SWMS Title	
Grid Connected PV and Battery Storage	
Version 6	**Date Issued:**

Safe Work Method Statement
This SWMS has been developed according to the Beyond Solar Solar IMS Manual and on the current version of the SWMS Form (version control is found in the footer). The up-to-date SWMS for this job is the version which is printed and taken to site. The Install/ Site Supervisor is required to carry out a hazard identification process when they arrive on site, see table below. Any medium or high risks should be flagged with the Project Manager before proceeding. The Install/ Site Supervisor must ensure that all workers attending the site inspection are inducted and sign onto this SWMS. If plant, such as ladders or EWPs are used to access the roof, a pre-start check must be carried out prior to use. Report any hazards or incidents to the Project Manager immediately.

Scope of Work covered by this SMWSs
This SWMS was developed specifically for the Installation of roof-mounted solar energy system and/or energy storage system at the site listed below.

Principal Contractor	Sub-Contractor Details	Installation site/Client Details
Beyond Solar 2/79 Williamson Rd Ingleburn, 2565 NSW ABN: 67 604 966 403 Email: info@beyondsolar.com.au		

Development of SWMS			
SWMS approved by		Signature:	Date:
Responsible Person (**RP***) for implementing, monitoring and ensuring compliance with SWMS.		Signature:	Date:
Beyond Solar Solar Project Manager (PM)			
SWMS have been developed in consultation with	☐ Client/ Site ☐(Principal) Contractor ☐Workers *All workers involved in the task must have this SMWS communicated to them before work commences. Sign on page below.*		

Other Install Key Roles		**Other Install Site Key Contacts**	
Construction Engineers			
Head Installer			
HSEQ			

Worker Sign-On Sheet

Worker Declaration- by signing below the worker agrees to the following for _____

- I have been consulted and have assisted in the development of this SWMS.
- I have been given the opportunity to comment on the content of this SWMS.
- I have read and understand how I am to carry out the activities listed in this SWMS.
- I have been supplied with the Personal Protective Equipment identified on this SWMS and I have been given training in the safe use of this equipment.

Workers Names	Role & qualifications used on this site (e.g., Electrician, Installer etc)	Signature	Date of Sign onto Construction Safety Plan
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

Competencies and Training

Topic	High Risk Work Licence or competency required?	Person with Competency
General Construction Induction	☒ White Card	All workers should have a white card to enter the site and perform inspections. See below*
First Aid	☐ Provide First Aid Cert.	At least one person on site
Electrical work	☒ Electrician Licence	Opening switch boards
Wearing harness (Fall restraint or Fall arrest as last option and must be approved by GM)	☐ Work Safely at Heights competency	Required if worker is using a harness
EWP (<11m, scissor-lift, boom-lift)	☐ EWP competency OR Yellow Card	Required to operate scissor life/ EWP <11am
Telehandler with forklift attachment	☐ Telehandler Gold Card OR RIIHAN309D - Conduct telescopic materials handler operations	
Cranes	☐ Tower crane ☐ Self-erecting tower crane ☐ Derrick crane ☐ Portal boom crane ☐ Bridge and gantry crane ☐ Vehicle loading crane ☐ Non-slewing mobile crane ☐ Slewing mobile crane – with a capacity up to 20 tonnes ☐ Slewing mobile crane – with a capacity of up to 60 tonnes ☐ Slewing mobile crane – with a capacity of up to 100 tonnes	

	☐ Slewing mobile crane – with a capacity of over 100 tonnes	
Hoists	☐ Materials hoist ☐ Personnel and materials hoist ☐ Boom-type elevating work platform ☐ Concrete placing boom	
Scaffolding	☐ Basic scaffolding ☐ Intermediate scaffolding ☐ Advanced scaffolding	
Dogging & Rigging	☐ Dogging work ☐ Basic rigging ☐ Intermediate rigging ☐ Advanced rigging	
Forklifts	☐ Forklift	

White Cards*
Staff performing inspections or walk throughs, including sales and engineering staff must have a white card unless they are supervised by a inducted person at ALL TIMES. That is, someone who is competent to work at a construction site and knows their way around the site. Scenario 1: Inspection at construction site An engineer may attend a construction site without a white card if they will be supervised at all times by a contractor with a white card operating under a SWMS, and the contractor must also sign the engineer onto their SWMS and perform an induction that is relevant for the engineer, this may including emphasising pathways and skylights on the roof. The engineer must be able to inspect the site without wearing a harness, accessing a roof area by fixed ladder, scissor lift (with ramp) is safe under direct supervision (see work safely at heights). Scenario 2: Inspecting site (work has not started) A sales representative or engineer may inspect a site of a potential or future project without a white card if they are supervised by a person with knowledge of the site, such a building manager, security attendant, operations manager etc. No work has commenced. And the staff member can perform an inspection without wearing a harness; accessing a roof area by fixed ladder, scissor lift (with ramp) is safe under direct supervision (see work safely at heights). If there is no one at a site to supervise the inspection, the staff member must have their own white card.

Personal Protective Equipment

List of PPE required for project.

Hi-Vis	Steel cap boots	Gloves	Eye protection	Hearing protection
☒ Required for Site Entry ☐ Required for Specific Task _____	☒ Required for Site Entry ☐ Required for Specific Task _____	☐ Required for Site Entry ☒Required for Specific Task Running cable, handling material with sharp edge; using epoxy resin. ☐ Not required	☐ Required for Site Entry ☒Required for Specific Task Cutting rail/ Hot work; drilling ☐ Not required	☐ Required for Site Entry ☒Required for Specific Task Cutting rail/ Hot work; drilling; site noise ☐ Not required
				
Hard Hat	**Respirator**	**Long Sleeve & Trousers**		
☐ Required for Site Entry ☐ Required for Specific Task ☒ Not required	☐ Required for Site Entry ☒Required for Specific Task Installing chemset – drilling; use of epoxy resin ☐ Not required	☒ Required for Site Entry ☐ Required for Specific Task ☐ Not required		
				

Are there any additional hazards or addition tasks identified now at this stage (i.e., before work starts) that are NOT inc. in the SWMS below?
Use the follow table as an identification tool. If there are additional hazards, please mark in far right column below and provide details on the next page.

Haz #	What could hurt me? (Hazard)	How could it hurt me? (Consequence)	Potential Controls	Additional Hazard (Y)
1.	Other work activities in area	Collisions, ergonomics, incompatible activities.	Communication, barriers, awareness	
2.	Tools and Equipment	Impact, entanglement, friction / abrasion, cutting, vibration, Cuts and Lacerations	Check tools before starting work.	
3.	Manual handling	Back injury, strain and sprain. Injury from pushing, pulling, lifting	Team lift, use mechanical aid, crane, forklift, hoist	
4.	Surfaces – Uneven, slippery	Slip, Trip, Fall	Awareness , barricades, signage	
5.	Vehicles, PIVS in vicinity	Hit, property damage, crushing , tipping over	Training, Qualification, Exclusion zones	
6.	Driving hazards	Road condition, other vehicles, uneven terrain, vehicle condition	Barricades, training, Qualifications, walkways	
7.	Noise	Hearing damage,	Ear protection, separate noisy tasks	
8.	Visibility / Lighting	Hit / collision / eye strain	Additional lighting	
9.	Foreign Body in eye	Eye damage , puncture wound	Safety Glasses, Face Shield,	
10.	Heights	Impact injury, unguarded openings, damaged rungs. Lack of barricading.	**Working at Height Permit**	
11.	Falling objects	Hit, crushing, Musculoskeletal damage	Barricading / Drop Zone,	
12.	Ladder Use	Falling from Height, Falling objects,	Appropriate ladder selection, Potential Permit	
13.	Roof work	Falling from Height, incl. fall through, Falling objects,	**Working at Heights Permit**	
14.	Confined spaces	Engulfment, suffocation, entrapment	**Confined Space Permit**	
15.	Oxygen Deficiency	Suffocation, fainting	**Confined Space Permit**	
16.	Dust / Fibres	Respiratory effects, silicosis,	Respiratory protection (PPE)	
17.	Weather	Rain, Wind, Lightning, Melanoma from UV radiation from Sun	Monitor weather condition, work schedule, PPE,	
18.	Temperature / Hot or Cold	Burns, Heat and cold, Heat stress, muscle & ligament damage in cold	Work schedule, short duration only, PPE	
19.	Electricity	Arc Flash, Electrocution, machinery damage	Qualified electrician, **LOTO Permit**	
20.	Moving machinery	Nips, crushing, amputation, laceration, Hit.	Separation of mobile plant & pedestrian workers	
21.	Rotating equipment / Moving objects	Laceration, burns, Nips, Crushing, amputation	Guarding, service equipment, pre-start checks	
22.	Steam	Scolds, burns,	Safe system of work, guarding	
23.	Water	Engulfment, drowning	Barricades,	
24.	Gas / fumes / dusts	Explosive atmospheres, Explosion, Fire, incl..Liquid, Gas, Vapour, Solid, Dust, Metal	**Hot Work Permit, consult with key contact**	
25.	Chemicals	Toxic poisoning through absorption/inhalation. Burn.	PPE, SDS, **consult with key contact**	
26.	Newness to site	lack of training, lack of familiarisation with risks	Supervision, Toolbox, SMWS	
27.	Fire	Burns, property damage	**Hot Work Permit**	
28.	Sprinkler deactivation	Uncontrolled fire , flood , water damage	**Hot Work Permit**	
29.	Flammables	Increased risk of explosion & fire	SDS, firefighting emergency procedures	
30.	Radiation, Electromagnetic Radiation	Burns, poisoning	PPE, Isolate, barricade off area.	
31.	Viral, Bacterial, Parasitic, Fungal	Skin infections	PPE	
32.	Hazardous substances	Eco toxic , Corrosive, Sensitizer, Reactive, Irritant	PPE, SDS sheet, **consult with key contact**	
33.	Fatigue	Low concentration, microsleeps	Appropriate rest periods, work schedule	
34.	Ergonomics/OOS	Product damage Poor work design, layout, repetition, and tendon and muscle	Posture, correct tools, regular breaks	
35.	Lone worker	Contact risks, emergency response communication	Communication plan, 2-way radios, phone	
36.	Repetitive / mundane task	OOS / Repetitive strain, boredom	Work Breaks, stretching, correct tool use	
37.	Spills and Leaks	Contamination of ground / waterways, risk of poisoning or fire	Bunding, Spill Kits, Clean-up	
38.	Wastewater	Pollution of natural waterways or groundwater	Bunding, Cover storm-water drains,	
39.	Land	Contamination of soil	Bunding, Spill Kits, Clean-up, contact EPA	
40.	Air	Odour, Visible emissions, particles (PM10), Sulphur Dioxide, Metal fume	PPE	
41.	Waste	Contamination, Spillage, Solid waste, Liquid Waste	Spill Kit, Bunding, WSU's	
42.	Excavations / Earthworks	Engulfment, suffocation, entrapment, underground services,	Shoring, barricade,	
43.	Crane Use	Slew radius(hit), falling objects, unstable ground, weather, load factors	**HRW Licence, exclusion zones, structural cert.**	
44.	Perceived pressure / haste	Stress, Fatigue	Supervision, planned break schedule	

Hazards and tasks, additional to SWMS

Job activity	Hazards and associated risks	Risk Level	How will the hazards and the risks be controlled?	Residual Risk Level

Evaluate Risk and Determine Significance

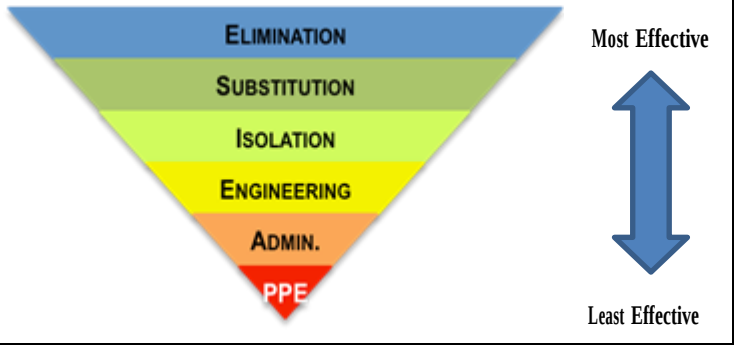
The level of risk will increase as the likelihood of harm and its severity increases.

Determine the associated risk level based on the following Risk Matrix. Controls should be selected with consideration of the Hierarchy of Controls.

Risk Matrix

			Severity				
			1 Negligible	2 Minor	3 Moderate	4 Significant	5 Severe
Likelihood	A	Frequent	M	H	H	VH	VH
	B	Probable	M	M	H	H	VH
	C	Possible	L	M	H	H	VH
	D	Unlikely	L	L	M	M	H
	E	Rare	L	L	M	M	M

Hierarchy of Controls



The residual risk level, identified in the SWMS, indicates the Action Required as per the table below.

Risk Rating

Risk Rating	**Description**	**Action Required**
Very High	Control immediately	Stop work until risk is reduced
High	Control today	More specific control measures must be applied and brief workers daily.
Moderate	Act this week	Control measures can be applied in a general way and monitored weekly
Low	Act this month/ quarter	Monitor monthly or quarterly

Job activity ✓ or NA	Hazards and associated risks	Risk Level	How will the hazards and the risks be controlled? ✓ or NA	Residual Risk Level	RP* (Install Supervisor if not otherwise specified)
Induction					
☐ Meeting with client or site contact - to identify/ understand site specific requirements	Not understanding any site-specific hazards	3C H	☐ Hold a meeting with the client or site contact, ☐ Carry out Client/ Site specific induction if required. ☐ Enquire about any site specific hazards, including ○ Roof structure, skylights, brittle areas, damage ○ Roof access ○ Roof hazards, slippery, wet steel, mould, moss ○ Traffic hazards, MEWP, Cranes, vehicles and mobile plant ○ Electrical cables- overhead, grid connections ○ Roof access- panel lifters ○ Other construction sites, work occurring on the site. Other	2D L	
☐ Site induction meeting with all relevant workers to go through the contents of the SWMS – First Day of the job. ♦ Follow by daily toolbox talks. Our induction procedure	Not understanding activity requirements – risk to health and safety.	3C H	☐ Hold a White Card* unless being supervised by a White Card holder at all times. ☐ Read and understand this set of SWMS. If you have any questions contact the Beyond Solar Solar Project Manager ☐ Workers have the relevant High Risk Work Licences, qualifications and competency as identified above ☐ **Induct all workers to site before work starts!** ☐ **Make sure late arrivals are inducted before starting work** ☐ **All workers have read & understood the SWMS (this document)**	2D L	

	Not understanding	3C	☐ Toolbox talks delivered **daily, including discussion**	2D	

Job activity ✓ **or NA**	**Hazards and associated risks**	**Risk Level**	**How will the hazards and the risks be controlled?** ✓ **or NA**	**Residual Risk Level**	**RP* (Install Supervisor if not otherwise specified)**
	activity requirements – risk to health and safety. Risk that people will be unaware of hazards and not following safety procedures or implementing appropriate control measures. Visitors not understanding risks	H	**of** ○ Identified hazards and specific controls that need to be implemented; ○ Recent incidents; ○ Outline of the day's activities and coordination between the workers. ☐ Workers are briefed at the start of the day about the tasks that are planned for that day and what tools are required. ☐ Plan the work to be carried out in stages to allow for job rotation. ☐ Supervisor to ensure all workers have appropriate PPE, working safely at heights equipment, and other safety equipment required. ☐ Visitors must be escorted at all times on site ☐ Visitors must sign onto daily prestart	L	
Fit for Work					

☐ COVID 19 *Signs to watch for:* *Dry cough, Fever,* *Sore Throat,* *Sore or heavy eyes* *Shortness of breath,* *Slower reaction times* *Lack of concentration* *Impatience* *Stiffness & cramps* *Loss of motivation*	Infection spread from person to person in several ways, including coughing, sneezing, touching infected material and touching nose, eyes or mouth after. Slow reaction time, low concentration, Increases the likelihood	5B VH	☐ Comply with Current Government COVID Restrictions and Health orders ☐ Comply with COVID safety Plan ☐ Practice good hand and cough/sneeze hygiene (Cough/Sneeze into your elbow) ☐ Wash hands with hand sanitizer ☐ Eliminate/limit use of site facilities wherever possible ☐ Avoid sharing of tools/equipment ☐ Avoid touching mouth, nose, eyes	2D L	

Job activity **✓ or NA**	**Hazards and associated risks**	**Risk Level**	**How will the hazards and the risks be controlled?** **✓ or NA**	**Residual Risk Level**	**RP* (Install Supervisor if not otherwise specified)**
	of accidents and injuries. Disease effects, with possible deadly outcome, depending on the age of the infected.		☐ Keep at least a 2m distance away from other team members where possible, including during works, breaks and commute ☐ **Supervisor Responsibility** a. Keep Sanitizers handy for the team if possible b. Brief everyone on the social distancing **Worker's responsibilities;** • Workers should stop working, report and go to a medical facility if they feel any symptoms of COVID-19. • Worker should advise if them or their family members have travelled to/from overseas in the last 14 days. ☐ Worker should declare that neither they nor the family member have made contact with any person who has tested positive for COVID 19.		

☐ Fatigue *Signs to watch for:* *Yawning,* *Sore or heavy eyes* *Slower reaction times* *Lack of concentration* *Impatience* *Stiffness & cramps* *Loss of motivation*	Slow reaction time, low concentration, low performance, lack of attention to detail. Increases likelihood of accidents and injuries.	3C H	☐ Supervisor must monitor all workers to ensure they are <u>fit for work</u> before they start their shift (no signs of fatigue). If a worker is showing signs of fatigue the supervisor should consider sending them home to rest and follow up with HR or Manager etc. ☐ **Restrict the number of successive night shifts (no more than 3 consecutive)** ☐ Avoid starting work earlier than 7am. ☐ Avoid working long hours, more than 50 per week. Take into consideration the previous week's work load when creating the work schedule. ☐ In each 24 hour period, maximum 12 hours of work (and work related activities, incl. driving) and 7 hours rest.	2D L	

Job activity **✓ or NA**	**Hazards and associated risks**	**Risk Level**	**How will the hazards and the risks be controlled?** **✓ or NA**	**Residual Risk Level**	**RP* (Install Supervisor if not otherwise specified)**
			☐ Account for travel time of workers in work schedule, if possible. **Workers responsibilities;** • Workers should aim for between 7 to 9 hours of sleep per night. • Get enough rest on your weekend. • Seek medical advice and help if you have or are concerned about a health condition that affects your sleep and/or causes fatigue, such as sleep apnoea • Find out if any medication you are taking may affect fatigue or capacity to operate plant or vehicles.		

Communing to & from work site ☐ When work includes a long commute; ☐ Away from home or away from usual work area for a particular project.		3C H	☐ Driving hours should be considered and planned for ☐ Arrange to share driving ☐ Avoid driving by using public transport, take a flight etc. ☐ Plan regular rest breaks, every 2 hours ☐ If necessary, organise overnight accommodation so that workers can drive after rest. ☐ Avoid driving between 2am-6am and between 2pm and 4pm. These are the two times of the day when we are most drowsy due to natural circadian rhythms. **Workers** ☐ **Do NOT continue to drive if you feel sleepy.**	2D L	
Alcohol & Drug use ☐ Intoxication ☐ Regular use or	Slow reaction time, low concentration, low performance, near	3C H	☐ Supervisor must monitor all workers to ensure they are fit for work (no signs of intoxication). If the worker is showing signs of intoxication, alcoholism, drug use or	2D L	

Job activity ✓ **or NA**	**Hazards and associated risks**	**Risk Level**	**How will the hazards and the risks be controlled?** ✓ **or NA**	**Residual Risk Level**	**RP* (Install Supervisor if not otherwise specified)**
dependence on alcohol or other drugs that adversely affects work performance or conduct. ☐ 'Hangover' effects, headache, shakiness, nausea & vomiting.	misses/ accidents, inappropriate behaviour, anti-social behaviour, mood swings, violence, **Increases likelihood of accidents and injuries.**		'hangover' the supervisor must send the person home in safe way and may subject workers to D and A testing. ☐ Workers- Must not attend workplace if under influence of alcohol or other illicit drugs ☐ Supervisors and managers should try to identify early warning signs before they develop into problems and report to HR.		
Site specific hazards conditions					

☐ Fragile sections of roof **Skylights** **Brittle roof** **Damaged Roof**	Fall from heights	5C VH	☐ Highlight the location of skylights during the induction process. ☐ Cover skylights with suitable material such as plywood or approved safety netting ☐ Demarcate fragile sections of roof as NO-GO areas. ☐ Develop safe travel paths.	2D L	
☐ Mobile phone and base station	Exposure to radio frequency or electromagnetic energy.	3C H	☐ Levels of radiofrequency EME vary according to the distance from the antenna. Levels immediately in front of the antenna may exceed the exposure limits. ☐ Take note of any signs that indicate the presence of RF hazards and safe areas. ☐ If you find at sign, request to view the Radiocommunications Site Management Book (RCSMB) that contains site contact details, information on the emission patterns from the antennas (known as RADHAZ drawings), site access control, equipment installed at the site and Safe Working Procedures. ☐ Follow the procedures in the RCSMB, including creating exclusion zones. Mark on the Construction	2D L	

Job activity ✓ **or NA**	**Hazards and associated risks**	**Risk Level**	**How will the hazards and the risks be controlled?** ✓ **or NA**	**Residual Risk Level**	**RP* (Install Supervisor if not otherwise specified)**
			Safety Plan.		
☐ Asbestos	Permanent lung damage- death	5B H	☐ Report any suspected ACM immediately to supervisor. STOP work and isolate area ☐ Do not perform any work that may impact of asbestos/ asbestos containing material. ☐ All asbestos work must be undertaken by licenced asbestos contractor	2D L	
Surrounding Hazards					

☐ Overhead power lines	Electric shock	5B H	☐ Take care to especially look out for over-head power lines If there are overhead, make sure they have been marked out on the site layout and install barricades and use spotters to prevent interaction. Exclusion zone for workers ☐ No part of a worker, operating plant or a vehicle should enter an exclusion zone while the overhead powerline is energised (live). ☐ Generally, workers and equipment must maintain **exclusion zones** around powerlines as follows: ○ 3 metres for voltages up to 132kV ○ 6 metres for voltages up to 330kV ☐ If the work you're planning has the potential to encroach into powerline exclusion zones or if you are unsure, contact the network owner for safety advice before starting the job. These exclusion zones can be reduced if the worker has been trained and approved as an Authorised Person by the network owner. ☐ A Safety Observer Zone should be set up where plant or equipment is operating within 10 metre either side of overhead powerlines. Demarcate the safety	5E M	

Job activity ✓ **or NA**	**Hazards and associated risks**	**Risk Level**	**How will the hazards and the risks be controlled?** ✓ **or NA**	**Residual Risk Level**	**RP* (Install Supervisor if not otherwise specified)**
			observer zone. ☐ A Safety Observer must, observe the operation of plant and advise the plant operator if it is likely that the plant operator will enter the exclusion zone for an overhead powerline. ☐ Safety Observer must be competent to perform the role in observing, warning and communicating effectively with the plant operator.		

☐ Working within 10 meters of Overhead powerlines with mobile plant (i.e., crane lift operations)	Electric shock Electrocution	5B VH	☐ Follow mandatory exclusion zones in accordance with the voltage of the powerlines Generally, workers and equipment must maintain **exclusion zones** around powerlines as follows: ○ 3 metres for voltages up to 132kV ○ 6 metres for voltages up to 330kV ☐ If the work you're planning has the potential to encroach into powerline exclusion zones or if you are unsure, contact the network owner for safety advice before starting the job. These exclusion zones can be reduced if the worker has been trained and approved as an Authorised Person by the network owner. ☐ A Safety Observer Zone should be set up where plant or equipment is operating within 10 metre either side of overhead powerlines. Demarcate the safety observer zone. ☐ A Safety Observer must, observe the operation of plant and advise the plant operator if it is likely that the plant operator will enter the exclusion zone for an overhead powerline. ☐ Safety Observer must be competent to perform the	5E M	

Job activity ✓ **or NA**	**Hazards and associated risks**	**Risk Level**	**How will the hazards and the risks be controlled?** ✓ **or NA**	**Residual Risk Level**	**RP* (Install Supervisor if not otherwise specified)**
			role in observing, warning and communicating effectively with the plant operator. ☐ Plant operators to include exclusion on SWMS ☐ Exclusion Zones to be demarcated on site using suitable poles/bunting		

☐ Site access set up roof installation	Service lines within site foot print	5B VH	☐ Identify service line's location, reticulation path & means of isolation during site set up process ☐ If possible isolate service line prior to commencing any works within 1 meter proximity ☐ Ensure no sharp tools or materials and flammable items are placed within the proximity of a service line that may cause damage ☐ Ensure access areas are away from service lines reticulation path or suitable and conforming trafficable protection devices are installed to protect line from foot traffic or other ☐ Ensure suitable guards/barricades is installed along service line path if works MUST be completed within 1 meter of line ☐ Ensure all team members are fully briefed about location and type of service line to ensure full awareness	5E M	
☐ If a public road is being blocked, such as blocking a road as part of the crane lifting operation.	Risks to public safety		☐ A certified traffic engineer must design a traffic management plan. Certified traffic controllers must be on site		
Work Conditions					
☐ Accessing areas that	Animal bites	3D	☐ Use caution and wear gloves when accessing areas	2D	

Job activity **✓ or NA**	**Hazards and associated risks**	**Risk Level**	**How will the hazards and the risks be controlled?** **✓ or NA**	**Residual Risk Level**	**RP* (Install Supervisor if not otherwise specified)**

are rarely used could be harbouring poisonous or dangerous animals/ insects. ☐ Risk of encountering a snake when working in long grass.	Pain, nausea/ vomiting, difficulty breathing, sweating, coughing, muscle spasms.	M	that are rarely accessed, as they could be harbouring poisonous or dangerous animals/ insects. ☐ If working in areas with long grass, wear long trousers and gaiters designed to protect the lower legs. ☐ In the case that someone is bitten or stung by an animal or insect, follow first aid procedures and seek medical attention, if necessary.	L	
☐ High winds increasing the risk of fall from heights or fall of object NOTE: Weather conditions can increase the risk of falling from heights. High winds, especially working on high buildings can make it easier for people to lose their balance. Solar panels, due to their large surface area can act like a sail.	High winds Increase the risk of falling off the roof.	3C H	☐ Record weather forecast on the daily toolbox. ☐ The Site Supervisor is responsibility for monitoring wind conditions and stop work if unsafe. ☐ Consider using handheld anemometer to assist with monitoring wind conditions General guidelines: ☐ 20 km/h (moderate winds), use additional controls such as team lift for handle solar panel or consider putting a temporary stop handling solar panels until wind conditions change. ☐ 30 km/h (strong winds), no work on roof or exposed areas.	2D L	
☐ Working in hot & humid conditions.	Heat stress Heat stroke Heat stroke is when a person is no longer sweating with rapid	3C H	☐ Site Supervisor is responsibility for checking the weather conditions and modifying the day's activities accordingly. ☐ Perform work on unshaded area, such as roof work early in the day when it is cooler. ☐ Reduce manual labour and strenuous tasks to the	2D L	

Job activity ✓ or NA	Hazards and associated risks	Risk Level	How will the hazards and the risks be controlled? ✓ or NA	Residual Risk Level	RP* (Install Supervisor if not otherwise specified)
	shallow breathing, the body temperature is heating up to 40 degrees, and suffering confusion, headaches, nausea and muscle cramps.		cooler part of the day. Air temperature above 27-36 degrees, ensure the following action is taken ☐ Worker should keep hydrated during the day by taking regular drink breaks, every 2-3 hours. ☐ Rest in the shade during drink breaks. ☐ Wet skin with cool water, especially on face and wrists – to aid evaporative cooling. ☐ Workers should keep a bottle of water on the roof, or close to where they are working. Re-fill when empty. <u>Monitor</u> ☐ Watch for signs of heat stress such as dizziness, nausea, muscle cramps and fatigue or more serious heat stroke which also includes dry skin (lack of sweating) and rapid, shallow breathing.		
UV exposure & Sunburn ☐ Working outside in sunny, high UV conditions	Sunburn, skin cancer.	3C M	☐ Worker should wear sun protection including ○ long sleeve shirts and trousers, ○ hat, ○ sunscreen and ○ sunglasses. ☐ Workers should regularly check skin for new or changes in the appearance of moles or freckles and get regular medical skin checks.	2D L	
Rain ☐ Working outside in the morning with dew on the roof. ☐ Precipitation.	Slippery surfaces, increase risk of falls.	3D M	☐ In the case that it rains while working on a roof, stop work! ☐ Wait until the rain stops and water is not running on the roof surface. ☐ Consider addition risk factors that increases the	2D L	

Job activity ✓ or NA	Hazards and associated risks	Risk Level	How will the hazards and the risks be controlled? ✓ or NA	Residual Risk Level	RP* (Install Supervisor if not otherwise specified)
			slipperiness of the roof such as painted surfaced. ☐ Check the chance of rain in the daily toolbox and take this into consideration when planning the work schedule for the day. ☐ Monitor for signs of rain (e.g., Darkening clouds, pick up of wind etc) and start packing up before drops start to fall. Secure all loose items and pack-up the site.		
☐ Working during an electrical storm	Hit by lightning. Burns, heat, injuries from other objects thrown by the lighting	2C M	☐ Monitor weather conditions and stop work if there is lightning.	2D L	
☐ Sunny conditions, glare.	Cannot see the job being performed or surrounding risks.	2C M	☐ Wear tinted safety glasses when working in bright conditions.	2D L	
☐ Working in dark conditions in plant rooms.	Cannot see the job being performed or surrounding risks.	2C M	☐ Turn on lights when available ☐ If lighting is not working/ unavailable, use torches or lamps.	2D L	
Set up work area					

☐ Risk of unauthorised people entering the work area ☐ Risk of falling objects	Public safety	3E M	☐ Set up a work area with restricted access. ☐ Put up a sign to indicate that work is occurring the in area. ☐ Allow sufficient space for pedestrian access to move around the construction site. ☐ Take into consideration any emergency escape paths. ☐ Set up exclusion zone below working area to prevent pedestrians being impacted by falling objects on roof ☐ No items to be stored within 2m of roof edge ☐ Secure all tools and equipment in adverse weather	1D L	

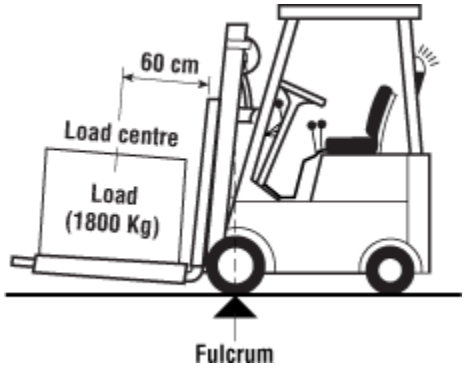
Job activity ✓ **or NA**	**Hazards and associated risks**	**Risk Level**	**How will the hazards and the risks be controlled?** ✓ **or NA**	**Residual Risk Level**	**RP* (Install Supervisor if not otherwise specified)**
☐ Ensure that the site can be identified as a construction site -It is a legal requirement to have a sign installed for construction work. -Can the site supervisor's contact details be found? -Can the site first aider details be found?	Workers/Public unaware of hazards	3C H	☐ Ensure that the construction work signage is created for our site. Including ☐ Danger – Construction Site, do not enter, authorised personal only ☐ Danger – workers above ☐ Principal contractor (i.e., Beyond Solar Solar) ☐ **Contact details** (Site Supervisor, PM and First a□ideMrsa)ndatory PPE (pictograms) ☐ Emergency evacuation procedures ☐ Principal certifying authorities (the council or an accredited certifier)		
Parking and Unloading Tools					

Parking vehicles in the loading bay and unloading equipment and tools.	Hit by traffic/ mobile plant; Pedestrian interaction;	3C H	☐ Adequate parking has been allocated for work vehicles DESCRIBE THE PARKING AVAILABLE ENSURE THAT DELIVERY VEHICLES WILL NOT INTERFER WITH SITE OPERATIONS/ TELEHANDLER/	2D L	
☐ Walking equipment up-stairs – if required	Manual handling; strains.	3E M	☐ Workers have walked the route before lifting material, to understand the path of travel. ☐ A spotter should be assigned to open doors	2D L	
☐ Lift pallets of material with forklift	Hit by mobile plant; crush injuries.	3C H	Put out traffic cones indicating the path that the forklift will take. And notify all people in the vicinity that a forklift is in operation. Forklift operations should be covered in the toolbox talk. In particular forklift drivers:	2D L	

Job activity **✓ or NA**	**Hazards and associated risks**	**Risk Level**	**How will the hazards and the risks be controlled?** **✓ or NA**	**Residual Risk Level**	**RP* (Install Supervisor if not otherwise specified)**

			☐ must undertake pre-operational checks ☐ must adjust the seat so that all controls can be operated comfortably and safely; ☐ must adjust all mirrors for maximum visibility; ☐ Warn any people in the vicinity of their operation that they are going to start using the forklift. ☐ use a spotter if there is a risk of people or mobile plant entering into the path of travel. ☐ shall not be under the influence of alcohol or drugs. Operation: ☐ park vehicle before the driver dismounts; ☐ do NOT leave vehicle unattended and in gear with the engine running; ☐ do not speed, or drive above posted speed limits. ☐ Do NOT carry passengers unless fitted with approved dual seating, which complies with the regulations; ☐ Do NOT drive on public roads (unless vehicle has on-road licence) ☐ Do not exceed the recommended load limit of your lift truck. Each lift truck has a maximum load limit. The load limit is shown on the data plate of the lift truck. ☐ Keep the mast of the forklift in an upright position before inserting the forks into a pallet. ☐ Adjust the fork as wide as possible to fit the load and to provide a more even distribution of weight. ☐ Keep loads close to the front wheels to keep lift truck stable		

Job activity ✓ **or NA**	**Hazards and associated risks**	**Risk Level**	**How will the hazards and the risks be controlled?** ✓ **or NA**	**Residual Risk Level**	**RP* (Install Supervisor if not otherwise specified)**

			 ☐ Travel with the load lowered;		
Telehandler					
☐ Using a telehandler to move material to the roof level	Plant rolls over; hit by mobile plant; crush injuries.	4C H	☐ Perform pre-operational checks using the form/ instructions provided with the machinery. ☐ Enter the cab using the proper hand rails and the steps provided. ☐ Always maintain 3 points of contact when entering or leaving the machine. ☐ Always wear the seat belt ☐ Stay in the machine cabin; do not hang your head, your arms, hand, legs or other parts of your body outside the cabin. ☐ Position the machinery on flat, consolidated ground (tarmac, concrete) to ensure the ground can support the machine. ☐ Never place the machine against a structure to hold that structure in place. ☐ Do not make contact with a fixed or mobile obstacle.		

Job activity ✓ or NA	Hazards and associated risks	Risk Level	How will the hazards and the risks be controlled? ✓ or NA	Residual Risk Level	RP* (Install Supervisor if not otherwise specified)
			Using lift accessories and weight of materials being lifted ☐ Check the load capacity of accessory used. ☐ Do not exceed the rated lifting capacity. ☐ Include the weight of the accessories as part of the load weight ☐ Comply with the capacity charts ☐ Do not drive at high speed with the boom raised ☐ Make sure that the chassis is level before raising the boom, if the terrane level changed during a movement, lower the boom to make the necessary changes. Picking up and moving materials ☐ Start, travel, turn and stop slowly to prevent the load from tipping over. ☐ Beware of the wind. The wind can cause a suspended load to tip over and generate destabilising side forces (even with tag lines). ☐ Never drag the load. Lift it vertically. Manoeuvring the telehandler. ☐ The turning radii changes according to the steering mode selected. Ensure that adequate clearance is provided for pivoting the rear tail and the front fork. ☐ Look out for and avoid other personnel, machinery and vehicles in the area. Always obtain assistance from a guide on the ground when manoeuvring. ☐ Before moving the machine, make sure there is adequate visibility, ensure that the path is clear and sound the horn. ☐ When driving, retract the boom and keep the boom		

Job activity ✓ or NA	Hazards and associated risks	Risk Level	How will the hazards and the risks be controlled? ✓ or NA	Residual Risk Level	RP* (Install Supervisor if not otherwise specified)
			and the attachment as low as possible. ☐ Maintain visibility of the mirrors and optimal visibility of the path of travel. ☐ Always look in the direction of travel. Lifting the material to the roof level ☐ When using the tines accessory, ensure that the material is on a pallet, designed to be lifted by the tines. ☐ The forks must be centred under the load and on the fork carriage and spaced apart as far as possible. ☐ Do not use the machine to lift people		
General					
Using power/ tools	Cuts, lacerations and Bruises to the hand and body;	2C M	☐ Operate the tool according to the manufacturer's instructions. ☐ Ensure the correct tool is used for the job. Do not force a tool to perform a task it was not designed to do. ☐ Use tools with ergonomic grip to allow the wrist to stay straight. ☐ Keep cutting tools sharp and cover sharp edges with suitable covering to protect the tool and to prevent injuries from unintended contact. ☐ Ensure tools are in good condition prior to use, including handle is not broken. ☐ Ensure the handle is fixed tightly. ☐ Ensure tools are put away after use. ☐ Power tools should be tested and tagged for electrical safety.	2D L	

Job activity ✓ or NA	Hazards and associated risks	Risk Level	How will the hazards and the risks be controlled? ✓ or NA	Residual Risk Level	RP* (Install Supervisor if not otherwise specified)
			☐ **Use battery powered tools where ever possible** ☐ Check to ensure the electrical cord is in good condition prior to use. ☐ If the power tool is damaged, immediately put a danger tag on the item and remove from use. ☐ Broken, damaged or worn tools should be taken out of use. ☐ Use safety glasses and gloves if there is a risk of projectiles produced from work being performed. ☐ Ensure tools are maintained. ☐ Never carry a power tool by the cord. ☐ Disconnect power tools when not in use, before servicing and cleaning them and when changing accessories. ☐ Secure work with clamp or vice, freeing both hands to operate the power tool.		
Cutting rail					
☐ Cutting the mounting rail, ducting and cable tray to the required length	Fall from heights – multiple injuries.	5B VH	Do NOT perform hot work/ cutting rail, cable tray etc on the roof. Work on the ground or solid surface, such as terrace level with high parapet.	2D L	
☐ Cutting the mounting rail, ducting and cable tray to the required length	Hot work – potential fire and/or explosion	4C H	☐ Removing or relocating flammable items in area, including fuel, paint, solvents and other flammable liquids ☐ Remove naked flames and other ignition sources. ☐ Remove objects contaminated or possibly contaminated with flammable substances such as empty drums previously holding fuels and oily rags, oil	2D L	

Job activity ✓ or NA	Hazards and associated risks	Risk Level	How will the hazards and the risks be controlled? ✓ or NA	Residual Risk Level	RP* (Install Supervisor if not otherwise specified)
			leaks not cleaned up properly. ☐ Ensure any oil spills or other spills on the work floor area are properly cleaned up and the area decontaminated. ☐ Ensure there is an adequate buffer area around hot work. ☐ Ensure that a fire extinguisher is located near-by and that workers have been trained in how to use a fire extinguisher.		

☐ Operating the drop saw	Noise; projectiles that could cause eye injuries and impact; Saw may grab and 'kick-back' toward operator. Hot work lacerations; entanglement. Electrical hazards; Ergonomic hazards from repetitive work.	2C M	☐ Set up a work bench of a suitable height for comfortable use of the drop saw to avoid strains, especially back and shoulder strains. ☐ **Use battery powered tool where possible** ☐ Keep the work bench clear of cut offs and tools. ☐ Ensure the saw is properly secured to a work table by bolts/clamps at approximately hip height. ☐ Wear PPE, including class 5 ear muffs and safety glasses. Note that sunglasses or normal prescription glasses are not sufficient. ☐ Do NOT wear gloves or loose clothing (esp. security tags on lanyards) ☐ Ensure the saw is operated on an RCD protected circuit. ☐ Ensure the appropriate blade is in place for the task i.e., blade suitable for cutting aluminium metal ☐ Check the blade before use and make sure it is in good condition. Check the electrical cable is free from damage. Any damaged equipment should be tagged Out of Service.	2D L	

Job activity **✓ or NA**	**Hazards and associated risks**	**Risk Level**	**How will the hazards and the risks be controlled?** **✓ or NA**	**Residual Risk Level**	**RP* (Install Supervisor if not otherwise specified)**

			☐ Ensure all guards are fitted, secure and functional. Do not operate if guards are missing or faulty. ☐ Locate and ensure you are familiar with all machine operations and controls. ☐ Before turning on the saw, perform a dry run of the cutting operation to ensure no problems will occur when the cut is made. ☐ Operate with firm, steady pressure. ☐ After finishing the cut, release the switch, hold the saw arm down and wait for blade to stop before removing work or off-cut piece. ☐ Keep a firm grip of the material being cut and it should be supported by the work bench. ☐ Do not use electric tools in damp or wet locations. Any swarf generated should be cleaned up as the work is carried out and treated as a potential fire hazard.		
Moving people and materials to the roof level					
Moving people and materials to the roof level	Fall from heights; falling objects.	5B VH	The following plant & equipment (blue highlighted) has been selected to provide safe roof access and work. ☐ Safe roof access must be planned and organised well before work starts (ideally a week before work starts). ☐ Provide sufficient time for consultation with client/ site, sub-contractors etc. ☐ Provide sufficient time to organise and check equipment.	2D L	
☐ **Crane**					

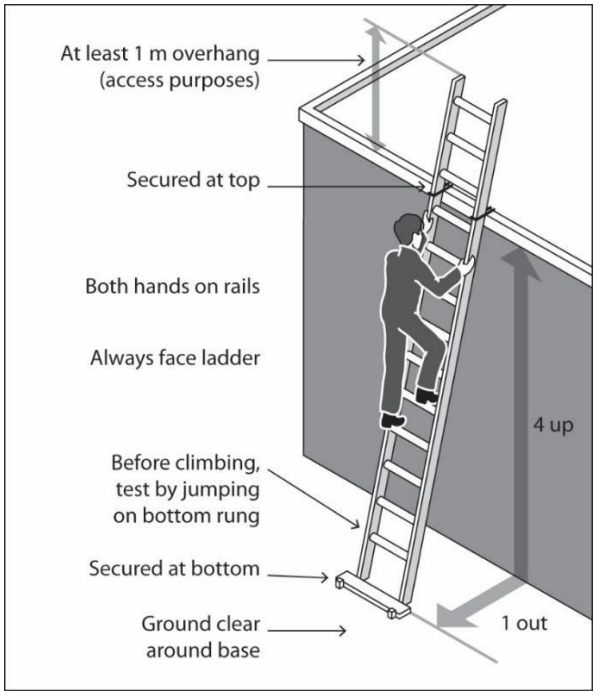
Job activity ✓ **or NA**	**Hazards and associated risks**	**Risk Level**	**How will the hazards and the risks be controlled?** ✓ **or NA**	**Residual Risk Level**	**RP* (Install Supervisor if not otherwise specified)**

☐ Crane Operation	Hit by falling object; hit by mobile plant.	4C H	☐ All workers must wear hard-hats. ☐ Crane Operator to design and set up exclusion zones for the crane operations and lift. ☐ Crane Operator to provide separate SWMS. ☐ Crane Operator to carry out a toolbox talk with Solar Install Workers to ensure all workers understand the exclusion zones for the crane operations and lift. Workers should wear hard hats during the lift operations.	2D L	Crane Operator
☐ Dropping material onto the roof using a crane	Roof collapse, damage to the roof.	4C H	☐ A structural assessment must be carried out to determine safe drop point on the roof. ☐ A detailed plan (visual map) of the drop points must be created and communicated with the crane operator and client/ site contacts. Mark out the drop point on the roof and layout timber for additional support, as specified by the structural engineer. The timber supports are to distribute the load over the structural steel supports.	2D L	
☐ Feeding loads to dogman for crane lift	Interactions between mobile plant	4B H	☐ If possible, position the loads for picking before the crane operations commence. If, due to site layout, it is not possible to pre-arrange the load for picking by the crane before the crane operation commences a spotter will need to be used to direct the forklift. The forklift spotter will need to coordinate the forklift movements with the dogman.	2D L	
☐ Ladder					
☐ Using extension ladder to provide access.	Falls; hit by falling object; collapses of structure	5C H	☐ Ladders should NOT be used to transport materials to the roof. ☐ Use a fixed ladder, if available, compliant with AS 1657 Fixed Platforms, Walkways, Stairways and	2C M	

Job activity ✓ **or NA**	**Hazards and associated risks**	**Risk Level**	**How will the hazards and the risks be controlled?** ✓ **or NA**	**Residual Risk Level**	**RP* (Install Supervisor if not otherwise specified)**

			Ladders—Design, Construction and Installation. ☐ Portable ladders should comply with the requirements of the latest editions of relevant Australian Standard: *AS/NZS 1892 Portable Ladders.* ☐ The ladder is in good condition—the ladder should be inspected for faults, such as broken rungs, stiles and footing before it is used. ☐ Metal or metal-reinforced ladders should not be used in proximity to any live electrical equipment or power lines. ☐ The ladder must have a 120 kg SWL, at least, and rated as industrial. ☐ Damaged ladders are removed from service ☐ The ladder is set up on firm, stable and level ground ☐ Set up the ladder in places where there is no chance of the ladder being hit or knocked; ☐ If the ladder is being set up in a door way or walkway, a spotter should be used to direct pedestrians. ☐ Placing ladders at a slope of 4:1, ☐ Prevent the ladder slipping or **sliding by securing at top** and bottom and/or there is another person holding the base of the ladder. ☐ All the locking devices on the ladder are secure ☐ The ladder extends at least one metre above the stepping-off point on the working platform. Select a ladder that is the correct height.		

Job activity ✓ **or NA**	**Hazards and associated risks**	**Risk Level**	**How will the hazards and the risks be controlled?** ✓ **or NA**	**Residual Risk Level**	**RP* (Install Supervisor if not otherwise specified)**

					
☐ Using a ladder	Falls; hit by falling object; collapses of structure	3C M	☐ Always have two hands free while climbing up and down. Use document pouches/ tool belts to carry things while using a ladder. ☐ No one works underneath the ladder ☐ Face the ladder when going up or down or when working from it	2D L	
☐ Ladder lift					
☐ Set up of the ladder lift	Collapses of structure – with multiple injuries	4C H	☐ The materials hoist will be set up by the supplier who Beyond Solar Solar hires the equipment from. ☐ The supplier is familiar with the manufactures	2D L	

Job activity ✓ **or NA**	**Hazards and associated risks**	**Risk Level**	**How will the hazards and the risks be controlled?** ✓ **or NA**	**Residual Risk Level**	**RP* (Install Supervisor if not otherwise specified)**

			instructions and set up requirements. ☐ Beyond Solar Solar will ensure that the hoist is set up on a flat and stable surface. ☐ The ladder lift must not be installed close to overhead power lines. And no such powerlines have been identified in the site inspection. ☐ The supplier will provide an indication of the SWL depending on the angle of the hoist structure. In general, the ladder lift SWL is 150 kg. ☐ Ladder-Lifts must be secured at the top of the tracks to a structure capable of withstanding a force of 2kN. Securing the base track section is recommended. Such as using two 12mm fibre ropes tied to the ladder section to an anchor point or other suitable attachment. ☐ A prop should be installed half way along the ladder lift assembly, or as per instructions. ☐ The ladder lift requires a power source that should be RCD protected. ☐ Wire rope must be neatly wrapped on the winch drum at all times.		
☐ Using the ladder lift	Collapses of structure; Fall from heights; Objects falling from height.	5C VH	READ SUPPLIER INSTRUCTIONS (the following is a summary) ☐ Carry out a pre-start check, daily to ensure the hoist is functional and the safety features are operational. Including checking for signs of corrosion of the winch and cables; ensure that the material handling frame is secure and the tie off rope is secure. ☐ Run the empty Ladder-Lift up to the Upper Travel Limit and then down to the Bottom Travel Limit checking for	4D M	

Job activity ✓ **or NA**	**Hazards and associated risks**	**Risk Level**	**How will the hazards and the risks be controlled?** ✓ **or NA**	**Residual Risk Level**	**RP* (Install Supervisor if not otherwise specified)**

			smoothness of operation, effectiveness of the Travel Limits and any unusual operation. ☐ The operator must be familiar with the operational functions and safety features before starting work. ☐ Working in wind speeds exceeding 70km/hr is prohibited. ☐ Do not stand underneath the ladder lift during operation. ☐ Do not over load the ladder lift. ☐ Any loose material should be secured prior to hoisting using appropriately rated lifting ropes. ☐ Be aware of the entanglement risk from the wire rope wrapping onto the drum. Keep clear during operation of the hoist. No one should be in this area except for the operator who should be using the operational controls with body clear of the ladder. ☐ A Safety Brake is fitted to all Trolleys to prevent the downward fall of the trolley and the attached carrier in the unlikely event of wire rope or other lifting component failure. The Safety Break should be tested as part of the pre-start checks. ☐ Check the function of the emergency stop. ☐ Wire rope must be neatly wrapped on the winch drum at all times. If not, do not proceed until the wire rope has been re-wrapped. ☐ The hoist will be barricaded to prevent access by pedestrians and workers when hoist is in operation. ☐ On-going monitoring ☐ If the ladder lift is not working properly, according to the supplier instructions at any point of the job, the		

Job activity **✓ or NA**	**Hazards and associated risks**	**Risk Level**	**How will the hazards and the risks be controlled?** **✓ or NA**	**Residual Risk Level**	**RP* (Install Supervisor if not otherwise specified)**

			ladder must be tagged out of service. Call the supplier and ask for assistance. ☐		
☐ Scissor Lift/ EWP					
Set up of the scissor lift/EWP, preparation.	Collapses of structure; hit by mobile plant; crush injuries.	4C H	☐ Perform Pre Start Check of all components and platform. ☐ Operator should be trained, such as holding a yellow card OR national unit of competency of EWP operation. ☐ Do not operate lift if any faults are found and isolate scissor lift by using a Lock-Out Tag Out system. ☐ Check the SWL of the scissor and ensure that the weight of the materials and people is under the SWL. ☐ Ensure that operator has the required level of competency to operate the Scissor Lift/ EWP ☐ Set up on flat, stable surface ☐ Use a spotter when moving and positioning the Scissor Lift/ EWP to avoid crush injuries. ☐ Check for over-head electric power lines and structures before positioning. ☐ Do not operate in high wind conditions ☐ Always set the brakes before lifting. Brakes add an extra layer of security to prevent the lift from moving.	2D L	
Using the Scissor Lift/ EWP to access the roof level or other parts of elevated structure	Fall from heights; Objects falling from height.	4C H	☐ Always move the lift in the lowered position to enable the operator to have a clear line of sight. ☐ Do not lean out over rails of platform when working at heights.	2D L	

Job activity ✓ **or NA**	**Hazards and associated risks**	**Risk Level**	**How will the hazards and the risks be controlled?** ✓ **or NA**	**Residual Risk Level**	**RP* (Install Supervisor if not otherwise specified)**

			☐ Only access the roof from the Scissor Lift/ EWP if there is a ramp/ platform fitted to the Scissor Lift/ EWP that can be extended over the roof to provide a safe means of access. Do NOT climb over rails if the ramps and gate is not fitted. ☐ Ensure the lift is rated to take the weight of the load including tools and the persons using the platform. ☐ Ensure the load weight is evenly distributed on the platform. ☐ Place sign on bottom control panel to prevent unauthorised movement or operation of machine while in use. ☐ If fitted, depress 'Dead Man' button to prevent movement of machine.		
Scenario: Walking out of Scissor Lift/ EWP to the roof level	Fall from heights	4C H	☐ If you are walking from the scissor-lift onto the surface of the roof and there is no edge protection installed either side of the scissor you must work in a fall restraint system. ☐ This means before exiting the scissor installing a temporary anchor point on the roof with a very short lanyard that is less than the distance from the edge of the roof edge, and then progressively install additional anchor points away from the edge, using twin rope to move from one anchor point to the next.	2D L	
☐ **Scaffold.**					
Using scaffold to perform work from.	Collapses of structure; fall from height, hit by falling object.	5C VH	☐ **If the scaffold is over 4m high, the installer must have a High-Risk Work Licence for scaffolding.** ☐ Ensure that unauthorised people cannot access the scaffold, install barricade/ fencing.	2D L	REFER Scaffolders SWMS and

Job activity **✓ or NA**	**Hazards and associated risks**	**Risk Level**	**How will the hazards and the risks be controlled?** **✓ or NA**	**Residual Risk Level**	**RP* (Install Supervisor if not otherwise specified)**

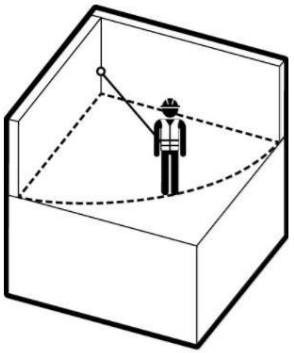
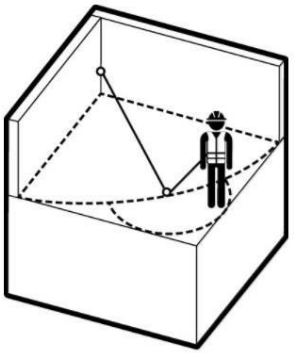
			☐ The scaffold is positioned away from overhead electric lines ☐ Select a scaffold system that has the appropriate SWL for the people and equipment that will be on the structure at any one time ☐ The scaffold is positioned clear of other material hoisting system. ☐ Set up the scaffold according to manufacturer's instructions. Do not mix components from different scaffolding systems (e.g., do not mix aluminium tubing with steel tubing). ☐ No workers to access scaffold until handed over from scaffold company with certificate ☐ Scaftag to be renewed every 30 days after full inspection by Scaffolder ☐ **NO WORKER TO MODIFY SCAFFOLD.** ☐ Only designated scaffolding company can modify ☐ Check the condition of the scaffold parts before setting ☐ Check the duty classification and dimensions complying with the manufacturer's information. ☐ Platforms should be ○ Non-slip surface ○ Not cracked or split ○ Be of a uniform thickness ○ be secure—so it cannot be kicked off or susceptible to uplift or displacement during normal use ○ be positioned so no single gap between exceeds 10 mm.		Scaffolder Supervisor
☐ Using scaffold to perform work from.	Fall from heights	5C VH	Consider the controls listed above for using scaffolding and in particular, ☐ Ensure that the scaffolding is set up according to the manufacture's specifications and perform pre-start	4D M	

Job activity ✓ or NA	Hazards and associated risks	Risk Level	How will the hazards and the risks be controlled? ✓ or NA	Residual Risk Level	RP* (Install Supervisor if not otherwise specified)
			checks daily. ☐ The scaffold should be set up on flat stable surface; use sole-boards and baseplates to evenly distribute the load from the scaffold to the supporting surface. The size of the sole-board depends on the supporting surface. ☐ Do not climb on guard rails to gain extra height. ☐ Do not climb on outside of scaffold. ☐ Scaffolds should not be set up on roof level unless more than 10 -15 metres away from the live edge or penetration. A structural assessment should be carried out to ensure that roof can take the load of the scaffold, weight of people and materials on the scaffold.  Figure 7: Mobile scaffold with an access ladder and a trapdoor to provide the largest possible hazard-free working platform. ☐		
Roof work, work safely at heights					
☐ Working at Heights methodology	Fall from heights – multiple injuries	5C VH	☐ No work occurring within 3m of the live edge ☐ Demarcate a 3m exclusion zone, along existing static	2D L	

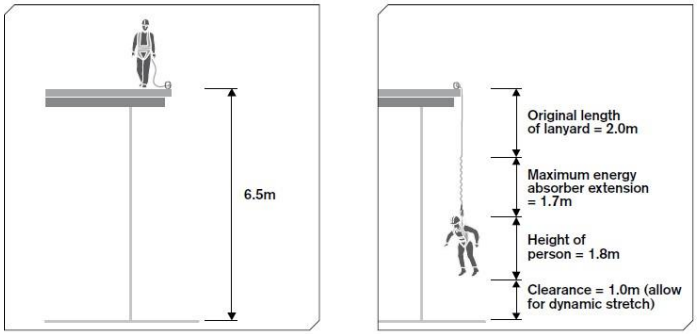
Job activity ✓ or NA	Hazards and associated risks	Risk Level	How will the hazards and the risks be controlled? ✓ or NA	Residual Risk Level	RP* (Install Supervisor if not otherwise specified)
Working on flat roof, greater than 3m away from the edge			lines, or using bollards attached to the roof (or weighed down) and danger tape. Edge protection may need to be installed around access points, example around the scissor lift. Recommended approx. 6 metres edge protection either side of the roof egress point.		
☐ Working at Heights methodology Transposing the design on the roof, marking out the position of the solar panel mounting units and the location of the DC isolators, cable trays and any other components. Installing mounting system, panels, DC isolators, cable tray and laying cable.	Fall from heights – multiple injuries	5C VH	☐ Edge protection must be installed on all edges where workers will be walking on the associated section of roof. ☐ If it is not practical to install edge protection on all edges, the worker must use a fall restraint system. ☐ See below for the working at heights methodology	3D M	
Use of **Edge Protection**	Fall from heights – multiple injuries	5C VH	☐ Must be installed by a competent person on all working faces of the roof ☐ Compliant with AS 4994. ☐ Site supervisor must obtain a copy of the install certification from the edge protection sub-contractor	2D L	
Use of **Fall Restraint** system	Fall restraint system - Harness not worn properly and does not provide adequate	4C H	☐ If permanent anchor points are available, check they have been inspected and certified within the last 12 months. ☐ If permanent anchor points are not available or not	2D L	

Job activity ✓ or NA	Hazards and associated risks	Risk Level	How will the hazards and the risks be controlled? ✓ or NA	Residual Risk Level	RP* (Install Supervisor if not otherwise specified)
	protection from falls.		suitably position, install temporary anchor points. ☐ Temporary anchor points will need to be installed by a competent person. ☐ Workers should inspect anchor points, harnesses and equipment before using as part of pre-start checks. ☐ Equipment must meet AS 1891 ☐ Ensure equipment is the correct size for the user and is not twisted. ☐ Supervisor must ensure that the worker remains in a fall restraint position at all times, that is, the position of the anchor and length of lanyard means the worker is prevented from reaching an unprotected edge. ☐ Position of worker – use rope grab to avoid slack in the rope ☐ Use a double lanyard if you need to move beyond the reach of the first anchor point, as shown below. Connect to both anchor points and go back and unclip from the first anchor point. ☐ If the length of the second lanyard is shorter, to prevent the worker getting into a fall arrest position, connect the rope to the second anchor point, while connected to the first lanyard. Then connect your person the second lanyard before disconnecting the lanyard from your person. (See example below)		

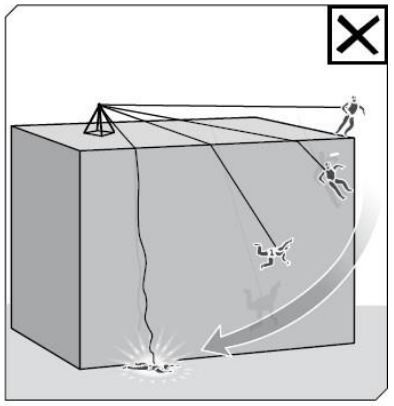
Job activity ✓ or NA	Hazards and associated risks	Risk Level	How will the hazards and the risks be controlled? ✓ or NA	Residual Risk Level	RP* (Install Supervisor if not otherwise specified)

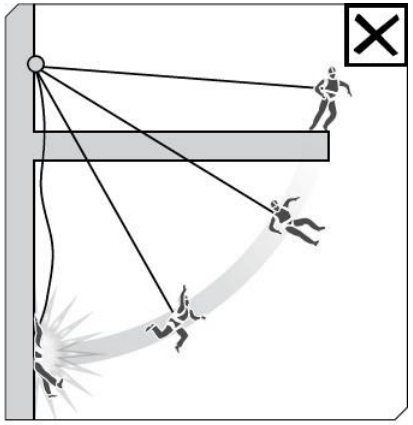
			 There is potential for free-fall if the user adjusts their lanyard beyond the dashed zone. This is the main reason for removing restraint rated equipment from the Standard.  The addition of an extra anchor can enable the user to gain more reach, using restraint technique, removing a potential for fall arrest. ☐ The person can be injured when falling – including hitting their head, workers should		
Fall arrest system to be used as last option and must be approved by Beyond Solar Solar GM The worker can get into a position where they can fall while wearing a harness. The worker has a lanyard that can be adjusted in length so that a free fall is possible.	Fall from heights, hitting ground surface.	4C H	☐ Limit the free fall distance, use the shortest lanyard possible. ☐ Person in fall arrest must not work alone ☐ Must be stand-by person that is capable of performing rescue. ☐ Calculate the cumulative fall distance in the fall arrest system including the original lanyard length, the maximum energy absorber extension, the height of the person and dynamic stretch, ensure a clearance of 1-2m from the next level (ground).	2D L	

Job activity **✓ or NA**	**Hazards and associated risks**	**Risk Level**	**How will the hazards and the risks be controlled?** **✓ or NA**	**Residual Risk Level**	**RP* (Install Supervisor if not otherwise specified)**

			Note: Figure 34 is only illustrative of cumulative fall distances in safety harness systems. The left-hand drawing is not intended to show a recommended work practice.  Figure 34: The required minimum fall clearance below the level of the line anchorage. The total fall distance before this particular configuration would be effective in arresting a fall is 6.5m. ☐ Don't work above (i.e., in elevation) relative to the anchor point. ☐ Identify any potential pendulum effects when designing the system of work. That is, Swing down, where the line slides along the edge until vertical. The worker may hit the ground. ☐ Install guard rails ☐ Install more anchor points		

Job activity ✓ **or NA**	**Hazards and associated risks**	**Risk Level**	**How will the hazards and the risks be controlled?** ✓ **or NA**	**Residual Risk Level**	**RP* (Install Supervisor if not otherwise specified)**

			 Figure 37: During 'swing down' the length of the lanyard and positioning of the anchor allow contact with the ground. Swing back, where the Person swings back and hits the building or other object on the path to swinging back If there is a risk of fall back, a fall-arrest system is NOT appropriate.		

Job activity ✓ or NA	Hazards and associated risks	Risk Level	How will the hazards and the risks be controlled? ✓ or NA	Residual Risk Level	RP* (Install Supervisor if not otherwise specified)
			 Figure 38: During 'swing back' the worker may hit the structure.		
Objects Falling from Heights					
Working on the roof, objects may fall off the edge of the roof to the ground below.	Objects falling from heights and hitting people below.	3D M	☐ Maintain a tidy work area on the roof. Recommend to keep tools in tool belt or toolbox. Do NOT leave tools on the roof area where they can be lost. ☐ Any materials/ equipment that can roll, drums of cable for example, should be placed in a box to prevent the drum turning up on its side and rolling off the roof. ☐ Set up exclusion zone below working area to prevent pedestrians being impacted by falling objects on roof ☐ No items to be stored within 2m of roof edge ☐ Secure all tools and equipment in adverse weather	2D L	
Working on the roof, objects may fall off the edge of the	Objects falling from heights and hitting	4C	☐ Install kickboards around the edge of the roof to catch any items that may slide or roll towards the edge of the	2D	

Job activity ✓ or NA	Hazards and associated risks	Risk Level	How will the hazards and the risks be controlled? ✓ or NA	Residual Risk Level	RP* (Install Supervisor if not otherwise specified)
roof to the ground below. Pitched roof (>10 degrees) AND/OR Working above high traffic area/ area open to general public*. *Working on roof of accommodation, restaurant, retirement village etc.	people below.	H	roof. ☐ Create exclusion zones on the ground level to catch any materials/ equipment that may fall from the roof. ☐ Install signage to warning people to stay outside exclusion zone	L	
Installing Chemsets					

Clear working area of obstructions, clean surface prior to commencement. Mark out fixing locations as per design. Scan concrete for potential services within slab or wall if identified as potential risk. Set desired length on Drill gauge and use masonry drill bit to drill holes as required	Use of drill - kick-back, push back or pull-in Hazardous dusts - Concrete dust may carry high levels of silica dust and repeated exposure can cause silicosis, which is a scarring and stiffening of the lungs. The effects are irreversible, invariably resulting in death. Coarser rock particles can cause short term throat irritation and	2C M	☐ See requirements for power tools above, inc. ensure equipment is tested & tagged. Always ensure plug in equipment uses a construction standard RCD. ☐ Ensure the drill and drill bit are of an appropriate size for the job. Be cautious of obstructions or resistance in the material being drilled into (concrete) that can cause sudden kick-back, push back or pull-in. ☐ Ensure the drill bit is fitted correctly to prevent breaking bit and forming projectiles. ☐ Wear a respiratory mask. ☐ Ensure hands, feet and loose clothing are kept clear from moving parts of the drill. Do not remove guards or covers. ☐ Avoid bending over, squat down, if necessary, rest knees on soft cushioning. Rotate job		

Job activity ✓ **or NA**	**Hazards and associated risks**	**Risk Level**	**How will the hazards and the risks be controlled?** ✓ **or NA**	**Residual Risk Level**	**RP* (Install Supervisor if not otherwise specified)**
	bronchitis. Bending, awkward position Noise Dust in the eyes Vibration		☐ Check the expected noise generation from the manufacture's manual. Provide operators with hearing protection. ☐ Use equipment that vibrates less and is as light as possible; ensure the equipment is well balanced; use equipment with soft, vibration-absorbing handles. ☐ Safety eyewear/ face shield.		

Clear out the hole with task specific test tube brush and hand air pump, sweep and clean area prior to Chemset application.	Hazardous dusts – inhalation of dust	2C M	☐ Wear a respiratory mask. ☐ Carry out activity in well ventilated area - on the roof top. ☐ Safety eyewear		
Epoxy Resin (Chemset 502) is applied into the prepped hole via the manufacturers Gun and cartridge. Threaded anchor stud is twisted into the prepared hole containing the epoxy resin.	Exposure to hazardous chemical Skin contact Inhalation of fumes Abrasion to hands when twisting the threaded studs.	2C M	☐ Wear a glove when exposed to the epoxy resin and handling the threaded studs ☐ If contact with skin occurs, flush with water. Seek medical assistance if required. ☐ Wear a respiratory mask. ☐ Carry out activity in well ventilated area - on the roof top. ☐ Have SDS on hand -Include controls from SDS here		

Job activity ✓ **or NA**	**Hazards and associated risks**	**Risk Level**	**How will the hazards and the risks be controlled?** ✓ **or NA**	**Residual Risk Level**	**RP* (Install Supervisor if not otherwise specified)**
Handling Materials on the roof					

Installing mount rails, cabling and installing panels.	Manual handling and ergonomics: strains	2C M	☐ Maintain a good grip, especially when handling solar panels. ☐ Worker lifting solar panels to be capable of lifting 15 to 20 kg for this task. ☐ Site supervisor is responsible for rotating workers through different tasks to avoid strains ☐ Carry panel on shoulder and balance with both hands-on opposite sides. Change shoulders to prevent muscle stains. Workers may also lift straight overhead. ☐ Avoid twisting ☐ Squad or kneel down to avoid bending over – **lift with legs** not back.	2D L	
Handling materials, cable tray, mount; and solar panel.	Sharp edges – hand cuts	2C M	☐ The person cutting the cable tray, mount should de-burr the edges to remove shape edges. ☐ Workers handling material should wear a good quality material handling glove.	2D L	
Running cabling					
Running cable from the roof to the inverter station/ MSB	Fall from heights; falling objects.	2C M	The following plant & equipment (blue highlighted) has been selected to provide access to run cables from roof to inverter station/ MSB. ☐ The path that the cable is going to take should be planned before work starts and an appropriate safe working at heights methodology must be developed. ☐ Provide sufficient time for consultation with client/ site, sub-contractors etc. ☐ Provide sufficient time to organise and check equipment.	2D L	

Job activity ✓ **or NA**	**Hazards and associated risks**	**Risk Level**	**How will the hazards and the risks be controlled?** ✓ **or NA**	**Residual Risk Level**	**RP* (Install Supervisor if not otherwise specified)**

Handling materials while running cable					
Installing cable tray and running cables	Manual handling; poor posture.	2C M	☐ Avoid sustained awkward and static positions. ☐ While performing work for an extended period, the worker is recommended to take breaks, stretch and re-focus every 20 -30 minutes. Depending on nature of the job. ☐ If possible, rotate the work at heights task between different workers.	2D L	
Handling materials, cable tray, mount; and solar panel.	Sharp edges – hand cuts	2C M	☐ The person cutting the cable tray, mount should de-burr the edges to remove shape edges. ☐ Workers handling material should wear a good quality material handling glove. ☐ Plan work to avoid reaching across cable tray that can lead to lacerations – specially to forearms.	2D L	
Cabling	Trip hazard – fall at same level.	2C M	☐ Poor cabling can lead to creating trip hazards for other workers.	2D L	
DC Electrical Wiring					
Roof Array wiring, cabling to Inverter station, Cable tray and duct installation, Module Installation, Isolator and fuse installations on roof and Inverter station. Battery (BESS) cabling.	Electric shock Electric Arc Flash	5B VH	☐ No exposure to Live DC parts other than testing ☐ All manufactured panel plugs, Isolators, Fuses etc rated for outside use. ☐ All array wiring installed prior to panels installed, all open ends fitted with moulded insulated plugs, allowing series connections to be made without exposure to Live DC Voltage. ☐ All Isolators and fuses terminated prior to energising of DC Array.	2D L	

Job activity **✓ or NA**	**Hazards and associated risks**	**Risk Level**	**How will the hazards and the risks be controlled?** **✓ or NA**	**Residual Risk Level**	**RP* (Install Supervisor if not otherwise specified)**

			☐ Panels plugged together connected with moulded insulated plugs ensuring no live exposed parts ☐ Array to Inverter wiring installed and terminated prior to energising. ☐ All DC cables tested for Insulation resistance prior to energising. ☐ Open circuit and Operating tests performed with insulated specialised instruments and undertaken by trained personnel		
AC Electrical Wiring			☐		
Inverter Installation, AC Switch Board Installation, AC Wiring to Inverters**,** AC Wiring to Site Connection point. Communications and monitoring equipment installation.	Electric shock Electric Arc Flash	5B VH	A licenced electrician must carry out certain tasks ☐ AC / DC Cabling – Ensure isolated / dead. ☐ Test Insulation Resistance, Polarity, Continuity prior to final testing ☐ No exposed cable outside insulated terminal ☐ Operating tests performed by trained personnel using purpose for use insulated instruments	2D L	
Installing inverter station					
Lifting and positioning inverter station into place.	Manual handling: strains	3B H	☐ Very heavy lift, use a team lift. ☐ Hold in position while fixing into position with power tools (see use of power tools above).		
Shutdown					
Performing a shut-down on a circuit board.	Electric shock Electric Arc Flash	5B VH	☐ IMPORTANT: Ensure that any circuit board shut downs are communicated and coordinated with the Project Manager and the Site Contact person.		

Job activity ✓ or NA	Hazards and associated risks	Risk Level	How will the hazards and the risks be controlled? ✓ or NA	Residual Risk Level	RP* (Install Supervisor if not otherwise specified)
			☐ If a shut-down will be shutting down all lighting ensure that alternative lighting will be provided. ☐ Ensure that there is a clear understanding between site contact, electrician and project manager exactly what is being shut down and how this will affect site (i.e., what services or parts of the building is going to be shut down). ☐ IMPORTANT: Only a licenced electrician is permitted to shut down circuit boards. ☐ The electrician should perform LOTO (lock out and tag out) however, as may be the case the electrician may need to work on the circuit board. ☐ Make sure that a Low Voltage Rescue Kit on hand and that a second person is present to perform a rescue if required.		
Testing & Commissioning					
Testing	Electric shock	5B VH	☐ Use Instruments fit for purpose (serviced / calibrated and tested on live source). ☐ Isolator / Fuse / Combiner Installation – Ensure all cable entries are sealed appropriately to maintain IP rating of enclosure (as per ASNZS5033, ASNZS3000, CEC Guidelines; Beyond Solar Solar Guidelines).	2D L	
Inspection of ceiling spaces					
If the structure of the building cannot be determined with available architectural drawings the solar installer may need to	Falling through ceiling space; dusty; electrical hazards – wiring running through the ceiling structure;	4C H	☐ The space must have a safe means of entry and exit. ☐ ensure someone is aware of the work being carried out in the ceiling space and contact with them is maintained until work is completed.	2D L	

Job activity ✓ or NA	Hazards and associated risks	Risk Level	How will the hazards and the risks be controlled? ✓ or NA	Residual Risk Level	RP* (Install Supervisor if not otherwise specified)
enter the ceiling space to determine the roof structure.	insulation material – that may irritate respiratory system and skin. Not considered confined space because the space is unlikely to have an unsafe oxygen level or airborne contaminants.		☐ be aware that heat and humidity may cause heat stress, so make sure fluid intake is sufficient to ensure you do not become dehydrated ☐ take additional lighting (e.g., torch) with you as the lighting is generally poor in ceiling spaces ☐ take care accessing and traversing the work area, avoiding tripping over debris, material and the ceiling trusses ☐ step carefully on ceiling joists or other beams – not the ceiling material (i.e., Gyprock sheeting) – to avoid risk of falling or injury ☐ using/providing appropriate tools – preferably manual or battery-operated tools ☐ be aware of the location of electrical cables, fittings and equipment and avoiding contact with them ☐ ensure you do not damage any electrical cables or electrical equipment. ☐ wear appropriate, well maintained and correctly-fitted personal protective equipment when working in dusty ceiling spaces, including: ○ a half-face (class P2) disposable particulate respirator, in accordance with AS/NZS 1715:2009 Selection, use and maintenance of respiratory protective equipment ○ a head-covering and goggles, to avoid eye irritation ☐ long-sleeved, loose-fitting clothing and gloves, to minimise skin contact with insulation material ☐ wearing appropriate footwear ☐ keep your work areas clean and clear of fibres and dust and place waste in plastic bags capable of containing the dust.		
Inspection of Electrical					

Job activity ✓ or NA	Hazards and associated risks	Risk Level	How will the hazards and the risks be controlled? ✓ or NA	Residual Risk Level	RP* (Install Supervisor if not otherwise specified)
services					
Visual inspection of the circuit boards	Electrical Hazards	4C H	☐ MUST be conducted by licenced electrician. ☐ Inspection must not include any possible contact with LIVE parts. ☐ No Live work is permitted ☐ Isolate power before working within switchboard ○ Minimum two people when potential contact with live apparatus. The role of the second person is to be a spotter and perform a rescue if required. ○ Wear insulated gloves and glasses, and long sleeve shirt when there is potential contact with live apparatus. ○ Use insulated instruments and tools that are fit for purpose (serviced / calibrated and tested on live source). ○ Low voltage rescue kit on-hand.	2D L	
Ensure that the site can be identified as a construction site	• It is a legal requirement to have a sign installed for construction work. • Can the site supervisor's contact details be found? • Can the site first aider details be found?	3C H	☐ Ensure that the construction work signage is created for our site. Including ☐ Danger – Construction Site, do not enter, authorised personal only ☐ Danger – workers above ☐ Principal contractor (i.e., Beyond Solar Solar) ☐ **Contact details** (Site Supervisor, PM and First aiders) ☐ Mandatory PPE (pictograms) ☐ Emergency evacuation procedures ☐ Principal certifying authorities (the council or an		

Job activity ✓ or NA	Hazards and associated risks	Risk Level	How will the hazards and the risks be controlled? ✓ or NA	Residual Risk Level	RP* (Install Supervisor if not otherwise specified)
	• Are there instructions for what to do in an emergency?				
Waste and material storage and removal					
Bins will be located within the cordoned off area. Any excess materials not required on roof and Install rubbish will be kept behind fence until final day of install.	Interaction with pedestrians – that are members of the public without knowledge of construction safety	2C M	☐ Rubbish will be collected in bins or kept within the work site area. ☐ Any light weight material, such as pallet wrap will be controlled to prevent the generation of litter on site. ☐ Public access to the material and rubbish will be restricted in a fenced area. On-going monitoring	2D L	
Emergency procedures					
Falls rescue procedure	Fall from heights Body trauma from being restrained in harness for an extended period	5B VH	☐ A fall restraint or work positioning system is being used to prevent falls occurring. In the event a fall occurs the site supervisor is responsible for rescuing the person or instructing the person, if possible, to ascend or lower to the ground. ☐ A specific fall rescue plan should be developed for the specific circumstances of the work set up.	2C M	
Evacuation	Personnel not evacuated and at assembly point.	3B H	☐ Shut down equipment and make area safe ☐ Move to the Emergency Assembly Area, as identified on the Site Emergency Plan	2D L	
Heat stress	Heat stress – dehydration	3B H	If heat stress occurs, move to shaded, cool area. Apply cool water to skin and clothes and if serious apply cold packs to neck, groin and/or armpits. See a doctor if symptoms do not improve.	2D L	

Appendix- Levels of severity

Severity	Description
Negligible	No injury
Minor	Injury or ill-health requiring first aid treatment only (includes minor cuts and bruises, irritation, ill-health with temporary discomfort)
Moderate	Minor injury or illness. Injury requiring medical treatment with short term lost time (e.g., lacerations, burns sprains, minor fractures, dermatitis, repetitive strain and overuse)
Significant	Major injury or illness. A serious illness or injury that requires a long term treatme or surgery. (e.g.; major fractures
Severe	May cause death or permanently disabling injury (includes amputations, occupational cancer, acute poisoning and fatal diseases)

What is the likelihood of harm occurring?

The likelihood that someone will be harmed can be estimated by considering the following:

- How often is the task done? Does this make the harm more or less likely?
- How often are people near the hazard? How close do people get to it?
- Has it ever happened before, either in your workplace or somewhere else? How often?

Levels of likelihood

Likelihood	Description
Rare	Very unlikely to occur
Unlikely	So unlikely, that an occurrence is not expected
Possible	Possible or limited previous occurrence
Probable	Predicted to occur several times and it has happened many times previously
Frequent	Common or repeating occurrence

Applicable legislation, Code of Practice, Australian Standards, Guidance Notes

Legal Requirement

Topic	Act	Regulations
General Work Health a Safety	Work Health and Safety Act 2011 (Harmonised States – NSW, QLD, ACT, TAS, NT, SA) Occupational Health and Safety Act 2004 (VIC) Work Health and Safety Act 2020 (WA)	Work Health and Safety Regulations 2017 (Harmonised States – NSW, QLD, ACT, TAS, NT, SA) Occupational Health and Safety Regulations 2017 (VIC) Work Health and Safety Act 2020 (WA)
Plant and Equipment	Refer to Corporate Legal Register	Refer to Corporate Legal Register
Electrical Safety	Electrical Safety Act 2002 (QLD) Electricity (Consumer Safety) Act 2004 (NSW) Electricity Safety Act 1971 (ACT) Electricity Safety Act 1998 (VIC) Electrical Workers and Contractors Act 2016 (NT) Electricity Act 1996 (SA) Electricity Act 1945 (WA)	Electrical Safety Regulation 2013 (QLD) Electricity (Consumer Safety) Regulation 2015 (NSW) Electricity Safety Regulation 2004 (ACT) Electricity Safety (Installations) Regulations 2009 (VIC) Electricity Safety (Registration and Licensing) Regulations 2010 (VIC) Electrical Workers and Contractors Regulations 2016 (NT) Electricity (General) Regulations 2012 (SA) Electricity Regulations 1947 Electricity (Licensing) Regulations 1991 (WA)
Injury and compensatio	Refer to Corporate Legal Register	Refer to Corporate Legal Register
Fire safety	Refer to Corporate Legal Register	Refer to Corporate Legal Register
Environmental Planning Assessment Regulation	Refer to Corporate Legal Register	Refer to Corporate Legal Register

Codes of Practice

- Excavation Work
- Safe Design of Structures
- Managing the Risk of Falls at Workplaces
- Managing Electrical Risks at the Workplace
- Managing Noise and Preventing Hearing Loss at Work
- Confined Spaces
- Hazardous Manual Tasks
- How to Manage and Control Asbestos in the Workplace
- Guide to safe solar panel installation NSW

https://www.safeworkaustralia.gov.au/resources_publications/model-codes-of-practice

Australian Standards

Australian Standards are available online through SAI Global Infostore
https://infostore.saiglobal.com/store/

Industry relevant standards

- AS/NZS 5033 Installation of photovoltaic (PV) arrays;
- AS/NZS 3000 Electrical Wiring Rules;
- AS/NZS 3012:2010 Electrical installations—Construction and demolition sites;
- AS 3439 Low-Voltage switchgear and control gear assemblies;
- AS 2053 Conduits and Fitting for Electrical Installations;
- AS 4509 Stand-Alone Power Systems;
- AS 1664 Aluminium Structures;
- AS/NZS 1170.2:2011 Structural Design Action- Wind Actions;
- AS/NZS 1768:2007 Lightning Protection;
- AS/NZS 3008.1.1:2009 Electrical Installations – Selection of Cables;
- AS/NZS 4777.2:2015 Grid Connection of Energy Systems Via Inverters – Inverter Requirements;

Safety standards

- AS 2550.7—1996: Cranes, hoists and winches —safe use—Builders' hoists and associated equipment.

Industry Standards and Guidance

- CEC Solar Installation Guidelines;
- Grid Connect Solar PV Systems: Install and Supervise Guidelines for Accredited Installers-
- Grid Connect Solar PV Systems: No Battery Storage, Design Guidelines for Accredited Installers-

Management System Standards

- AS/NZS ISO 45001 Occupational Health and Safety Management Systems –
- AS/NZS ISO 9001 Quality Management Systems
- AS/NZS ISO 14001 Environmental Management Systems
- AS/NZS 31000 Risk Management