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	Flat roof and membrane roofing	**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	Set up edge protection around the flat roof and guard any roof openings or skylights	Falling from a roof edge Falling through a floor opening or void Falling through a fragile roof or skylight Rules: 29 CFR 1926 Subpart M	**Critical Likely / Fatality**	1.1 Do what you can from the ground or from a scaffold at the gutter line, for example pre-assemble parts on the ground. [Elimination] 1.2 Install edge protection or guardrails on all open roof edges before work starts. [Engineering (guarding)] 1.3 Use a perimeter scaffold with handrails and toe boards along the eaves where practical. [Engineering] 1.4 Where guardrails cannot be fitted, use fall restraint on certified roof anchors so workers cannot reach the edge. [Engineering] 1.5 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] 1.6 Use one safe, controlled access point and keep others off the roof. [Administrative] 1.7 Cover every hole with a secured cover marked "HOLE" or "COVER" that can hold twice the weight it may carry. [Engineering (guarding)] 1.8 Put guardrails with toe boards around stairwells, elevator shafts, floor holes and open edges. [Engineering (guarding)] 1.9 Install stairs early and fit temporary handrails as soon as they go in. [Engineering] 1.10 Never remove a cover or guardrail without approval. Put it back straight away. [Administrative] 1.11 Inspect covers and barriers daily and after other trades have been through. [Administrative] 1.12 Work from underneath or from an aerial lift so nobody stands on the fragile roof. [Elimination] 1.13 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)] 1.14 Use crawl boards or staging to spread the load on	**Medium Rare / Fatality**	Site supervisor

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
				fragile or rotten decking, and cover or guard any hole left where decking is removed (29 CFR 1926.501(b)(4)). [Engineering] 1.15 Use fall arrest on rated anchors when working near fragile areas. [Engineering] 1.16 Treat all roof sheets as fragile until a competent person confirms they are not. Old fiber cement and plastic sheets are fragile. [Administrative]		
2	Lift materials up with a hoist, keeping the area below closed off	Falling tools and materials Lifting and carrying heavy loads Public entering the work area Rules: 29 CFR 1926.501(c)	**High Possible / Serious injury**	2.1 Barricade and sign the drop zone under overhead work so nobody walks beneath. [Engineering (guarding)] 2.2 Fit toe boards, kick plates and mesh screens on scaffolds and edges. [Engineering] 2.3 Use catch fans, debris netting or covered walkways where people pass below. [Engineering] 2.4 Tether hand tools when working at height. [Engineering] 2.5 Keep platforms tidy. Do not stack materials near edges or above toe board height. [Administrative] 2.6 Plan to avoid carrying: have materials delivered, and old items picked up, as close as possible to where they are used. [Elimination] 2.7 Use lighter or smaller loads: order smaller bags and shorter lengths, and drain or break down old items before moving them. [Substitution] 2.8 Use trolleys, pallet jacks, hoists, vacuum lifters or plant instead of carrying by hand. [Engineering] 2.9 Use a two-person lift for anything heavy, long or awkward. Plan the route first and clear it. [Administrative] 2.10 Keep the load close, back straight and no twisting. Turn with your feet. [Administrative] 2.11 Fence off the site with secure temporary fencing and lock the gates when you leave. [Engineering (guarding)] 2.12 Give pedestrians a safe, marked path around the work, with ramps for strollers and wheelchairs. [Engineering (guarding)] 2.13 Use hoarding, covered walkways or catch fans where work is above public areas. [Engineering] 2.14 Put signs at each entry: site name, contact number and "No unauthorized entry". [Administrative] 2.15 Make the site safe at the end of each day: cover holes, lower plant, remove ladders and lock tools away. [Administrative]	**Medium Unlikely / Serious injury**	Site supervisor
3	Strip the old covering and check the deck for rot	Lifting and carrying heavy loads Cuts from sharp edges General dust	**High Likely / Recordable / lost time**	3.1 Rotate tasks and take breaks on long lifting jobs. [Administrative] 3.2 Wear gloves for grip and safety boots to protect your feet. [PPE] 3.3 Lifting and carrying heavy loads: see step 2 for the full controls [Administrative] 3.4 Deburr or cover sharp edges, and fit edge protectors on	**Medium Unlikely / Recordable / lost time**	Site supervisor

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
				exposed sheet metal. [Engineering] 3.5 Use knives with retractable or self-retracting blades. [Engineering] 3.6 Cut away from your body and keep your other hand clear. [Administrative] 3.7 Put used blades in a blade bin or sharps container. [Administrative] 3.8 Use two people to handle large sheets of metal or glass. [Administrative] 3.9 Use low-dust products, such as dust-reduced or pre-mixed compounds. [Substitution] 3.10 Seal off the work area with plastic sheeting in occupied buildings. [Engineering (guarding)] 3.11 Use tools with dust extraction and a vacuum for clean up. [Engineering] 3.12 Lightly mist the area with water to keep dust down, away from anything electrical. [Engineering] 3.13 Never dry sweep or blow dust off with compressed air. [Administrative]		
4	Apply primers and adhesives with good airflow and away from flames	Hazardous chemicals Flammable liquids and gases Rules: 29 CFR 1926.59 Hazard Communication; 29 CFR 1926.152	**High Unlikely / Fatality**	4.1 Choose the least harmful product that does the job, for example water-based instead of solvent-based. [Substitution] 4.2 Use chemicals in well-ventilated areas, or use fans and extraction in closed rooms. [Engineering] 4.3 Read the Safety Data Sheet (SDS) and labels before use, following OSHA Hazard Communication. [Administrative] 4.4 Keep chemicals in labeled containers. Never pour them into drink bottles. [Administrative] 4.5 Store chemicals away from heat, food and drink, and keep products that react with each other apart. [Administrative] 4.6 Have eye wash and a spill kit nearby, and wash hands before eating. [Administrative] 4.7 Wear chemical-resistant gloves and safety glasses or goggles as listed on the SDS. [PPE] 4.8 Use a respirator with the right cartridge if the SDS calls for one. [PPE] 4.9 Use non-flammable or water-based products where you can. [Substitution] 4.10 Keep ignition sources away: no smoking, no hot work and no running engines near flammables. [Engineering (guarding)] 4.11 Store fuels and solvents in approved, closed containers in a ventilated area away from the work. [Engineering] 4.12 Refuel equipment outdoors with the engine off and cool. [Administrative] 4.13 Keep only what you need for the day on site. [Administrative] 4.14 Store gas cylinders upright, secured and outdoors. [Administrative]	**Medium Unlikely / Recordable / lost time**	Site supervisor

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
				4.15 Keep a suitable fire extinguisher where flammables are used or stored. [Administrative] 4.16 Wear chemical gloves and safety glasses when pouring or mixing. [PPE]		
5	Torch on membrane under a hot work permit, with an extinguisher and a fire watch after	Fire from hot works Burns from hot surfaces Fire and emergencies Rules: 29 CFR 1926.352 and NFPA 51B (35 ft rule also in 1910.252(a)); 29 CFR 1926 Subpart F	**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 Isolate heating systems and let parts cool before you touch them. [Elimination] 5.7 Fit guards or insulation on hot pipes and equipment. [Engineering] 5.8 Mark hot items with chalk or a "HOT" sign so others know. [Administrative] 5.9 Keep a first aid kit and cool running water nearby for burns. [Administrative] 5.10 Wear heat-resistant gloves and long sleeves. [PPE] 5.11 Provide fire extinguishers suited to the site, checked and easy to reach. [Engineering] 5.12 Keep exits and escape routes clear and signed. [Engineering] 5.13 Have a site emergency plan: alarm, exits, assembly point and emergency contacts. [Administrative] 5.14 Keep a stocked first aid kit and at least one trained first aider on site. [Administrative] 5.15 Know the site address and how emergency services get in. Call 911. [Administrative]	**Medium Rare / Fatality**	Site supervisor
6	Seal outlets and edges, clear the roof and remove access	Poor housekeeping and waste Heat stress Sun exposure (UV) Rules: 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)	**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] 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 Schedule heavy work for the cooler part of the day. [Elimination] 6.7 Provide shade over work and rest areas, and fans or cooling in attics. [Engineering] 6.8 Supply cool drinking water close by and drink a cup every	**Medium Unlikely / Serious injury**	Site supervisor

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
				15 to 20 minutes. [Administrative] 6.9 Take regular rest breaks in the shade, more often as it gets hotter. [Administrative] 6.10 Let new and returning workers build up to full work in the heat over about a week. [Administrative] 6.11 In California, Washington, Oregon and Maryland, follow the state heat illness rule: written plan, shade, water, rest and high-heat procedures. [Administrative] 6.12 Plan outdoor work for early morning or late afternoon when UV is lower. [Elimination] 6.13 Put shade covers over fixed work areas. [Engineering] 6.14 Check the UV index each day. Use sun protection when it is 3 or higher. [Administrative] 6.15 Check your skin regularly and see a doctor about any new or changing spots. [Administrative] 6.16 Wear a broad-brim hat or hard hat brim, long sleeves, sunglasses and SPF 30 or higher sunscreen, reapplied every 2 hours. [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) Half-face respirator (P100 cartridges) Sun protection (sunscreen, hat, long sleeves) Hard hat (ANSI Z89.1) High-visibility safety apparel, ANSI/ISEA 107 Class 2 or 3 (Type R near roadways) Cut-resistant gloves N95 respirator Chemical-resistant gloves Safety goggles (ANSI Z87.1) Coveralls 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

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Propane torch					
Hand tools					
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))			
Material hoist					

5. TRAINING REQUIRED FOR THIS WORK

- Fall protection training by a competent person, with a written certification record (29 CFR 1926.503)
- 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

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