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	Roof repair and leak repair	**Start date**	Nov 9, 2026
Working hours	7:00 am to 3:30 pm	**Trade**	Roofing

2. JOB STEPS, HAZARDS AND CONTROLS

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
1	Check the roof type and condition from the ground, looking for brittle sheets, skylights and asbestos	Falling through a fragile roof or skylight Disturbing asbestos Rules: 29 CFR 1926 Subpart M; 29 CFR 1926.1101 and 40 CFR 61 Subpart M (NESHAP)	**Critical Possible / Fatality**	1.1 Work from underneath or from an aerial lift so nobody stands on the fragile roof. [Elimination] 1.2 Cover every skylight with a fixed, marked cover that can hold at least twice the weight it may carry, or guard it with a guardrail. [Engineering (guarding)] 1.3 Use crawl boards or staging to spread the load on fragile or rotten decking, and cover or guard any hole left where decking is removed (29 CFR 1926.501(b)(4)). [Engineering] 1.4 Use fall arrest on rated anchors when working near fragile areas. [Engineering] 1.5 Treat all roof sheets as fragile until a competent person confirms they are not. Old fiber cement and plastic sheets are fragile. [Administrative] 1.6 Put "Fragile roof" signs at every roof access point. [Administrative] 1.7 Never walk on sheets between purlins or along skylights. Stay on boards or staging. [Administrative] 1.8 Wear a full body harness clipped to a rated anchor. [PPE] 1.9 Treat insulation, surfacing and resilient flooring in buildings built before 1981 as asbestos unless testing shows otherwise, and get the owner's asbestos survey before you start. [Elimination] 1.10 Seal off the work area and keep everyone else out. [Engineering (guarding)] 1.11 If asbestos must be disturbed, keep it wet, use hand tools not power tools, and clean up with a HEPA vacuum. [Engineering] 1.12 Follow 29 CFR 1926.1101: competent person, work class, regulated area and exposure monitoring. [Administrative] 1.13 Commercial renovation and any demolition need a NESHAP asbestos inspection first, and demolition needs written notice to the state or EPA 10 working days before work starts (40 CFR 61 Subpart M). [Administrative] 1.14 Roofing felts, cement shingles and siding, roof coatings	**Medium Rare / Fatality**	Site supervisor

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
				and old panel backboards can also contain asbestos. Test them or treat them as asbestos; asbestos roofing is removed intact with hand tools by trained workers (29 CFR 1926.1101(g)(8)). [Administrative] 1.15 Stop work straight away if you find suspect asbestos. Do not touch it and tell your supervisor. [Administrative] 1.16 Wear a fit-tested NIOSH-approved respirator suited to the work class, and disposable coveralls. [PPE]		
2	Set up a secured ladder and edge protection or a harness and anchor	Falling from a ladder Falling from a roof edge Rules: 29 CFR 1926 Subpart X; 29 CFR 1926 Subpart M	**Critical Likely / Fatality**	2.1 Use a platform ladder, mobile scaffold or aerial lift for longer jobs instead of a straight ladder. [Substitution] 2.2 Use Type I, IA or IAA ladders in good condition. Tag and remove any damaged ladder. [Engineering] 2.3 Set extension ladders at a 4 to 1 angle on firm, level ground, secured, and reaching 3 feet above the landing. [Engineering] 2.4 Use ladders only for short, light work. Do not carry heavy or awkward loads up a ladder. [Administrative] 2.5 Keep three points of contact and your belt buckle between the stiles. Do not overreach. [Administrative] 2.6 Do not stand on the top three rungs of an extension ladder or the top step of a stepladder. [Administrative] 2.7 Check the ladder before each use: feet, rungs, side rails and locks. [Administrative] 2.8 Wear non-slip safety boots with clean soles. [PPE] 2.9 Do what you can from the ground or from a scaffold at the gutter line, for example pre-assemble parts on the ground. [Elimination] 2.10 Install edge protection or guardrails on all open roof edges before work starts. [Engineering (guarding)] 2.11 Use a perimeter scaffold with handrails and toe boards along the eaves where practical. [Engineering] 2.12 Where guardrails cannot be fitted, use fall restraint on certified roof anchors so workers cannot reach the edge. [Engineering] 2.13 Low-slope roofs: guardrails, safety nets, personal fall arrest, or a warning line combined with one of these or with a safety monitor (a safety monitor alone only on roofs 50 feet wide or less). Steep roofs: guardrails with toe boards, safety nets or personal fall arrest (29 CFR 1926.501(b)(10), (11)). [Administrative] 2.14 Use one safe, controlled access point and keep others off the roof. [Administrative] 2.15 Stop roof work in strong wind or rain, and when the roof is wet, icy or covered in dust or frost. [Administrative] 2.16 Wear a harness clipped to a rated anchor when using restraint or fall arrest, and soft-soled non-slip boots. [PPE]	**Medium Unlikely / Serious injury**	Site supervisor
3	Go into the roof space to find the leak, watching for live	Electric shock from live wiring Falling through a floor opening	**Critical Possible /**	3.1 Isolate the power before any work. Do not work live. [Elimination]	**Medium Unlikely /**	Site supervisor

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
	cables and weak ceiling joists	or void Heat stress Bites and stings Rules: 29 CFR 1926 Subpart K; 29 CFR 1926 Subpart M; OSH Act Section 5(a)(1) General Duty Clause; state heat rules where they apply (Cal/OSHA T8 3395, WA WAC 296-62-095, OR OAR 437-002-0156, MD COMAR 09.12.32)	**Fatality**	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 Cover every hole with a secured cover marked "HOLE" or "COVER" that can hold twice the weight it may carry. [Engineering (guarding)] 3.6 Put guardrails with toe boards around stairwells, elevator shafts, floor holes and open edges. [Engineering (guarding)] 3.7 Install stairs early and fit temporary handrails as soon as they go in. [Engineering] 3.8 Never remove a cover or guardrail without approval. Put it back straight away. [Administrative] 3.9 Schedule heavy work for the cooler part of the day. [Elimination] 3.10 Provide shade over work and rest areas, and fans or cooling in attics. [Engineering] 3.11 Supply cool drinking water close by and drink a cup every 15 to 20 minutes. [Administrative] 3.12 Take regular rest breaks in the shade, more often as it gets hotter. [Administrative] 3.13 In California, Washington, Oregon and Maryland, follow the state heat illness rule: written plan, shade, water, rest and high-heat procedures. [Administrative] 3.14 Check work areas before starting, and get pest control to remove nests. [Elimination] 3.15 Look before you reach into dark spaces. [Administrative] 3.16 Ask owners to keep pets away from the work area. [Administrative] 3.17 Know who has allergies and keep their medication, such as an epinephrine auto-injector, close by. [Administrative]	**Serious injury**	
4	Replace cracked tiles, sheets or flashings and seal joints	Cuts from sharp edges Hazardous chemicals Slips and trips Rules: 29 CFR 1926.59 Hazard Communication	**Medium Possible / Recordable / lost time**	4.1 Deburr or cover sharp edges, and fit edge protectors on exposed sheet metal. [Engineering] 4.2 Use knives with retractable or self-retracting blades. [Engineering] 4.3 Cut away from your body and keep your other hand clear. [Administrative] 4.4 Put used blades in a blade bin or sharps container. [Administrative] 4.5 Use two people to handle large sheets of metal or glass. [Administrative] 4.6 Choose the least harmful product that does the job, for example water-based instead of solvent-based. [Substitution] 4.7 Use chemicals in well-ventilated areas, or use fans and extraction in closed rooms. [Engineering] 4.8 Read the Safety Data Sheet (SDS) and labels before use,	**Medium Unlikely / Recordable / lost time**	Site supervisor

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
				following OSHA Hazard Communication. [Administrative] 4.9 Keep chemicals in labeled containers. Never pour them into drink bottles. [Administrative] 4.10 Store chemicals away from heat, food and drink, and keep products that react with each other apart. [Administrative] 4.11 Plan walkways and keep them clear of materials, hoses and leads. [Elimination] 4.12 Run cords and hoses overhead on hooks or stands, or along walls, not across walkways. [Engineering] 4.13 Fill or cover holes, and lay boards or mats on muddy access paths. [Engineering] 4.14 Clean up offcuts, packaging and spills as you go, not at the end of the day. [Administrative] 4.15 Keep work areas, stairs and access paths well lit. [Administrative]		
5	Use heat for flashings only with a hot work permit and a fire extinguisher at hand	Fire from hot works Burns from hot surfaces Rules: 29 CFR 1926.352 and NFPA 51B (35 ft rule also in 1910.252(a))	**Critical Possible / Fatality**	5.1 Use cold work methods where you can, such as bolting, press fittings or cutting with a saw instead of a torch. [Elimination] 5.2 Move anything that can burn at least 35 feet away, or cover it with fire blankets. [Engineering (guarding)] 5.3 Use fire-resistant screens to stop sparks reaching people or gaps in walls and floors. [Engineering] 5.4 Get a hot work permit before starting. [Administrative] 5.5 Keep a charged fire extinguisher and fire blanket at the work spot. [Administrative] 5.6 Keep a fire watch during the work and for at least 60 minutes after you finish (NFPA 51B), longer if the permit says so. [Administrative] 5.7 Check for smoldering behind walls, in ceilings and under floors before you leave. [Administrative] 5.8 Wear flame-resistant clothing, welding gloves and eye or face protection. [PPE] 5.9 Isolate heating systems and let parts cool before you touch them. [Elimination] 5.10 Fit guards or insulation on hot pipes and equipment. [Engineering] 5.11 Mark hot items with chalk or a "HOT" sign so others know. [Administrative] 5.12 Keep a first aid kit and cool running water nearby for burns. [Administrative] 5.13 Wear heat-resistant gloves and long sleeves. [PPE]	**Medium Rare / Fatality**	Site supervisor
6	Clean up debris, check gutters are clear and remove the ladder	Poor housekeeping and waste Falling tools and materials Rules: 29 CFR 1926.501(c)	**High Possible / Serious injury**	6.1 Order materials to size and send packaging back where you can. [Elimination] 6.2 Put dumpsters and waste chutes close to the work. [Engineering] 6.3 Clean as you go, and do a full clean up at the end of each day. [Administrative]	**Medium Unlikely / Serious injury**	Site supervisor

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
				6.4 Keep exits, stairs and walkways clear at all times. [Administrative] 6.5 Stack materials neatly on level ground, away from edges. [Administrative] 6.6 Wear gloves when handling waste. [PPE] 6.7 Barricade and sign the drop zone under overhead work so nobody walks beneath. [Engineering (guarding)] 6.8 Fit toe boards, kick plates and mesh screens on scaffolds and edges. [Engineering] 6.9 Use catch fans, debris netting or covered walkways where people pass below. [Engineering] 6.10 Tether hand tools when working at height. [Engineering] 6.11 Keep platforms tidy. Do not stack materials near edges or above toe board height. [Administrative] 6.12 Lower materials with a hoist, chute or rope. Never throw or drop anything down. [Administrative] 6.13 Wear a hard hat anywhere objects could fall. [PPE]		

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) Personal fall arrest system (harness) Work gloves Safety glasses (ANSI Z87.1) Sun protection (sunscreen, hat, long sleeves) Hard hat (ANSI Z89.1) Half-face respirator (P100 cartridges) Coveralls Cut-resistant gloves Chemical-resistant gloves Safety goggles (ANSI Z87.1) Welding gloves Face shield (ANSI Z87.1)	Written fall protection plan (only where guardrails, nets or personal fall arrest are not feasible, 1926.502(k)) Hot work permit (fire watch at least 60 minutes after, NFPA 51B)

4. PLANT AND EQUIPMENT

Plant / equipment	License or training needed	Inspection needed	Rego / ID	Last inspected	Certificate / report
Extension ladder		Inspected by a competent person for visible defects periodically and after any event that could affect safe use (29 CFR 1926.1053(b)(15))			
Hand tools					

Plant / equipment	License or training needed	Inspection needed	Rego / ID	Last inspected	Certificate / report
Propane torch					

5. TRAINING REQUIRED FOR THIS WORK

- Fall protection training by a competent person, with a written certification record (29 CFR 1926.503)
- Asbestos awareness training, plus class-specific training for Class I to III work (29 CFR 1926.1101(k)(9)); respirator fit test and medical evaluation (29 CFR 1910.134)
- Ladder safety training by a competent person (29 CFR 1926.1060)
- Qualified person training for work on or near exposed energized parts (29 CFR 1926.416, NFPA 70E)
- Hazard communication training on the written program, labels and SDS (29 CFR 1910.1200(h), via 1926.59); respirator fit test and medical evaluation if a respirator is used (29 CFR 1910.134)

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

Rev	Date	By	What changed

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