FIELD LEVEL HAZARD ASSESSMENT (FLHA)

Business name

Document: FLHA-001 Rev 1
Assessed: 2026-11-09 17:46
Valid for this shift / task only
Highest risk after controls: Medium

1. BUSINESS AND JOB DETAILS

Job	Solar panel installation on a pitched roof	**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	Check the roof for asbestos, brittle tiles and power lines	Disturbing asbestos Falling through a fragile roof or skylight Contact with overhead power lines Rules: Provincial OHS regulation, asbestos	**Critical Possible / Fatality**	1.1 Get an asbestos survey before work on buildings built before 1990. [Elimination] 1.2 Seal off the work area and keep everyone else out. [Engineering (guarding)] 1.3 If asbestos must be disturbed, keep it wet, use hand tools not power tools, and clean up with a HEPA vacuum. [Engineering] 1.4 Follow your province's asbestos rules, including notification and trained or certified workers where required. [Administrative] 1.5 In BC, a qualified person must inspect and write a hazardous materials report before demolition or renovation, and asbestos abatement must be done by a WorkSafeBC licensed contractor (since 1 January 2024). [Administrative] 1.6 Stop work straight away if you find suspect asbestos. Do not touch it and tell your supervisor. [Administrative] 1.7 Wear a fit-tested respirator suited to the work, and disposable coveralls. [PPE] 1.8 Work from underneath or from an aerial work platform so nobody stands on the fragile roof. [Elimination] 1.9 Cover or guard every skylight and fragile sheet with a fixed, marked cover or mesh before work starts. [Engineering (guarding)] 1.10 Install safety mesh under new roof sheeting, and use crawl boards or staging to spread the load on fragile surfaces. [Engineering] 1.11 Use fall arrest on rated anchors when working near fragile areas. [Engineering] 1.12 Treat all roof sheets as fragile until a competent person confirms they are not. Old fibre cement and plastic sheets are fragile. [Administrative] 1.13 Ask the utility to de-energize, move or insulate the lines before work starts. [Elimination] 1.14 Use non-conductive (fibreglass) ladders near any power lines. [Substitution]	**Medium Rare / Fatality**	Site supervisor

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
				1.15 Mark the safe distance with flags, tape or goal posts and keep all equipment and people outside it. [Engineering (guarding)] 1.16 Keep to the provincial limits of approach and contact the utility before working near lines. [Administrative] 1.17 Use a dedicated spotter whenever equipment moves or raises anything near lines. [Administrative] 1.18 Treat all lines as live. If equipment touches a line, stay in the cab and keep everyone well away. [Administrative]		
2	Set up edge protection or harness anchors and a secured ladder	Falling from a roof edge Falling from a ladder Rules: Provincial OHS regulation, fall protection	**Critical Likely / Fatality**	2.1 Do what you can from the ground or from a scaffold at the gutter line, for example pre-assemble parts on the ground. [Elimination] 2.2 Install edge protection or guardrails on all open roof edges before work starts. [Engineering (guarding)] 2.3 Use a perimeter scaffold with handrails and toe boards along the eaves where practical. [Engineering] 2.4 Where guardrails cannot be fitted, use fall restraint on certified roof anchors so workers cannot reach the edge. [Engineering] 2.5 Use one safe, controlled access point and keep others off the roof. [Administrative] 2.6 Stop roof work in strong wind or rain, and when the roof is wet, icy or covered in dust or frost. [Administrative] 2.7 Wear a harness clipped to a rated anchor when using restraint or fall arrest, and soft-soled non-slip boots. [PPE] 2.8 Use a platform ladder, mobile scaffold or aerial work platform for longer jobs instead of a straight ladder. [Substitution] 2.9 Use CSA Grade 1, 1A or 1AA ladders in good condition. Remove any damaged ladder from site. [Engineering] 2.10 Set extension ladders at a 4 to 1 angle on firm, level ground, tied or footed, and reaching 1 metre above the landing. [Engineering] 2.11 Use ladders only for short, light work. Do not carry heavy or awkward loads up a ladder. [Administrative] 2.12 Keep three points of contact and your belt buckle between the side rails. Do not overreach. [Administrative] 2.13 Do not stand on the top three rungs of an extension ladder or the top step of a stepladder. [Administrative] 2.14 Check the ladder before each use: feet, rungs, side rails and locks. [Administrative] 2.15 Wear non-slip safety boots with clean soles. [PPE]	**Medium Unlikely / Serious injury**	Site supervisor
3	Lift panels with a hoist, not up a ladder	Lifting and carrying heavy loads Falling tools and materials Strong wind and storms	**High Likely / Lost time injury**	3.1 Plan to avoid carrying: have materials delivered, and old items picked up, as close as possible to where they are used. [Elimination] 3.2 Use lighter or smaller loads: order smaller bags and shorter lengths, and drain or break down old items before moving them. [Substitution]	**Medium Unlikely / Serious injury**	Site supervisor

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
				3.3 Use trolleys, pallet jacks, hoists, vacuum lifters or equipment instead of carrying by hand. [Engineering] 3.4 Use a two-person lift for anything heavy, long or awkward. Plan the route first and clear it. [Administrative] 3.5 Keep the load close, back straight and no twisting. Turn with your feet. [Administrative] 3.6 Barricade and sign the drop zone under overhead work so nobody walks beneath. [Engineering (guarding)] 3.7 Fit toe boards, kick plates and mesh screens on scaffolds and edges. [Engineering] 3.8 Use catch fans, debris netting or covered walkways where people pass below. [Engineering] 3.9 Tether hand tools when working at height. [Engineering] 3.10 Keep platforms tidy. Do not stack materials near edges or above toe board height. [Administrative] 3.11 Check the forecast each morning and plan work at height and lifting around the weather. [Elimination] 3.12 Tie down or weigh down loose sheets, panels, boards and rubbish at the end of each shift. [Engineering] 3.13 Set wind limits for roof work, platforms and cranes, using the manufacturer's limits, and stop when they are reached. [Administrative] 3.14 Stop work and get down in lightning. Wait 30 minutes after the last thunder before going back up. [Administrative] 3.15 Check scaffold, fencing and edge protection after strong wind before anyone uses them. [Administrative]		
4	Fit rails and brackets, cutting tiles with dust control	Silica dust from concrete, brick, stone and tiles Angle grinder injuries Injury from power tools Rules: Provincial OHS regulation, silica exposure limits	**Critical Likely / Fatality**	4.1 Order materials cut to size, or use low-dust methods such as score and snap or a block splitter. [Substitution] 4.2 Cut outdoors or in a separate area, with other people well away and upwind. [Engineering (guarding)] 4.3 Use water on the blade or on-tool dust extraction connected to a HEPA vacuum. [Engineering] 4.4 Clean up with a vacuum or wet methods. Never dry sweep or use compressed air. [Administrative] 4.5 Have a silica exposure control plan where your province requires one. [Administrative] 4.6 Wear a fit-tested N95 (or better) respirator. [PPE] 4.7 Use a guarded saw or a different tool where you can. [Substitution] 4.8 Keep the guard on and use the side handle. Never remove the guard. [Engineering] 4.9 Use the right disc for the job, rated for the grinder's speed. Check it for cracks first. [Administrative] 4.10 Only trained people change discs, with the grinder unplugged or the battery out. [Administrative] 4.11 Keep both hands on the grinder and let the disc stop before putting it down. [Administrative] 4.12 Keep all guards fitted and working. Never tie back or remove a guard. [Engineering]	**Medium Unlikely / Serious injury**	Site supervisor

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
				4.13 Clamp or secure the work piece. Do not hold it by hand. [Engineering] 4.14 Only trained, competent people use power tools, following the maker's instructions. [Administrative] 4.15 Check tools before use. Unplug or remove the battery before changing blades or bits. [Administrative] 4.16 No loose clothing, jewellery or long hair near spinning parts. [Administrative]		
5	Mount panels, remembering they make power in daylight	Electric shock from live wiring Lifting and carrying heavy loads Rules: Provincial OHS regulation, electrical safety, and CSA Z462	**Critical Possible / Fatality**	5.1 Isolate the power before any work. Do not work live. [Elimination] 5.2 Lock out and tag the isolation point with your own personal lock and danger tag. [Engineering (guarding)] 5.3 Test before you touch: prove dead at the point of work with a tested voltage tester. [Engineering] 5.4 Only licensed electricians do electrical work, to the Canadian Electrical Code and provincial rules. [Administrative] 5.5 Check for back feeds from solar, batteries and generators that can keep a circuit live after the main switch is off. [Administrative] 5.6 If energized work cannot be avoided, use a permit, a safety observer and insulated tools, following CSA Z462. [Administrative] 5.7 Wear insulated gloves, arc-rated clothing and a face shield when testing or working near live parts. [PPE] 5.8 Rotate tasks and take breaks on long lifting jobs. [Administrative] 5.9 Wear gloves for grip and safety boots to protect your feet. [PPE] 5.10 Lifting and carrying heavy loads: see step 3 for the full controls [Administrative]	**Medium Unlikely / Lost time injury**	Site supervisor
6	Run DC cabling and test, then clean up the roof	Electric shock from live wiring Heat stress Sun exposure (UV) Poor housekeeping and waste Rules: Provincial OHS regulation, electrical safety, and CSA Z462	**Critical Possible / Fatality**	6.1 Electric shock from live wiring: see step 5 for the full controls [Administrative] 6.2 Schedule heavy work for the cooler part of the day. [Elimination] 6.3 Provide shade over work and rest areas, and fans or cooling in attics. [Engineering] 6.4 Supply cool drinking water close by and drink a cup every 15 to 20 minutes. [Administrative] 6.5 Take regular rest breaks in the shade, more often as it gets hotter. [Administrative] 6.6 Plan outdoor work for early morning or late afternoon when UV is lower. [Elimination] 6.7 Put shade covers over fixed work areas. [Engineering] 6.8 Check the UV index each day. Use sun protection when it is 3 or higher. [Administrative] 6.9 Check your skin regularly and see a doctor about any new or changing spots. [Administrative]	**Medium Unlikely / Serious injury**	Site supervisor

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
				6.10 Order materials to size and send packaging back where you can. [Elimination] 6.11 Put waste bins and chutes close to the work. [Engineering] 6.12 Clean as you go, and do a full clean up at the end of each day. [Administrative] 6.13 Keep exits, stairs and walkways clear at all times. [Administrative]		

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
CSA green triangle safety boots (CSA Z195) Full body harness (fall arrest) Cut-resistant gloves Safety glasses (CSA Z94.3) Sun protection (sunscreen, hat, long sleeves) Hard hat (CSA Z94.1) Respirator fit tested to CSA Z94.4 (P100 for dust, or the type the air test calls for) Coveralls Work gloves Hearing protection Face shield Rubber insulating gloves Arc flash PPE (CSA Z462)	Roof access permit Fall protection plan Lockout permit

4. PLANT AND EQUIPMENT

Plant / equipment	Licence or training needed	Inspection needed	Rego / ID	Last inspected	Certificate / report
Frame scaffold	Provincial scaffold erector training				
Extension ladder					
Material hoist					
Power drill					
Angle grinder					
Electrical test meter					

5. CREW COMPETENCY, TICKETS AND LICENCES

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

6. 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 serious incidents to the provincial regulator as required.		

7. MONITORING, REVIEW AND LEGAL BASIS

The supervisor and crew review this assessment at the start of the shift, whenever the task, crew or conditions change, and before any new work process starts. Re-assess and initial the changes below.

Legal basis: Provincial occupational health and safety law (e.g. Ontario OHSA and O. Reg. 213/91, BC OHS Regulation, Alberta OHS Code). Employers must identify hazards before work starts and control them, and workers must be told about them. A field level hazard assessment is done on site, at the start of each shift or task, and reviewed again when conditions change.

Keep completed hazard assessments for at least 3 years (COR auditors sample the last 12 months). Review this FLHA and re-sign whenever the task, crew or conditions change.

8. PRE-JOB CHECKS

Check	Yes	No
PPE inspected and in good condition		
Tools and equipment inspected		
Permits reviewed and posted		
Locates valid and on site (if digging)		
Barricades or warning ribbon in place		
Muster point and emergency plan reviewed with the crew		
SDS available for products used		
Working alone check-in set up (if anyone works alone)		

9. RE-ASSESSMENT WHEN CONDITIONS CHANGE

Time	What changed	New hazards	Controls	Initials

Time	What changed	New hazards	Controls	Initials

10. END OF SHIFT REVIEW

Completed at		Reviewed by	
Area cleaned up and safe		Permits closed	
Incidents or near misses		Hazards remaining	

11. REVISION HISTORY

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

12. SIGN-OFF

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

By signing below, each worker confirms they took part in this hazard assessment, it was reviewed with them before work started, and they will follow it. Stop and re-assess if anything changes.

Name	Role / company	Tickets / licences	Signature	Date

Name	Role / company	Tickets / licences	Signature	Date