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	Replace roof tiles	**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 weather, look for overhead power lines and barricade the area below the work	Strong wind and storms Contact with overhead power lines Public entering the work area Falling tools and materials Rules: 29 CFR 1926.1408 and 1926.416; 29 CFR 1926.501(c)	**High Possible / Serious injury**	1.1 Check the forecast each morning and plan work at height and lifting around the weather. [Elimination] 1.2 Tie down or weigh down loose sheets, panels, boards and rubbish at the end of each shift. [Engineering] 1.3 Set wind limits for roof work, platforms and cranes, using the manufacturer's limits, and stop when they are reached. [Administrative] 1.4 Stop work and get down in lightning. Wait 30 minutes after the last thunder before going back up. [Administrative] 1.5 Ask the utility to de-energize, move or insulate the lines before work starts. [Elimination] 1.6 Use non-conductive (fiberglass) ladders near any power lines. [Substitution] 1.7 Mark the safe distance with flags, tape or warning lines and keep all equipment and people outside it. [Engineering (guarding)] 1.8 Keep equipment at least 10 feet from lines up to 50 kV once the utility confirms the voltage, more for higher voltages, and 20 feet when the voltage is unknown (29 CFR 1926.1408). [Administrative] 1.9 Use a dedicated spotter whenever equipment moves or raises anything near lines. [Administrative] 1.10 Fence off the site with secure temporary fencing and lock the gates when you leave. [Engineering (guarding)] 1.11 Give pedestrians a safe, marked path around the work, with ramps for strollers and wheelchairs. [Engineering (guarding)] 1.12 Use hoarding, covered walkways or catch fans where work is above public areas. [Engineering] 1.13 Put signs at each entry: site name, contact number and "No unauthorized entry". [Administrative] 1.14 Barricade and sign the drop zone under overhead work so nobody walks beneath. [Engineering (guarding)] 1.15 Fit toe boards, kick plates and mesh screens on scaffolds and edges. [Engineering]	**Medium Unlikely / Serious injury**	Site supervisor

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
				1.16 Falling tools and materials: see step 5 for the full controls [Administrative]		
2	Set up scaffold or roof edge protection and a secured ladder for roof access	Falling from a roof edge Falling from a ladder Scaffold collapse or fall from scaffold Rules: 29 CFR 1926 Subpart M; 29 CFR 1926 Subpart X; 29 CFR 1926 Subpart L	**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 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] 2.6 Use one safe, controlled access point and keep others off the roof. [Administrative] 2.7 Use a platform ladder, mobile scaffold or aerial lift for longer jobs instead of a straight ladder. [Substitution] 2.8 Use Type I, IA or IAA ladders in good condition. Tag and remove any damaged ladder. [Engineering] 2.9 Set extension ladders at a 4 to 1 angle on firm, level ground, secured, and reaching 3 feet above the landing. [Engineering] 2.10 Use ladders only for short, light work. Do not carry heavy or awkward loads up a ladder. [Administrative] 2.11 Keep three points of contact and your belt buckle between the stiles. Do not overreach. [Administrative] 2.12 Scaffold is built, moved and taken down under the supervision of a competent person. [Engineering] 2.13 Fit guardrails, mid rails and toe boards on every platform more than 10 feet above a lower level, or use personal fall arrest (29 CFR 1926.451(g)(1)). [Engineering] 2.14 Use mobile scaffolds only on firm, level ground with casters locked, and guy, tie, brace or fit outriggers once the height is more than 4 times the base width (29 CFR 1926.451(c)(1)). Never move one with anyone on it. [Engineering] 2.15 Every worker on the scaffold is trained by a qualified person (29 CFR 1926.454). [Administrative] 2.16 A competent person inspects the scaffold before each shift and after anything that could affect it (29 CFR 1926.451(f)(3)). [Administrative] 2.17 Do not overload platforms. Know the rated load (light, medium or heavy duty) and stack materials over the legs, not mid-span (29 CFR 1926.451(f)(1)). [Administrative]	**Medium Unlikely / Serious injury**	Site supervisor

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
3	Check for brittle or cracked tiles, skylights and roof sheets from the access point, and plan a walking route	Falling through a fragile roof or skylight Rules: 29 CFR 1926 Subpart M	**Critical Possible / Fatality**	3.1 Work from underneath or from an aerial lift so nobody stands on the fragile roof. [Elimination] 3.2 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)] 3.3 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] 3.4 Use fall arrest on rated anchors when working near fragile areas. [Engineering] 3.5 Treat all roof sheets as fragile until a competent person confirms they are not. Old fiber cement and plastic sheets are fragile. [Administrative] 3.6 Put "Fragile roof" signs at every roof access point. [Administrative] 3.7 Never walk on sheets between purlins or along skylights. Stay on boards or staging. [Administrative] 3.8 Wear a full body harness clipped to a rated anchor. [PPE]	**Medium Rare / Fatality**	Site supervisor
4	Walk on the tile laps only, clipped to an anchor where there is no edge protection	Falling from height Falling through a fragile roof or skylight Slips and trips Rules: 29 CFR 1926 Subpart M	**Critical Likely / Fatality**	4.1 Do the work from the ground where you can, for example pre-assemble on the ground or use extension poles. [Elimination] 4.2 Install guardrails or edge protection on all open edges before work starts. [Engineering (guarding)] 4.3 Use a scaffold, mobile work platform or aerial lift instead of working off a ladder. [Engineering] 4.4 Where edge protection is not practical, use a fall restraint or fall arrest system on a rated anchor point. [Engineering] 4.5 Provide fall protection at 6 feet or more and train workers to recognize fall hazards (29 CFR 1926.503). [Administrative] 4.6 Have a rescue plan so a worker hanging in a harness can be brought down within minutes. [Administrative] 4.7 Falling through a fragile roof or skylight: see step 3 for the full controls [Administrative] 4.8 Plan walkways and keep them clear of materials, hoses and leads. [Elimination] 4.9 Run cords and hoses overhead on hooks or stands, or along walls, not across walkways. [Engineering] 4.10 Fill or cover holes, and lay boards or mats on muddy access paths. [Engineering] 4.11 Clean up offcuts, packaging and spills as you go, not at the end of the day. [Administrative] 4.12 Keep work areas, stairs and access paths well lit. [Administrative]	**Medium Rare / Fatality**	Site supervisor
5	Lift out broken tiles and stack them or lower them down; never throw them off the roof	Lifting and carrying heavy loads Falling tools and materials Cuts from sharp edges Rules: 29 CFR 1926.501(c)	**High Likely / Recordable / lost time**	5.1 Plan to avoid carrying: have materials delivered, and old items picked up, as close as possible to where they are used. [Elimination] 5.2 Use lighter or smaller loads: order smaller bags and shorter lengths, and drain or break down old items before	**Medium Unlikely / Serious injury**	Site supervisor

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
				moving them. [Substitution] 5.3 Use trolleys, pallet jacks, hoists, vacuum lifters or plant instead of carrying by hand. [Engineering] 5.4 Use a two-person lift for anything heavy, long or awkward. Plan the route first and clear it. [Administrative] 5.5 Keep the load close, back straight and no twisting. Turn with your feet. [Administrative] 5.6 Barricade and sign the drop zone under overhead work so nobody walks beneath. [Engineering (guarding)] 5.7 Fit toe boards, kick plates and mesh screens on scaffolds and edges. [Engineering] 5.8 Use catch fans, debris netting or covered walkways where people pass below. [Engineering] 5.9 Tether hand tools when working at height. [Engineering] 5.10 Keep platforms tidy. Do not stack materials near edges or above toe board height. [Administrative] 5.11 Deburr or cover sharp edges, and fit edge protectors on exposed sheet metal. [Engineering] 5.12 Use knives with retractable or self-retracting blades. [Engineering] 5.13 Cut away from your body and keep your other hand clear. [Administrative] 5.14 Put used blades in a blade bin or sharps container. [Administrative] 5.15 Use two people to handle large sheets of metal or glass. [Administrative]		
6	Cut tiles with a grinder fitted with water or dust extraction, wearing a dust mask and glasses	Angle grinder injuries Silica dust from concrete, brick, stone and tiles Loud noise Eye injuries Rules: 29 CFR 1926.1153; 29 CFR 1926.52	**Critical Likely / Fatality**	6.1 Use a guarded saw or a different tool where you can. [Substitution] 6.2 Keep the guard on and use the side handle. Never remove the guard. [Engineering] 6.3 Use the right disc for the job, rated for the grinder's speed. Check it for cracks first. [Administrative] 6.4 Only trained people change discs, with the grinder unplugged or the battery out. [Administrative] 6.5 Order materials cut to size, or use low-dust methods such as score and snap or a block splitter. [Substitution] 6.6 Cut outdoors or in a separate area, with other people well away and upwind. [Engineering (guarding)] 6.7 Use wet cutting or on-tool dust collection with a HEPA vacuum, as set out in Table 1 of 29 CFR 1926.1153. [Engineering] 6.8 Clean up with a vacuum or wet methods. Never dry sweep or use compressed air. [Administrative] 6.9 Have a written exposure control plan and a competent person for silica (29 CFR 1926.1153). [Administrative] 6.10 Workers who must wear a respirator 30 or more days a year get a free medical exam every 3 years (29 CFR 1926.1153(h)). [Administrative] 6.11 Use quieter tools and methods, such as cut-to-size	**Medium Unlikely / Serious injury**	Site supervisor

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
				materials, low-noise machines and battery tools. [Substitution] 6.12 Keep noisy plant away from work areas, and use screens or distance between the noise and people. [Engineering (guarding)] 6.13 Keep tools maintained and use mufflers on compressors and generators. [Engineering] 6.14 Limit time on noisy tools and rotate workers. [Administrative] 6.15 Use tool guards and screens to stop flying particles. [Engineering] 6.16 Use dust extraction and water to keep dust out of the air. [Engineering] 6.17 Keep others out of the area when cutting, grinding or chipping. [Administrative] 6.18 Keep an eye wash station or eye wash bottles on site. [Administrative]		
7	Fit new tiles, then re-bed and re-point ridge capping, taking breaks in heat and sun	Lifting and carrying heavy loads Wet concrete and cement burns 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 Likely / Recordable / lost time**	7.1 Rotate tasks and take breaks on long lifting jobs. [Administrative] 7.2 Wear gloves for grip and safety boots to protect your feet. [PPE] 7.3 Lifting and carrying heavy loads: see step 5 for the full controls [Administrative] 7.4 Use long-handled tools and pumps to cut down contact. [Engineering] 7.5 Wash concrete off skin straight away with clean water. [Administrative] 7.6 Have clean water and eye wash at the pour. [Administrative] 7.7 Wear waterproof gloves, long sleeves and rubber boots with pants worn over the top. [PPE] 7.8 Schedule heavy work for the cooler part of the day. [Elimination] 7.9 Provide shade over work and rest areas, and fans or cooling in attics. [Engineering] 7.10 Supply cool drinking water close by and drink a cup every 15 to 20 minutes. [Administrative] 7.11 Take regular rest breaks in the shade, more often as it gets hotter. [Administrative] 7.12 In California, Washington, Oregon and Maryland, follow the state heat illness rule: written plan, shade, water, rest and high-heat procedures. [Administrative] 7.13 Plan outdoor work for early morning or late afternoon when UV is lower. [Elimination] 7.14 Put shade covers over fixed work areas. [Engineering] 7.15 Check the UV index each day. Use sun protection when it is 3 or higher. [Administrative] 7.16 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
8	Check the roof for tiles cracked during the work, then clear offcuts and loose tiles from the roof and gutters	Falling through a fragile roof or skylight Poor housekeeping and waste Falling tools and materials Rules: 29 CFR 1926 Subpart M; 29 CFR 1926.501(c)	**Critical** **Possible / Fatality**	8.1 Falling through a fragile roof or skylight: see step 3 for the full controls [Administrative] 8.2 Order materials to size and send packaging back where you can. [Elimination] 8.3 Put dumpsters and waste chutes close to the work. [Engineering] 8.4 Clean as you go, and do a full clean up at the end of each day. [Administrative] 8.5 Keep exits, stairs and walkways clear at all times. [Administrative] 8.6 Stack materials neatly on level ground, away from edges. [Administrative] 8.7 Lower materials with a hoist, chute or rope. Never throw or drop anything down. [Administrative] 8.8 Wear a hard hat anywhere objects could fall. [PPE] 8.9 Falling tools and materials: see step 5 for the full controls [Administrative]	**Medium** **Unlikely / Serious injury**	Site supervisor
9	Take down access equipment last and leave the area below clean for the client	Falling from a ladder Poor housekeeping and waste Rules: 29 CFR 1926 Subpart X	**High** **Possible / Serious injury**	9.1 Do not stand on the top three rungs of an extension ladder or the top step of a stepladder. [Administrative] 9.2 Check the ladder before each use: feet, rungs, side rails and locks. [Administrative] 9.3 Wear non-slip safety boots with clean soles. [PPE] 9.4 Falling from a ladder: see step 2 for the full controls [Administrative] 9.5 Wear gloves when handling waste. [PPE] 9.6 Poor housekeeping and waste: see step 8 for the full controls [Administrative]	**Medium** **Unlikely / Serious 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) Personal fall arrest system (harness) Work gloves Safety glasses (ANSI Z87.1) Sun protection (sunscreen, hat, long sleeves) N95 respirator Hard hat (ANSI Z89.1) High-visibility safety apparel, ANSI/ISEA 107 Class 2 or 3 (Type R near roadways) Cut-resistant gloves Face shield (ANSI Z87.1) Hearing protection (earmuffs or plugs) Half-face respirator (P100 cartridges)	Written fall protection plan (only where guardrails, nets or personal fall arrest are not feasible, 1926.502(k))

Required PPE	Permits and plans
Safety goggles (ANSI Z87.1) Chemical-resistant gloves Knee pads	

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))			
Supported scaffold	Erected under a competent person (29 CFR 1926.451)	Inspected by a competent person for visible defects before each work shift and after any occurrence that could affect its integrity (29 CFR 1926.451(f)(3))			
Hand tools					
Angle grinder		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))			

5. TRAINING REQUIRED FOR THIS WORK

- Fall protection training by a competent person, with a written certification record (29 CFR 1926.503)
- Ladder safety training by a competent person (29 CFR 1926.1060)
- Scaffold user training by a qualified person; erectors trained by a competent person (29 CFR 1926.454)
- Silica training on the exposure control plan and Table 1 controls (29 CFR 1926.1153(i)); respirator fit test and medical evaluation (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

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