JOB HAZARD ANALYSIS (JHA)

Business name

Document: JHA-001 Rev 1
Prepared: Nov 9, 2026
Review by: Dec 9, 2026
Highest risk after controls: Medium

1. BUSINESS AND JOB DETAILS

Job	Solar inverter installation	**Start date**	Nov 9, 2026
Working hours	7:00 am to 3:30 pm	**Trade**	Solar

2. JOB STEPS, HAZARDS AND CONTROLS

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
1	Isolate AC at the electrical panel and DC at the isolators, apply lockout/tagout	Electric shock from live wiring Stored energy Rules: 29 CFR 1926 Subpart K	**Critical Possible / Fatality**	1.1 Isolate the power before any work. Do not work live. [Elimination] 1.2 Lock out and tag the disconnecting means with your own personal lock and tag so the circuit cannot be energized (29 CFR 1926.417). [Engineering (guarding)] 1.3 Electric shock from live wiring: see step 3 for the full controls [Administrative] 1.4 Release or block all stored energy before work: release the pressure in pipes, tanks and hoses, bleed hydraulics, release springs, lower loads. [Elimination] 1.5 Lock out and tag all energy sources with personal locks. [Engineering (guarding)] 1.6 Put mechanical blocks or props under raised parts like buckets, tipper bodies and doors. [Engineering] 1.7 Test that the system is dead and nothing can move before you start. [Administrative] 1.8 Follow the maker's procedure, for example for garage door and roller door springs. [Administrative] 1.9 Wear safety glasses and gloves. [PPE]	**Medium Rare / Fatality**	Site supervisor
2	Mount the inverter with two people	Lifting and carrying heavy loads Injury from power tools Rules: 29 CFR 1926 Subpart I	**High Likely / Recordable / lost time**	2.1 Plan to avoid carrying: have materials delivered, and old items picked up, as close as possible to where they are used. [Elimination] 2.2 Use lighter or smaller loads: order smaller bags and shorter lengths, and drain or break down old items before moving them. [Substitution] 2.3 Use trolleys, pallet jacks, hoists, vacuum lifters or plant instead of carrying by hand. [Engineering] 2.4 Use a two-person lift for anything heavy, long or awkward. Plan the route first and clear it. [Administrative] 2.5 Keep the load close, back straight and no twisting. Turn with your feet. [Administrative] 2.6 Rotate tasks and take breaks on long lifting jobs. [Administrative] 2.7 Wear gloves for grip and safety boots to protect your feet.	**Medium Unlikely / Recordable / lost time**	Site supervisor

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
				[PPE] 2.8 Keep all guards fitted and working. Never tie back or remove a guard. [Engineering] 2.9 Clamp or secure the work piece. Do not hold it by hand. [Engineering] 2.10 Only trained, competent people use power tools, following the maker's instructions. [Administrative] 2.11 Check tools before use. Unplug or remove the battery before changing blades or bits. [Administrative] 2.12 No loose clothing, jewelry or long hair near spinning parts. [Administrative] 2.13 Wear safety glasses and hearing protection. Do not wear loose gloves on drills or other rotating tools. [PPE]		
3	Terminate DC and AC cables, testing before touching	Electric shock from live wiring Rules: 29 CFR 1926 Subpart K	**Critical Possible / Fatality**	3.1 Isolate the power before any work. Do not work live. [Elimination] 3.2 Lock out and tag the disconnecting means with your own personal lock and tag so the circuit cannot be energized (29 CFR 1926.417). [Engineering (guarding)] 3.3 Test before you touch: prove dead at the point of work with a tested voltage tester. [Engineering] 3.4 Only qualified persons work on or near exposed energized parts. [Administrative] 3.5 Check for back feeds from solar, batteries and generators that can keep a circuit live after the main switch is off. [Administrative] 3.6 If energized work cannot be avoided, use an energized work permit, a safety observer and insulated tools, following NFPA 70E. [Administrative] 3.7 Wear insulated gloves, arc-rated clothing and a face shield when testing or working near live parts. [PPE]	**Medium Rare / Fatality**	Site supervisor
4	Commission the inverter and set export limits	Electric shock from live wiring Rules: 29 CFR 1926 Subpart K	**Critical Possible / Fatality**	4.1 Electric shock from live wiring: see step 3 for the full controls [Administrative]	**Medium Rare / Fatality**	Site supervisor
5	Label everything and clean up	Poor housekeeping and waste	**Medium Likely / Minor injury**	5.1 Order materials to size and send packaging back where you can. [Elimination] 5.2 Put dumpsters and waste chutes close to the work. [Engineering] 5.3 Clean as you go, and do a full clean up at the end of each day. [Administrative] 5.4 Keep exits, stairs and walkways clear at all times. [Administrative] 5.5 Stack materials neatly on level ground, away from edges. [Administrative] 5.6 Wear gloves when handling waste. [PPE]	**Low Unlikely / Minor injury**	Site supervisor

Risk key: risk = likelihood x consequence on a 5 x 5 matrix. Low, Medium, High, Critical. Work must not start while the risk after controls is high or above. Controls are listed in order of the hierarchy of controls: Elimination, Substitution, Engineering (guarding), Engineering, Administrative, PPE.

3. PPE AND PERMITS

Required PPE	Permits and plans
Safety-toe boots (ASTM F2413) Rubber insulating gloves Safety glasses (ANSI Z87.1) Arc flash PPE (NFPA 70E) Work gloves Hearing protection (earmuffs or plugs)	Lockout/tagout (1926.417)

4. PLANT AND EQUIPMENT

Plant / equipment	License or training needed	Inspection needed	Rego / ID	Last inspected	Certificate / report
Power drill		Visual check of cord, plug and guards before each day's use; if you run an assured equipment grounding program instead of GFCIs, test every 3 months (29 CFR 1926.404(b)(1))			
Electrical test meter		Rated for the voltage and category (CAT III or IV), inspected before each use, and checked on a known source before and after testing (NFPA 70E)			
Hand tools					

5. TRAINING REQUIRED FOR THIS WORK

- Qualified person training for work on or near exposed energized parts (29 CFR 1926.416, NFPA 70E)

6. CREW TRAINING AND CERTIFICATIONS

Crew listed at sign-on below, with ticket and licence numbers.

7. EMERGENCY ARRANGEMENTS

Emergency number	911	**First aid kit**	In the work vehicle
Fire extinguisher	In the work vehicle	**Alarm and evacuation**	Shout for help and stop work. Make the area safe and go to the assembly point. Call the emergency number and send someone to meet the ambulance.
Reporting incidents	Report a fatality to OSHA within 8 hours, and an in-patient hospitalization, amputation or eye loss within 24 hours.		

8. MONITORING, REVIEW AND LEGAL BASIS

A competent person inspects the job site, materials and equipment before work each day and as conditions change (29 CFR 1926.20(b)(2)). Any time this JHA is revised, the affected crew is re-briefed and signs again.

Legal basis: OSH Act Section 5(a)(1) and 29 CFR 1926, Safety and Health Regulations for Construction (incl. 1926.20 and 1926.21). OSHA requires employers to find and fix hazards and to train workers on them. A JHA breaks the job into steps, lists the hazards in each step and the controls that protect the crew. General contractors often require one before you start.

Keep this JHA on site during the job, and keep it with the training and inspection records for at least 1 year after the job (longer if your state plan or general contractor requires it). OSHA does not set a retention period for JHAs themselves.

9. REVISION HISTORY

Rev	Date	By	What changed
1	Nov 9, 2026		First issue

10. SIGN-OFF

	Name	Signature	Date	
Prepared by				
Supervisor				
General contractor review				Accepted for use: Yes / No

By signing below, each crew member confirms they were trained on the hazards and controls in this JHA before work started, and will follow it. Stop work and tell the supervisor if conditions change.

Name	Role / company	Tickets / licences	Signature	Date

Name	Role / company	Tickets / licences	Signature	Date