qualified or adequately trained to do the task, discontinue and leave site

Site Inducted Elevated Work Platform Refrigerant Filler Electrical Service Technician(EST)
 Harness Training Working at Heights Electrical Practicing License Site Safe

STEP 1: IDENTIFY HAZARDS

(Tick hazards you may be exposed to when doing the job **NOT** included in the ACS generic SWMS Manual) Take 5 – Assess/ Analyse/ Act to validate risks before you start the work and/or if you change the task

Asbestos Environmental/weather Manual Handling Stored Pressure
 Chemicals Excavation Noise/ Vibration Tools (hand & power)
 Confined Spaces Fire & hot works Pedestrians/other workers Vehicles
 Dust Gases & Fumes Sharp edges Working at heights
 Electrical Machinery/ Equipment Slippery/ wet surfaces Other _____

STEP 2: JOB STEPS & HAZARDS

STEP 3:
See Below

STEP 4: RISK CONTROLS

STEP 3:
See Below

List new hazards identified from Step: 1, note the risk(s) you are exposed to and link with risk control measures below & risks scores using Step: 3 risk matrix

Circle those SWMS Step(s) that New Hazard Relates to	Workplace Hazard Risk Identified (List the risk associated with the hazard from Step:1)	IR	Risk Control Measures (List control measures to Eliminate or Minimise the identified risk)	RR
1 2 3 4 5 6 5 6 7 8 9 10				
1 2 3 4 5 6 5 6 7 8 9 10				
1 2 3 4 5 6 5 6 7 8 9 10				

STEP 3: ASSESS HAZARD RISKS

Use the Risk Matrix to calculate the risk score (Likelihood x Potential Consequences) for the identified hazards from Step: 2. List both Before (IR) and After (RR) risk levels.

RISK MATRIX	Consequence					Risk Response	
	Likelihood	Minor (FAI)	Moderate (MTI)	Serious (LTI)	Very Serious (Hospital)	Disaster Multiple Fatalities	
Almost Certain	High 3	High 3	Extreme 4	Extreme 4	Extreme 4	Low 1	Proceed with the job using SWMS and wearing prescribed PPE - worst scenario First Aid
Likely	Moderate 2	High 3	High 3	Extreme 4	Extreme 4	Moderate 2	Immediate action required – worst scenario Doctor Visit
Possible	Low 1	Moderate 2	High 3	High 3	Extreme 4	High 3	Method of risk management to be specified – worst scenario Hospital Admittance
Remotely Possible	Low 1	Low 1	Moderate 2	Moderate 2	High 3	Extreme 4	Work not to proceed, contact your Manager or ACS for action required – worst scenario DEATH
Practically Impossible	Low 1	Low 1	Low 1	Moderate 2	Moderate 2	Extreme 4	

STEP 5: MONITOR & RISK REVIEW ACCEPTANCE SIGN-OFF

(All workers / visitors involved in the task / activity must sign to indicate they have contributed to, and understand, the SWMS and agree to follow the risk control requirements as outlined)

Worker/ Visitor Name	Signature	Toolbox Talk Attended	Circle the SWMS Job Steps you are personally responsible for to do the job safely
		Yes <input type="checkbox"/> No <input type="checkbox"/>	1 2 3 4 5 6 7 8 9 10 11
		Yes <input type="checkbox"/> No <input type="checkbox"/>	1 2 3 4 5 6 7 8 9 10 11



- SAFETY FIRST**
- 1 Identify Hazard
 - 2 Hazard Risk(s)
 - 3 Assess Hazard Risk
 - 4 Risk Controls
 - 5 Risk Monitoring Sign-off
- Engage the Brain BEFORE the Hands*



Identify & write in here the closest Medical Centre

.....



High Risk Checklists

	ACS Forms	Issue Date	Page#
	Lock-out/Tag-out - HRC	1/01/2023	48
	Hot Work / HRC	1/01/2023	49
	Working at Heights/ Non power equipment - HRC	1/01/2023	50
	Elevated Work Platform (EWP) / HRC	1/01/2023	51
	Lifting / HRC	1/01/2023	52

Lock-Out/Tag-Out (LOTO) | High Risk Checklist

When to use **Important: Use with applicable ACS generic SWMS**

To isolate equipment/machinery from energy sources (primarily electrical)
 State the source (e.g., pressure, pneumatic, hydraulic) when source is other than electrical
 Shut down and isolate the electrical circuitry using LOTO, when cleaning, maintenance, set-up, installation, demolition or service work
 Filter replacements require isolation / LOTO. If ducted unit LOTO is not required as there are no moving or dangerous parts.



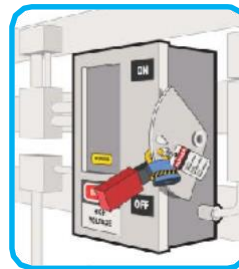
Purchase Order Number:	Site Location:
Contractor:	Date:
Description of work & equipment/source to isolate:	

What things do you think could go wrong?

BEFORE work begins | Isolate the equipment

Done (Complete only 1 checklist for similar tasks e.g., work on 2 x outdoor units)

- 1. Inform all affected workers/site personnel that the energy source is to be turned off & duration of shutdown.
- 2. Locate the energy source (e.g., circuit breaker or valve) and turn off/closed. De-energize / release any pressure.
- 3. Attach personal padlocks and tags to the energy source.
- 4. Tags include technicians name, mobile number and date.
- 5. Only you (Technician) have the key (keep on your person).
- 6. Verify the system is isolated safely, **Use testing instrument to PROVE-TEST-PROVE to validate** equipment is safely disconnected from the energy source.



Complete 1 to 6 for each additional circuit: Circuit 2 Circuit 3 Circuit 4

Print name, sign, date confirming that equipment is isolated. Complete new form for transfer of lock ownership

Worker Name:	Date/Time:
Signature:	

MORE THAN ONE CREW is working on the same powersupply

- Done**
- 7. On arrival new crew announces and discusses planned work with the crew(s) already using LOTO.
 - 8. Each crew attaches their own locks and tags to the energy source



AFTER work is complete | Activate the equipment

- Done**
- 9. Inform all affected workers/site personnel that energy source is to be restored.
 - 10. Remove all locks and tags from the appropriate energy source.
 - 11. Test that affected equipment is operating.



Only Authorized Worker can remove lock(s) unless approved by ACS Account Manager

Print name, sign and date confirming work complete or LOTO transfer completed with new form

Worker Name:	Date/Time:
Signature:	For transfer, new Worker name:

Hot Work | High Risk Checklist

When to use **Important: Use with applicable ACS generic SWMS**

Before any work that can potentially **ignite combustible or flammable materials**. Examples:

- Arcing / sparking equipment (e.g., gas or arc welding, soldering, brazing, grinding, cutting)
- Equipment that produces sparks, flame or heat (e.g., grinder, chop saw)
- Open flames (e.g., blow lamps, torches)



No Hot Work allowed in Tanks (Prohibited Area - see Diagram below)

Purchase Order Number:	Site Location:
Contractor:	Date:

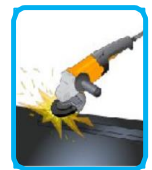
Description of work/equipment that is hot work:

What things do you think could go wrong?

BEFORE Starting All Hot Work

Done

- 1. Determine if activity can be completed without Hot Work or outside Restricted Area.
- 2. Relocate Hot Work activity 10m from all combustible or flammable materials if possible. Cover combustible material if removal is not possible.
- 3. Erect traffic management and place charged 9kg fire extinguisher within immediate reach.
- 4. Identify all sources of potential explosive vapors (e.g., fuel, sewer, chemicals)
- 5. Reduce potential sources of explosive vapors (reduce restricted area e.g., apply vapor screen/cover sewers)
- 6. All equipment has proper safety guards and is properly grounded.
- 7. When Hot Work is within 10m of combustible materials which cannot be relocated e.g., wood structure / forms, assign a worker whose **only** task is to watch for fire (Fire Watch) during and 30 minutes after Hot Work is completed



Before starting Hot Work in a Restricted Area complete steps 8 - 11:

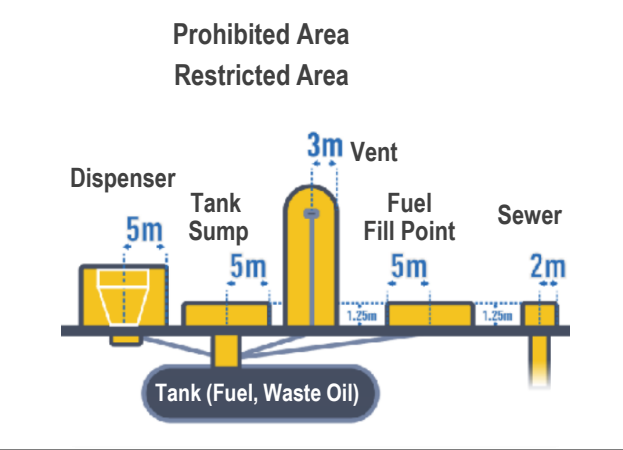
- 8. Gas meter bump test against approved reference gas completed and within tolerance **today**.
- 9. Perform atmospheric testing to confirm 0% LEL using a certified gas meter – use Log below.
- 10. All Hot Work activities are stopped during high-risk conditions e.g., fuel deliveries.
- 11. Fire Watch is available during and 30 minutes after hot work is completed

Atmospheric Testing Log **Hazardous Identification Diagram**

Monitor atmosphere **continuously** during the work using a gas meter and record in log before beginning Hot Work, then hourly during work. If work stops, test/record before resuming Hot Work.

STOP HOT WORK when atmospheric test results are outside the acceptable ranges

Ranges	%O ₂ : 19.5 -23%			% LEL: 0%		
Work Area	Before	Hour 1	Hour 2	Before	Hour 1	Hour 2
1						
2						



Name of person testing:		Signature:		Date:	
Name of worker:		Signature:		Date:	
Name of Fire Watch:		Signature:		Date:	

Working at Heights | Non-Power Equipment High Risk Checklist

When to use		
Important: Use with applicable ACS generic SWMS		
Use before a worker begins an activity where his/her feet are more than 2 meters above grade, floor, or surface.		
Determine if work can be completed without Working at Heights.		
For all working at heights: <ul style="list-style-type: none"> • Two-man task. Requires a spotter to observe the worker at heights. • Assess if conditions are safe (e.g., weather/power lines) • Maintain 360-degree protection with solid railing or sizable parapet, otherwise apply an approved fall restrain/arrest system and safety harness. • Use traffic management (Cones, barriers, work overhead caution signage) and use your vehicle where practicable. 	For all ladder use, including stepladder platforms: <ul style="list-style-type: none"> • Work starts and ends at the base of the ladder, ascending and descending are key steps in the work. • Consciously always maintain 3 points of contact, usehelper if needed. • Do not carry items in your hands, use backpack or use a rope to lift tools or equipment onto roof. 	
Purchase Order Number:	Site Location:	
Contractor:	Date:	
Description of work:		
What things do you think could go wrong?		
BEFORE work begins Select appropriate equipment and complete the steps		
Done <input checked="" type="checkbox"/> EXTENSION ladder use only for inspection / access (do not work from ladder) <ul style="list-style-type: none"> <input type="checkbox"/> 1. Ladder in good condition – no defects, suitable load rating, made from appropriate material. <input type="checkbox"/> 2. Position ladder on a stable surface and tie off upper part & co-worker to hold the ladder base. <input type="checkbox"/> 3. Top of ladder extends 1 metre or 2 rungs above the edge landing. <input type="checkbox"/> 4. Ladder is at a suitable angle (4:1 ratio), every 4 metres high, bottom should be 1 metre out. <input type="checkbox"/> 5. Maintain 3 points of contact when scaling ladder – use backpack to carry tools or use a rope to pull up equipment or tools alongside of the building or structure. 		
Done <input checked="" type="checkbox"/> STEP LADDER PLATFORM, <ul style="list-style-type: none"> <input type="checkbox"/> 1. Ladder in good condition, with suitable load rating, made from appropriate material. <input type="checkbox"/> 2. Restrict platform work activity where feet are more than 2 metres from ground or floor surface. Use a mobile EWP if more than 2 metres. <input type="checkbox"/> 3. Position step ladder ladder on a stable and even surface. <input type="checkbox"/> 4. Does the step ladder platform have a test tag attached. Check if test date is current 		
Done <input checked="" type="checkbox"/> For WORK within 2m of an unguarded edge or on a sloped roof. <ul style="list-style-type: none"> <input type="checkbox"/> 1. Fall Restraint / Fall Arrest equipment (e.g., full body harness, anchor connector and lanyard/shock absorbing lanyard) to be inspected prior to each use. <input type="checkbox"/> 2. Safety harness fits appropriately and used per manufacturer’s instructions. <input type="checkbox"/> 3. Worker is always tied off. Double lanyard to be used when there is a need to change anchor points for 100% fall protection. <input type="checkbox"/> 4. Fully extended lanyard prevents worker from striking the ground. Shorter lanyards may be Used to prevent worker from reaching an unguarded edge. <input type="checkbox"/> 5. There is a spotter appointed and has good knowledge of the emergency rescue plan. 		
Name of worker:	Signature:	Date:
Name of spotter:	Signature:	Date:

Elevated Work Platform (EWP)/ High Risk Checklist

When to use

Important: Use with applicable ACS generic SWMS

Before working in mobile elevated work platforms (e.g., scissor lift, cherry picker etc.), when feet are more than 2 meters above grade, floor, or surface

Determine if work can be completed without Working at Heights

For all working at heights:

- Assess if conditions are safe (weather/utility lines)
- Maintain 360-degree protection with solid railing
- Fall restrain/arrest system with harness applies **at all times** for all aerial lifts including **scissor lift** and **cherry-picker**
- Erect traffic management, considering drop, tip, and buffer areas
- Requires a competent spotter on the ground.
- Emergency rescue plan discussed with spotter



Always tie-off when working from an aerial lift.

Work Order Number:	Site Location:
Contractor:	Date:
Description of work:	

What things do you think could go wrong?

BEFORE work begins | Select appropriate equipment and complete all steps

Done

Mobile Equipment

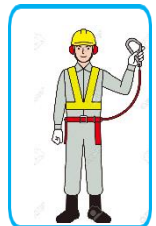
- 1. Ground conditions and terrain are stable and acceptable for EWP
- 2. Minimum required clearance between live electrical lines and any part of the personnel lift is ensured - see table
- 3. Confirm expected winds will not exceed equipment tolerance
- 4. Confirm workload (workers and equipment) does not exceed allowable weight
- 5. Pre-use equipment inspection completed by trained personnel.
- 6. Spotter checks functionality of safety and emergency features

Voltage kV	Clearance m
< 50	3.1
50–200	4.6
201–350	6.1
351–500	7.6
501–750	10.7
751–1000	13.7

Done

Fall Protection

- 7. EWP operator is NZQA certified and passport expiry date is/...../.....
- 8. Fall Restraint/ Fall Arrest equipment is inspected prior to each use e.g. full body harness, anchor connector and lanyard/ self-retracting lanyard. Check that test dates are current.
- 9. Safety harness fits appropriately and is used per manufacturer’s instructions.
- 10. Fall Restraint / Fall Arrest anchor points on the mobile EWP have been identified.
- 11. For Fall Arrest equipment, calculate if worker falls they don’t hit the ground if fall occurs from height above 2m.



Name of worker:	Signature:	Date:
Name of spotter:	Signature:	Date:

Lifting | High Risk Checklist

When to use **Important: Use with applicable ACS generic SWMS**

For all lifting, hoisting, or moving of equipment or materials with a mechanical device

Examples:

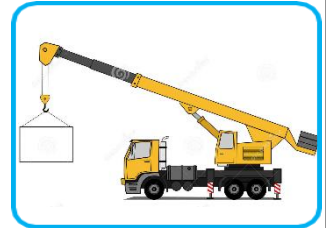
- Equipment: truck/lorry mounted crane, fork lift, mobile crane
- Load: air conditioning systems, ducting, hi-walls, kitchen hoods, building structures, signs, platform materials



Only 1 checklist required for same day repeat lifts of similar loads from same position - dedicated and competent spotter required

Use the **Critical Lifting High Risk Checklist** if any of the following apply:

- Two or more cranes are required at the same time to lift
- Lift is over an occupied building
- Load is more than 18 tonnes
- Load represents more than 80% of the manufacturer's rated crane capacity



Purchase Order Number:	Site Location:
------------------------	----------------

Contractor:	Date:
-------------	-------

Description of work:

Load Weight: (max Load weight and radius for group of lifts)	Lift Radius:	Crane's rated capacity at lift radius:
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What things do you think could go wrong?

BEFORE work begins | Complete all steps

Done

- 1. Certified operator completes lift evaluation to confirm Swing, Drop & Buffer Areas (Exclusion Zone), considering the load, crane capacity / configuration and any hazards (on and off property)
- 2. Work area is free from overhead and sideways obstructions
- 3. Review minimum required clearance between live electrical lines and any part of the crane, load, or load line – see table at right
- 4. Lift equipment is certified, in good order, appropriate for the lift and meets manufacturer's specifications
- 5. Lift equipment is supported on a firm, stable base or foundation, any outriggers fully deployed
- 6. For each individual lift, equipment or materials to be lifted are stable, wrapped and tied, and securely attached and balanced to prevent load separation / falling
- 7. Erect proper barricades, considering swing and drop zones and buffer area
- 8. Equipment operator has a clear view of the work area
- 9. Communication method between spotter and equipment operator is defined
2 way radio communication is preferred
- 10. Movement of the load is controlled, preferably using tag lines / guiding ropes
- 11. Lift apparatus (slings/ straps/ hooks/ jibs) in good condition with suitable load rating

Voltage kV	Clearance m
< 50	3.1
50-200	4.6
201-350	6.1
351-500	7.6
501-750	10.7
751-1000	13.7



Ensure everyone keeps a safe distance from the lifting activity

Name of equipment operator:	Signature:	Date:
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Name of spotter(s):	Signature:	Date:
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ACS J No.
(Internal office use)

AIR CONDITIONING SERVICES (NZ) LTD

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SERVICE FORM

ASA ORDER NUMBER:	SITE NAME:	AGENCY NUMBER:	DATE:
ASA / CONTRACTOR COMPANY NAME:		NUMBER OF WORKERS:	SAFETY PASSPORT / AUTHORIZATION CARD NUMBERS:
ARRIVAL TIME:	DEPARTURE TIME:	TIME ON JOB:	PROCUREMENT TIME: TRAVEL TIME:
ARRIVAL TIME:	DEPARTURE TIME:	TIME ON JOB:	PROCUREMENT TIME: TRAVEL TIME:
TYPE OF SERVICE: <input type="radio"/> BREAKDOWN <input type="radio"/> MAINTENANCE <input type="radio"/> WARRANTY <input type="radio"/> IQP CHECK <input type="radio"/> PROJECT / INSTALL <input type="radio"/> SITE AUDIT			

EQUIPMENT SCHEDULE

WORK SCHEDULE

HVAC & REFRIGERATION

<p>WALK IN CHILLER / FREEZER - ROOMS</p> <ul style="list-style-type: none"> <input type="checkbox"/> CHECK EVAPORATOR (CLEAN IF REQUIRED) <input type="checkbox"/> CHECK EVAPORATOR FAN MOTORS/S <input type="checkbox"/> CHECK DEFROST HEATER/S (FREEZER ONLY) <input type="checkbox"/> CHECK DRAIN TRAY & LINE AND FLUSH WITH WATER <input type="checkbox"/> CHECK CONTROLLER OPERATION <p><input type="checkbox"/> RECORD TEMPERATURE</p> <p><input type="checkbox"/> CHECK DOOR HANDLE/S</p> <p><input type="checkbox"/> CHECK SAFETY RELEASE</p> <p><input type="checkbox"/> CHECK DOOR SEAL/S</p> <p><input type="checkbox"/> CHECK CONDENSER COIL (CLEAN IF REQUIRED)</p> <p><input type="checkbox"/> CHECK CONDENSER FAN MOTOR/S</p> <p><input type="checkbox"/> CHECK GAS CHARGE</p> <p><input type="checkbox"/> CHECK HP/LP SWITCH</p> <p><input type="checkbox"/> CHECK ELECTRICAL WIRING</p> <p><input type="checkbox"/> CHECK LIGHTING</p> <p>SUPPLY / EXHAUST AIR FANS</p> <ul style="list-style-type: none"> <input type="checkbox"/> CHECK FAN MOTOR <input type="checkbox"/> CHECK DUCTING (REPORT IF REQUIRED) <input type="checkbox"/> CHECK FAN WHEELS (REPORT IF REQUIRED) <input type="checkbox"/> CHECK UPSTANDS AND FLASHING <input type="checkbox"/> CHECK CEILING GRILLES AND BOOTS <input type="checkbox"/> CLEAN FILTERS (SUPPLY ONLY) <input type="checkbox"/> CHECK ELECTRICAL <input type="checkbox"/> CHECK MOTORISED AND MECHANICAL DAMPERS 	<p>OTHER CHILLERS / FREEZERS - STANDALONE</p> <ul style="list-style-type: none"> <input type="checkbox"/> CHECK EVAPORATOR (CLEAN IF REQUIRED) <input type="checkbox"/> CHECK EVAPORATOR FAN MOTOR/S <input type="checkbox"/> CHECK DEFROST HEATER/S (FREEZER ONLY) <input type="checkbox"/> CHECK DRAIN TRAY & LINE AND FLUSH WITH WATER <input type="checkbox"/> CLEAN OUT DRAIN LINES IF REQUIRED <input type="checkbox"/> CHECK CONTROLLER OPERATION <input type="checkbox"/> RECORD TEMPERATURE AND LABEL ASSET <input type="checkbox"/> CHECK DOOR HANDLE/S <input type="checkbox"/> CHECK DOOR SEAL/S <input type="checkbox"/> CHECK CONDENSER COIL (CLEAN IF REQUIRED) <input type="checkbox"/> CHECK CONDENSER FAN MOTOR/S <input type="checkbox"/> CHECK GAS CHARGE <input type="checkbox"/> CHECK HP/LP SWITCH <input type="checkbox"/> CHECK ELECTRICAL WIRING <input type="checkbox"/> CHECK LIGHTING <p>AC INDOOR UNITS - CASSETTES, DUCTED, HI WALL</p> <ul style="list-style-type: none"> <input type="checkbox"/> CHECK AIR FLOW <input type="checkbox"/> CHECK AND CLEAN AIR FILTERS AND LABEL DATE <input type="checkbox"/> CHECK EVAPORATOR FOR CLEANLINESS <input type="checkbox"/> CHECK CONDENSATE LINE AND FLUSH WITH WATER <input type="checkbox"/> CHECK CONDENSATE PUMP (CLEAN IF REQUIRED) <input type="checkbox"/> CLEAN FLEXIBLE DUCTING (RE-TAPE IF REQUIRED) <input type="checkbox"/> CHECK FOR AIR LEAKS AROUND PLENUMS <input type="checkbox"/> CHECK FAN BLADES (CLEAN IF REQUIRED) <input type="checkbox"/> CHECK MOTOR BEARINGS (LUBRICATE IF REQUIRED) <input type="checkbox"/> CHECK RETURN AND SUPPLY GRILLES <input type="checkbox"/> CHECK P TRAP 	<p>AC OUTDOOR UNITS - INCLUDES ROOF TOP UNITS</p> <ul style="list-style-type: none"> <input type="checkbox"/> CHECK START AND STOP OPERATION <input type="checkbox"/> CHECK CONDENSER COIL (REPORT IF CLEAN REQUIRED) <input type="checkbox"/> CHECK RELIEF VALVE OPERATION <input type="checkbox"/> CHECK PIPEWORK AND INSULATION <input type="checkbox"/> CHECK FOR UNIT VIBRATION <input type="checkbox"/> CHECK COMPRESSOR TEMPERATURE <input type="checkbox"/> CHECK COMPRESSOR AMPS AND RECORD BELOW <input type="checkbox"/> CHECK CRANK CASE HEATER <input type="checkbox"/> CHECK CURRENT DRAW <input type="checkbox"/> CHECK VOLTAGE <input type="checkbox"/> CHECK CONDENSER FAN MOTOR/S <input type="checkbox"/> CHECK REFRIGERANT PRESSURE <input type="checkbox"/> CHECK CONDENSING UNIT MOUNTS <input type="checkbox"/> CHECK ELECTRICAL <input type="checkbox"/> CHECK HP/LP CONTROL SWITCH <input type="checkbox"/> CHECK PULLEYS AND V BELTS (ROOF TOP UNITS) <input type="checkbox"/> CHECK P TRAP <input type="checkbox"/> COIL CLEAN <input type="checkbox"/> COIL TREATMENT <p>OTHER</p> <p><input type="checkbox"/> _____</p> <p><input type="checkbox"/> _____</p> <p><input type="checkbox"/> _____</p> <p><input type="checkbox"/> _____</p> <p><input type="checkbox"/> _____</p>
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WORK COMPLETED	ADDITIONAL WORK REQUIRED <input type="radio"/> YES <input type="radio"/> NO

SIGN IN/OUT SECTION

SIGN IN:		SITE REPRESENTATIVE TO COMPLETE BELOW:		
CONTRACTOR RESPONSIBLE PERSON NAME:	INITIALS:	SITE REPRESENTATIVE NAME:	TIME:	INITIALS:
SIGN OUT:				
CONTRACTOR RESPONSIBLE PERSON NAME:	SIGNATURE:	SITE REPRESENTATIVE NAME:	TIME:	SIGNATURE:

WHITE - ACS COPY PINK - CLIENT COPY YELLOW - ASA COPY

TOOL BOX TALK RECORD

Facilitators Name:	Location:	Date / /
<i>Team meetings should be short 10 to 15 minutes Health and Safety should be the first thing on the agenda</i>		
Note generic SWMS for task(s)?	SWMS# _____	
Has a SWMS Risk Review – Site Specific been completed?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Has a site specific safety plan SSSP been completed?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> (Tick Applicable Box)	
What is the name of the closest medical centre?		
Where is the site evacuation assembly point location?		
What PPE is being worn for task?	<input type="checkbox"/> Hard Hat & Chin Strap <input type="checkbox"/> Hi-vis Vest <input type="checkbox"/> Safety Footwear <input type="checkbox"/> Harness <input type="checkbox"/> Eye Protection <input type="checkbox"/> Gloves <input type="checkbox"/> Respiratory <input type="checkbox"/> Ear Muffs	
What Higher Risk Checklists do you fill out for this task? (Tick Applicable)	<input type="checkbox"/> LOTO <input type="checkbox"/> Working at Heights <input type="checkbox"/> Hot Work <input type="checkbox"/> Lifting	
Have you performed a Loss Prevention Self-Assessment (LPSA)?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Is your ACS Vehicle Manual & Safety Data Sheets (SDS) available at site?	Yes <input type="checkbox"/> No <input type="checkbox"/> Edition:	
Other Safety Topics:		

What site specific hazards have you identified today?

Attendees Sign-off Section

	Workers Name (Print)	Workers Signature
1.		
2.		
3.		
4.		
5.		
6.		

SAFETY ISSUE NOTICE (SIN)

Hazard
 Near Miss
 Damage

Part 1: Details (Worker to complete)

Location: Date:/...../.....
 Hazard Identified by (Write your name here):

Part 1: What was the incident or What happened? (Worker to complete)

How were you nearly injured or what did you see that could have injured you or others:

Part 2: What was the hazard you identified? (Worker to complete)

You can below what topic best explains the hazard:

- | | | | |
|---|--|--|---|
| <input type="checkbox"/> Animal/insect bite | <input type="checkbox"/> Electrical appliances/tools | <input type="checkbox"/> Hand Trolley | <input type="checkbox"/> Site Traffic incl. customers |
| <input type="checkbox"/> Chemical (fumes) | <input type="checkbox"/> Environmental (weather) | <input type="checkbox"/> Knife or other cutting tool | <input type="checkbox"/> Stairs or walkways |
| <input type="checkbox"/> Clutter | <input type="checkbox"/> HVAC Equipment | <input type="checkbox"/> Ladder or platform | <input type="checkbox"/> Stock or product |
| <input type="checkbox"/> Computer station | <input type="checkbox"/> Lifting equipment | <input type="checkbox"/> Machinery or fixed plant | <input type="checkbox"/> Uneven surface incl. floor |
| <input type="checkbox"/> Congested Space | <input type="checkbox"/> Lighting | <input type="checkbox"/> Mobile plant or transport | <input type="checkbox"/> Welding – Hot Work |
| <input type="checkbox"/> Dust | <input type="checkbox"/> Hand Tools | <input type="checkbox"/> Shelving or racking | <input type="checkbox"/> Other..... |

Write the hazard risk(s) here: (Select from the summary on the back of the form)

Part 3: Corrective Action to prevent this from happening again? (Worker to complete)

What steps or measures would you take to fix the problem identified to make sure it does not happen again. Put forward your suggestions below:

1.
2.
3.

Part 4: Risk Assessment (H&S Manager to complete)

Investigated by: Date:/...../.....
 Is this a new hazard? Yes Complete Hazard Report Form – Risk Assessment Tracking No Complete Part 5
 Hazard & Risk Register Updated (new hazard only): Yes No Date:/...../.....

Part 5: Feedback (H&S Manager to complete)

Feedback must be given to the person who initiated the report on the steps taken to correct the event File copy in H&S folder: Yes No Date:/...../.....

Part 6: Definitions Only

- Hazard - something that could potentially cause harm (injury or illness) e.g. ladder
- (ii) Risk – what is the risk (likelihood x consequences) of an incident occurring using the ladder e.g. falling from heights
- (iii) Near Miss – an incident that occurred but no harm was caused e.g. foot slipped from ladder rung but worker stabilised balance by holding onto ladder uprights

Thanks for your contribution to make your work place safer to work in!!

Report is to be completed within 24hrs of identifying the hazard and handed to your Director

ACCIDENT REPORT FORM

LTI MTI FAI

INCIDENT DETAILS:

Injured Workers Name:

Location: Department:.....

Date of Accident: / / Time: am/pm Hours @ Work: Shift: Day/ Night

Describe what happened?

ROOT CAUSE(S):

Root cause factor? Ask “why” several times to determine the reason this incident happened. When established simply circle e.g. 3 the cause(s) next to the RC title heading:

- | | |
|--|---|
| 1 Lack of skill or knowledge | 5 Lack of or Inadequate procedures or standards |
| 2 Doing the job according to standards or acceptable practices takes more time/ effort | 6 Inadequate communication of expectations regarding procedures or acceptable standards |
| 3 Shortcutting standards or acceptable practices is positively reinforced or tolerated | 7 Inadequate tools or equipment (available, operable & safely maintained, proper task & workplace design) |
| 4 In past, did not follow standards or acceptable practices & no incident occurred | 8 External Factor |

INJURY DETAILS:

Body Part(s) Affected: (applicable box(s) and tick here whether it was the workers **Left** or **Right** limb injured.

- | | | | |
|-------------------------------|--------------------------------|-------------------------------|--|
| <input type="checkbox"/> Head | <input type="checkbox"/> Chest | <input type="checkbox"/> Legs | <input type="checkbox"/> Arms |
| <input type="checkbox"/> Eyes | <input type="checkbox"/> Back | <input type="checkbox"/> Feet | <input type="checkbox"/> Hands/Fingers |

Nature of injury: (Tick applicable box(es))

- | | | | |
|---|--|--|---------------------------------|
| <input type="checkbox"/> Ache/limb soreness (OOS) | <input type="checkbox"/> Burn | <input type="checkbox"/> Fracture (broken bone) | <input type="checkbox"/> Stress |
| <input type="checkbox"/> Abrasion (scrape) | <input type="checkbox"/> Cut or puncture | <input type="checkbox"/> Occupational hearing loss | <input type="checkbox"/> Other |
| <input type="checkbox"/> Amputation | <input type="checkbox"/> Crushing | <input type="checkbox"/> Poisoning & toxic affects | |
| <input type="checkbox"/> Blood disorder | <input type="checkbox"/> Dislocation | <input type="checkbox"/> Skin incl Dermatitis | |
| <input type="checkbox"/> Bruising | <input type="checkbox"/> Foreign body | <input type="checkbox"/> Sprain or strain | |

INJURY TREATMENT:

Treatment: (Tick applicable box) Nil First Aid Doctor (Not hospitalised) Hospitalised

Is there an ACC claim?: (Tick box Yes No Claim #.....

Has the injured worker been offered alternative duties?: Yes No

INVESTIGATION:

Will a full investigation be carried out? (Take into account the injury severity or probability e.g. Lost time injury or serious near miss):

(applicable box) Yes No If Yes by whom:

HAZARD MANAGEMENT:

What was the hazard involved? (below or describe hazard here)

- | | | | |
|---|--|--|---|
| <input type="checkbox"/> Animal/insect bite | <input type="checkbox"/> Electrical appliances/tools | <input type="checkbox"/> Knife or other cutting tool | <input type="checkbox"/> Stairs/ walkways |
| <input type="checkbox"/> Chemical (fumes) | <input type="checkbox"/> Environmental | <input type="checkbox"/> Ladder or platform | <input type="checkbox"/> Stock or product |
| <input type="checkbox"/> Clutter | <input type="checkbox"/> Fork Hoist | <input type="checkbox"/> Machinery or fixed plant | <input type="checkbox"/> Uneven surface |
| <input type="checkbox"/> Computer station | <input type="checkbox"/> Lifting equipment | <input type="checkbox"/> Mobile plant or transport | <input type="checkbox"/> Welding – hot work |
| <input type="checkbox"/> Confined Space | <input type="checkbox"/> Hand Tools | <input type="checkbox"/> Shelving or racking | <input type="checkbox"/> Wet Floors |
| <input type="checkbox"/> Dust | <input type="checkbox"/> Human or biological | <input type="checkbox"/> Site Traffic | <input type="checkbox"/> Other |

Is the hazard involved significant, use the risk ranking calculator to determine risk significance? Yes No

Consequences

	Minor (FAI)	Moderate (MTI)	Serious (LTI)	Very Serious (Hospital)	Fatality
Likelihood	Almost Certain	High 3	High 3	Extreme 4	Extreme 4
	Likely	Moderate 2	High 3	High 3	Extreme 4
	Possible	Low 1	Moderate 2	High 3	High 3
	Remotely Possible	Low 1	Low 1	Moderate 2	Moderate 2
	Practically Impossible	Low 1	Low 1	Low 1	Moderate 2

Risk Ranking Score



Was this a new

hazard?: Yes No

If **YES** when was the Hazard Register updated:/...../.....

ACTION:

What action will be taken to prevent a recurrence?: (remember you need to determine the Root Cause(s) to do this)

.....

.....

.....

Who is responsible for action? Person(s):.....

Date:/...../.....

NOTIFIABLE INJURY/ ILLNESS:

Is this injury/illness classified as “notifiable”. If **YES**, when was Worksafe NZ notified: (Day) (Month) (Year)

NB Worksafe NZ to be informed of the notifiable injury/illness within 24 hours of the event occurrence

ACCIDENT REPORT CIRCULATION SIGN-OFF:

..... (PCBU Officer - Director)/...../..... (Date) (H&S Manager)/...../..... (Date)
..... (Injured Person)/...../..... (Date)		



MINIMUM REQUIREMENT FOR FIRST AID KIT CONTENTS (M&R ONLY)

Item Number	First Aid Items
1	Kit case in good clean condition
2	Gauze Swabs (7.5cm x 7.5cm)
3	Sterile eye pads - single packet
4	Conforming gauze bandages (5cm)
5	Conforming gauze bandages (7.5cm)
6	Triangular bandages
7	Small sterile wound dressings
8	Medium sterile wound dressings
9	Adhesive tape (1.25cm wide) (Hypoallergenic)
10	Blunt ended stainless steel scissors
11	Safety pins
12	Disposable gloves
13	Disposable resuscitation face shield
14	Gloves Latex Large Pre-packed Pair
15	Scissors 9cm Sharp/Sharp S/S
16	Tweezers
17	Cotton ball

This is a suggested contents list only; equivalent but different items will be considered acceptable.

This kit can be carried in individual belt pouches by people working alone. Once the employer has completed their assessment of the first aid items required, a need for additional items may be identified. This could include, for example, scissors, adhesive tape, thermal blanket, and additional individually wrapped un-medicated sterile wound dressings. As with workplace first aid kits, the contents should be stocked from backup stock at the home site.

Emergency Plans for Evacuation Situations

ARMED ROBBERY

Obey Instructions - Keep Calm - No Heroics

1. Do exactly as asked.
2. Avoid eye contact.
3. Observe:
 - Physical features
 - Clothing worn
 - Distinguishing features including voice, hair, tattoos
 - Scars
 - Any weapons
 - Anything touched, or taken
 - Escape route, vehicle.
4. When safe, Dial 111 Basic Life Support and state "Armed Hold-Up", giving exact location and details of events
5. Request all witnesses to remain.
6. Restrict entry to the area until Security Staff arrive.
7. Do not touch anything within the scene.
8. Write down all you observed.

Suspicious Packages – What to do

If you find a suspicious package either inside or outside a building

- Do not touch it or move it.
- Inform the site manager clearly stating why you believe it to be a suspicious package.

The site manager should make arrangements to

- Notify the police using the 111 system.
- Switch off building air conditioning/ventilation systems.
- Close all fire doors.
- Close all windows.
- Move everybody away from the hazard and await instructions from the emergency services.

CHEMICAL SPILL

- Remain calm.
- Do not touch eyes, nose or any other part of your body.
- Wash your hands and any other exposed parts of your body in ordinary soap where facilities are provided
- Movement outside the room should be avoided as much as possible, to avoid contamination.
- Do not eat, drink or smoke
- Contact the ambulance service using the 111 system.

VEHICLE ACCIDENT

It's important to remember that you should not admit liability or try to settle a claim. This limits how your insurance company can sort things out with anyone else involved – and it may cancel out your claim.

If you're pressed, say: "I need to talk with my insurance company. They'll know what to do."

If you're in an accident

1. Stop and give assistance. If anyone is injured, dial 111 for ambulance and police assistance.
2. Exchange details with other drivers, owners or witnesses such as:
 - Names
 - Addresses
 - Phone numbers
 - Car registration
 - Insurance company details
3. If an uninsured driver hits your car, it's important that you also identify:
 - The driver (by licence number if possible)
 - The car and licence number
 - Witnesses and their contact details
 - The Police Officer contact details (if applicable)

FIRE

Obey Instructions - Keep Calm - No Heroics

1. Warn other building occupants
2. Operate fire alarm
3. WALK - Do not run
4. Dial 111 from a safe location and state "FIRE" giving exact location and details
5. Stay at the assembly point until the "ALL CLEAR" is given
6. Do not attempt to extinguish the fire unless it is safe to do so

EARTHQUAKES

- If an earthquake occurs, it is to be treated as an emergency and the building evacuated
- Move away from windows, which may break, and anything which may fall
- Get under a strong piece of furniture or stand in a doorway
- When the alarm sounds, follow the normal evacuation procedures if safe to do so
- As aftershocks may occur, care must be taken to keep clear of the building after evacuation, or of any object, which may fall if remaining in the building, until all movement has ceased



AIR CONDITIONING SERVICES (NEW ZEALAND) LIMITED RESCUE PLAN

Site Location: Date:/...../.....

Task Description:

CONTRACTS

Rescuer(s):	Competent Person:
Emergency Contact:	Contact Method: <input type="checkbox"/> PA <input type="checkbox"/> Verbal <input type="checkbox"/> Mobile Phone <input type="checkbox"/> Other

RESCUE EQUIPMENT

<input type="checkbox"/> Ladder	<input type="checkbox"/> Rescue Pole	<input type="checkbox"/> Rescue Rope	<input type="checkbox"/> Crane
<input type="checkbox"/> Scaffold	<input type="checkbox"/> MEWP	<input type="checkbox"/> Harness/Lanyard	<input type="checkbox"/> First Aid

CRITICAL RESCUE FACTORS

Anchor Point:

Landing Area:

Rescue Obstructions/ Hazards/ Risks:

LAST MINUTE RISK ASSESSMENT

<input type="checkbox"/> Yes <input type="checkbox"/> No	Have alternatives to using fall arrest equipment been considered?
<input type="checkbox"/> Yes <input type="checkbox"/> No	Has rescue equipment been inspected and found in good order?
<input type="checkbox"/> Yes <input type="checkbox"/> No	Is equipment adequate for the rescue plan?
<input type="checkbox"/> Yes <input type="checkbox"/> No	Have communication devices been identified, located & tested
<input type="checkbox"/> Yes <input type="checkbox"/> No	Are all rescuers familiar with the use of the rescue equipment?

PRE WORK TASKS:

Describe the tasks that will be done prior to work to prevent a fall and the step by step process that will be followed in the event of a fall (review against SWMS)

1: _____

2: _____

3: _____

4: _____

5: _____

RESPONSE PROCEDURE:

1: Notify Emergency Contact

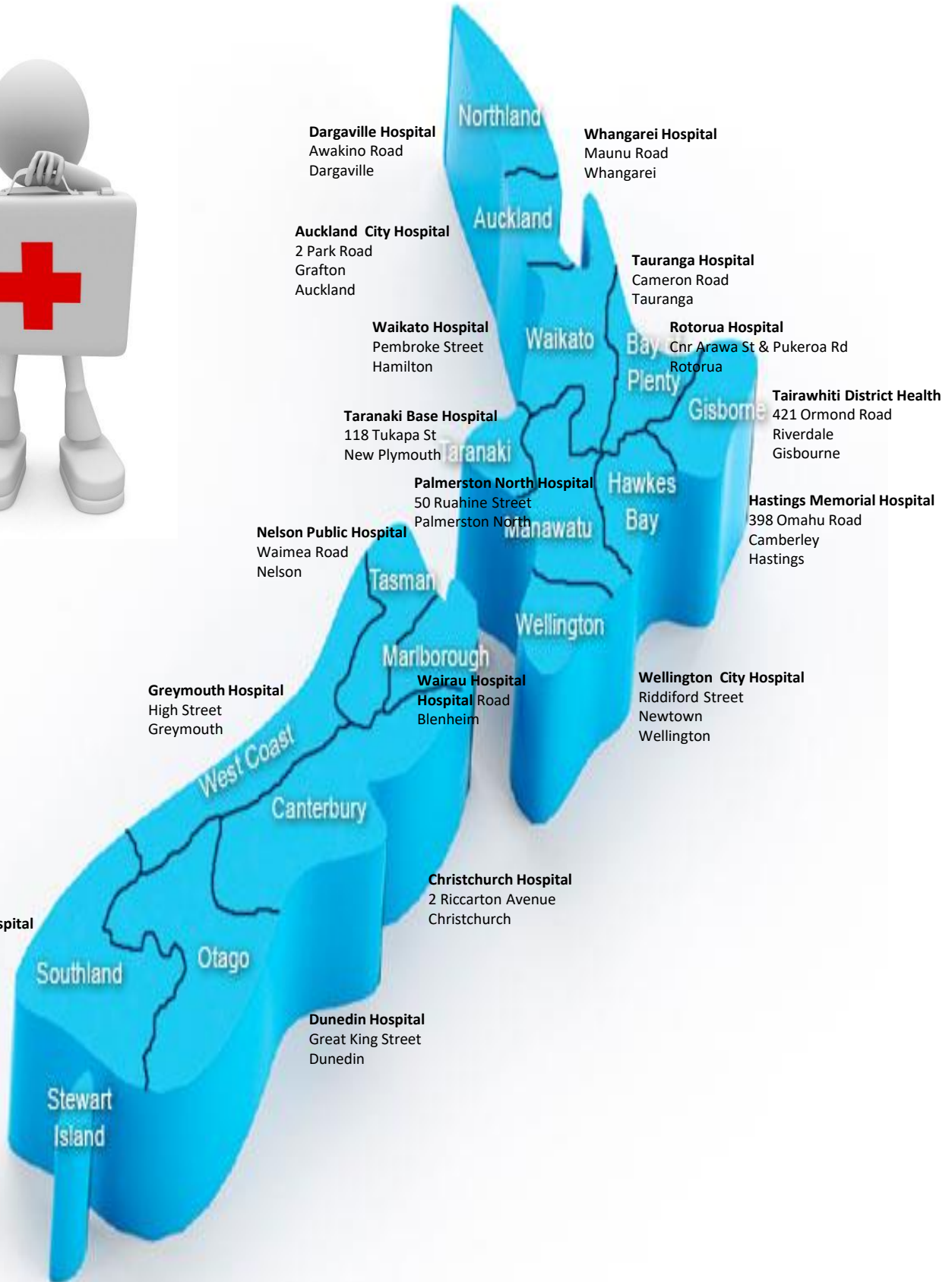
2: Make medical assessment of person

3: If possible have worker perform self-rescue

4: _____

5: _____

Nationwide Hospital Locations



If you need medical advice or attention please ring Healthline 0800 611 116 or visit your GP. For serious injury and health concerns go to an Accident and Emergency Department or call 111. Notify ACS Management of any incident or injury whilst working on their behalf as soon as you have arranged adequate first aid or professional medical treatment for the injured party.

D

Dangers?

R

Responsive?

S

Send for help

A

Open Airway

B

Normal Breathing?

C

Start CPR

30 compressions : 2 breaths

if unwilling / unable to perform rescue breaths continue chest compressions

D

Attach Defibrillator (AED)

as soon as available and follow its prompts

Continue CPR until responsiveness or normal breathing return

Vehicle PPE & Equipment List

MINIMUM REQUIREMENTS FOR PPE & EQUIPMENT (M&R ONLY)	
QTY	ITEMS
5	900mm Cone with two reflective strips
5	Interlinking barriers (tiger tails)
2	“Person at Work” signage
1	1.5kg Fire extinguisher
1	4kg Fire extinguisher (if brazing or hot works being conducted)
1	First aid kit
1	This vehicle manual
1	SDS for all chemicals, products and gases within vehicle
1	Wet weather gear
1	Hard hat with chin strap
2	Rated gloves (4543) minimum
1	Protective eye wear
1	Hi Viz Vest
1	LOTO kit
1	Spill kit
1	Step Ladder Platform

ACS & CUSTOMER ACRONYMS

ACS	Air Conditioning Services (NZ) Ltd
AS/NZS	Australia/ New Zealand Standard
CSD	Critical Safety Device
EWP	Elevated Work Platform
HEEZ	Heavy Equipment Exclusion Zone
HRC	High Risk Checklist
KPI	Key Performance Indicator
LBS	Let's Behave Safely (Observation)
LOTO	Lock out/ Tag out
M&R	Maintenance and Repairs
PO	Purchase Order
PPE	Personal Protective Equipment
RC	Root Cause
SDS	Safety Data Sheets
SHE	Safety, Health & Environment
SIN	Safety Issue Notification
SLP	Step Ladder Platform
SWMS	Safe Work Method Statement

ACS Key Personnel Contact Details

Name	Number	Mobile	Email
Chris Parry (Projects)	09 571 5455	021 284 3442	chris@airconcentre.co.nz
Dan Bicknell (General Manager)	09 579 1099	027 489 9214	dan@airconcentre.co.nz
Gordon Knowles (HSE Consultant)	09 517 5465	02102450941	gordon@airconcentre.co.nz
Jason Cain (Managing Director)	09 571 5460	0272922556	Jason@airconcentre.co.nz
John Watson (Key Account Manager)	09 571 5462	027 2020 985	John.w@airconcentre.co.nz
Matt Cottam (Tenders)	09 571 5458		matt@airconcentre.co.nz
Tania Susana (Accounts)	09 571 5461		tania@airconcentre.co.nz
Reception / Service	09 579 1099		