NSW GOVERNMENT

SAFEWORK NSW

SOLAR INSTALLERS SAFETY CHECKLIST

Businesses that sell, design and install solar systems have duties to provide and maintain a working environment that is safe and without risk to health and safety, so far as is reasonably practicable.

This checklist can help you prepare and plan for the safe installation of photovoltaic solar systems.

This checklist is not exhaustive and should be used in conjunction with the *SafeWork NSW Guide to Safe Solar Panel Installation*, relevant codes of practice and the SafeWork NSW solar installers video safety alerts risks of falls and electrical risks.

Solar installers face on-the-spot fines of up to $720 for individuals and $3,600 for businesses for not protecting workers from falls from heights and electrical risks.

Name: _____ Date: _____ Time: _____

Site Address: _____

Preparation and the working environment		
	Y	N
Workers have been consulted regarding site specific information/controls e.g. toolbox talk	☐	☐
An exclusion zone has been established around the work area, to prevent unauthorised persons, such as the homeowner, neighbours or children, accessing work areas	☐	☐
Electrical work is being undertaken or appropriately supervised by a licenced electrician i.e holds the correct Fair Trading licence	☐	☐
A site-specific safe work method statement has been prepared for high-risk construction work e.g. addressing falls and electrical risks	☐	☐
An emergency plan has been prepared for roof works and is site-specific	☐	☐
Workers have been trained in working at heights, applying SWMS, emergency response procedures and other skills, as required	☐	☐
Workers have been provided with sun-safety equipment e.g. hats, sunscreen, long sleeved shirts, sunglasses	☐	☐

Managing the risks of falls		
	Y	N
Safe access and egress is available to the roof e.g. ladder is fixed at the top along with anti-slip gutter guards and stabilisers and leg levellers as required, secured at the base and extends 1-metre past access point	☐	☐
A perimeter scaffold system has been installed as the highest order control for falls	☐	☐
A fall prevention device (e.g. scaffold or temporary edge protection such as roof rails) has been installed to control the risk of falls	☐	☐
Consideration has been given to a roof rail system that can be installed from the ground	☐	☐
If scaffold or roof rail has not been installed, the reasons why it is not practicable to do so have been recorded and able to be produced	☐	☐
Adequate processes and controls are in place to prevent a fall through brittle/fragile roof materials and identified in the site-specific SWMS e.g. skylight covers, roof mesh, physical barrier	☐	☐

Managing the risks of harness-based work		
Note: harness-based systems should only be considered if it is not reasonably practicable to install a fall prevention device e.g. scaffold or temporary edge protection such as roof rails.	Y	N
A plan/diagram has been drawn that shows the system layout e.g. access point, anchor point locations, location of fall hazards	☐	☐
The system design allows the worker to connect on to the system prior to stepping off the ladder	☐	☐
The system prevents the worker from reaching a falls hazard (edge or fragile roof surface) when correctly adjusted i.e. physically prevents worker reaching a position where they can fall	☐	☐
Proprietary anchor points are installed in accordance with manufacturer's instructions, including the number/type of fixings	☐	☐
Improvised anchor points (e.g. rafters, beams, trees) have been assessed by a competent person to ensure they are clearly structurally adequate i.e. 15kN single person, 21kN two person.	☐	☐
All fall arrest equipment is within service date and inspected prior to use	☐	☐
Users are installing multiple anchors to cover the working area and remain connected to the anchors as they traverse the work area	☐	☐
Workers are wearing the harness correctly e.g. leg loops attached, harness firm and orientated correctly	☐	☐

Managing electrical and installation risks		
	Y	N
Before workers enter a ceiling space or drill into walls, electricity to the property is switched OFF at the meter box	☐	☐
A lock has been placed on the main switch or the meter box itself i.e. lock-out/tag-out procedure 'LOTO'	☐	☐
Authorised electrical workers are testing for dead to ensure power is isolated prior to conducting electrical work (consider alternate power sources)	☐	☐
Prior to isolation all potential hazards that may be introduced after electrical isolation, such as loss of lighting, life support systems, have been identified	☐	☐
The risks of energised consumer mains prior to the meter box are adequately controlled i.e. cables in wall/roof/ceiling space need an exclusion zone established or isolated if required	☐	☐
The risks associated with overhead powerlines have been adequately controlled (as these will be live even after meter box isolation) e.g. maintain safe approach distances	☐	☐
Damaged or aged wiring and appliances within ceiling spaces/surrounds have been adequately controlled e.g. identified, isolated where possible and reported to owner	☐	☐
Solar panel isolators are terminated prior to panel installation	☐	☐
If the job has been completed the electrical certificate of compliance (CCEW) has been issued by the electrical installer	☐	☐

Notes:

FURTHER INFORMATION

Safety information

- *Solar panel photovoltaic (PV) installations* - SafeWork NSW web page
- *SafeWork NSW Guide to Safe Solar Panel Installation*
- *Housing Industry Site Safety Pack* – residential construction guidance including templates to help you to meet your work health and safety responsibilities (e.g. SWMS, toolbox talk)
- Checklist – *Construction falls from heights principal contractor safety checklist*
- Safe Work Method Statement template
- *Ladders* - SafeWork NSW web page
- Work near overhead powerlines – the basics

Codes of practice

- *Managing the risk of falls in housing construction*
- *Managing the risk of falls at workplaces*
- *Managing electrical risks in the workplace*
- *Work near overhead powerlines*
- *Hazardous Manual Tasks*

Australian Standards

- AS/NZS3000:2018 Electrical Installations (AUS/NZ Wiring Rules)
- AS/NZS 1170.2011(R2016) Structural Design Actions – Wind Actions
- AS/NZS 4994.1.2009 Temporary edge protection – General Requirements
- AS/NZS 3760:2010 In-service safety inspection and testing of electrical equipment
- AS/NZS 1576.1.209 – Scaffolding – General requirements
- AS 4576:2020 – Guidelines for scaffolding

Other government and not-for-profit organisations

- NSW Fair trading – government consumer rights and trader compliance regulator including for installing solar panels and certificate of compliance for electrical work. Also see www.fairtrading.nsw.gov.au
- NSW Department of Planning, Industry and Environment. Also see www.planning.nsw.gov.au
- Clean Energy Council – Also see www.cleanenergycouncil.org.au

For further information about how to work safely when installing solar panels, see www.safework.nsw.gov.au or call 13 10 50.

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