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	HVAC service and maintenance	**Start date**	Nov 9, 2026
Working hours	7:00 am to 3:30 pm	**Trade**	HVAC

2. JOB STEPS, HAZARDS AND CONTROLS

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
1	Isolate the unit, apply lockout/tagout, and prove dead	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 Test before you touch: prove dead at the point of work with a tested voltage tester. [Engineering] 1.4 Only qualified persons work on or near exposed energized parts. [Administrative] 1.5 Check for back feeds from solar, batteries and generators that can keep a circuit live after the main switch is off. [Administrative] 1.6 If energized work cannot be avoided, use an energized work permit, a safety observer and insulated tools, following NFPA 70E. [Administrative] 1.7 Wear insulated gloves, arc-rated clothing and a face shield when testing or working near live parts. [PPE] 1.8 Release or block all stored energy before work: release the pressure in pipes, tanks and hoses, bleed hydraulics, release springs, lower loads. [Elimination] 1.9 Lock out and tag all energy sources with personal locks. [Engineering (guarding)] 1.10 Put mechanical blocks or props under raised parts like buckets, tipper bodies and doors. [Engineering] 1.11 Test that the system is dead and nothing can move before you start. [Administrative] 1.12 Follow the maker's procedure, for example for garage door and roller door springs. [Administrative] 1.13 Wear safety glasses and gloves. [PPE]	**Medium Rare / Fatality**	Site supervisor
2	Access units safely, from a ladder or roof with edge protection	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	**Medium Unlikely / Serious injury**	Site supervisor

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
				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]		
3	Clean filters and coils, wearing a mask for mould and dust	Mold and droppings General dust Hazardous chemicals Rules: 29 CFR 1926.59 Hazard Communication	**Medium Possible / Recordable / lost time**	3.1 Fix the water leak and dry the area before removing mold. [Elimination] 3.2 Seal off the area with plastic sheeting and keep occupants out. [Engineering (guarding)] 3.3 Clean up with a HEPA vacuum and wet wipes. Never dry sweep. [Engineering] 3.4 Bag moldy material on site and remove it promptly. [Administrative] 3.5 Wash hands and face before eating and at the end of each shift. [Administrative] 3.6 Use low-dust products, such as dust-reduced or pre-mixed compounds. [Substitution] 3.7 Seal off the work area with plastic sheeting in occupied buildings. [Engineering (guarding)] 3.8 Use tools with dust extraction and a vacuum for clean up. [Engineering]	**Medium Unlikely / Recordable / lost time**	Site supervisor

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
				3.9 Lightly mist the area with water to keep dust down, away from anything electrical. [Engineering] 3.10 Never dry sweep or blow dust off with compressed air. [Administrative] 3.11 Choose the least harmful product that does the job, for example water-based instead of solvent-based. [Substitution] 3.12 Use chemicals in well-ventilated areas, or use fans and extraction in closed rooms. [Engineering] 3.13 Read the Safety Data Sheet (SDS) and labels before use, following OSHA Hazard Communication. [Administrative] 3.14 Keep chemicals in labeled containers. Never pour them into drink bottles. [Administrative] 3.15 Store chemicals away from heat, food and drink, and keep products that react with each other apart. [Administrative]		
4	Check refrigerant pressures with gauges	Refrigerant leaks Pressure testing Rules: 40 CFR Part 82 Subpart F (Section 608)	**Medium Unlikely / Serious injury**	4.1 Recover refrigerant into an approved cylinder before opening the system. Never vent it. [Engineering (guarding)] 4.2 Ventilate closed spaces and use a leak detector during the work. [Engineering] 4.3 Only EPA Section 608 certified technicians handle refrigerants. [Administrative] 4.4 With flammable refrigerants (such as R32 or R290), remove ignition sources and use spark-free tools. [Administrative] 4.5 Wear cold-rated gloves and safety glasses or a face shield. [PPE] 4.6 Test with water instead of air or gas where the system allows it. Never put water in refrigerant pipework, which is tested with dry nitrogen. [Substitution] 4.7 Keep people out of the test area with signs and barriers. [Engineering (guarding)] 4.8 Use a calibrated gauge and a relief valve set to protect the system. [Engineering] 4.9 Test to the pressure the system calls for and hold it for the set time. Never go over. [Administrative] 4.10 Release the pressure fully before tightening anything or fixing leaks. [Administrative] 4.11 Wear safety glasses or a face shield. [PPE]	**Low Rare / Serious injury**	Site supervisor
5	Restore power, test and record	Electric shock from live wiring Poor housekeeping and waste Rules: 29 CFR 1926 Subpart K	**Critical Possible / Fatality**	5.1 Electric shock from live wiring: see step 1 for the full controls [Administrative] 5.2 Order materials to size and send packaging back where you can. [Elimination] 5.3 Put dumpsters and waste chutes close to the work. [Engineering] 5.4 Clean as you go, and do a full clean up at the end of each day. [Administrative] 5.5 Keep exits, stairs and walkways clear at all times.	**Medium Rare / Fatality**	Site supervisor

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
				[Administrative] 5.6 Stack materials neatly on level ground, away from edges. [Administrative] 5.7 Wear gloves when handling waste. [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) Safety glasses (ANSI Z87.1) Work gloves N95 respirator Rubber insulating gloves Arc flash PPE (NFPA 70E) Hard hat (ANSI Z89.1) Personal fall arrest system (harness) Sun protection (sunscreen, hat, long sleeves) Half-face respirator (P100 cartridges) Safety goggles (ANSI Z87.1) Coveralls Chemical-resistant gloves Face shield (ANSI Z87.1)	Lockout/tagout (1926.417) Written fall protection plan (only where guardrails, nets or personal fall arrest are not feasible, 1926.502(k))

4. PLANT AND EQUIPMENT

Plant / equipment	License or training needed	Inspection needed	Rego / ID	Last inspected	Certificate / report
Hand tools					
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)			
Platform 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))			
Pressure washer					

5. TRAINING REQUIRED FOR THIS WORK

- Qualified person training for work on or near exposed energized parts (29 CFR 1926.416, NFPA 70E)
- Ladder safety training by a competent person (29 CFR 1926.1060)
- 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

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