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	Ductwork installation	**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	Set up aerial lift or platform and close the area below	Aerial lift tip-over or crush Falling tools and materials Rules: 29 CFR 1926.453 (boom lifts); 1926.452(w) and 1926.454 (scissor lifts); 29 CFR 1926.501(c)	**Critical Possible / Fatality**	1.1 Check the ground before setting up. Use outriggers and spreader pads, and keep clear of trenches, pits and slopes. [Engineering] 1.2 Use a platform with tilt alarm and secondary guarding (anti-entrapment) where there is an overhead crush risk. [Engineering] 1.3 Only trained and authorized operators use aerial lifts and scissor lifts (29 CFR 1926.453 for boom lifts, 1926.452(w) and 1926.454 for scissor lifts). [Administrative] 1.4 Do a pre-start check each day. Keep a trained person on the ground who can lower the platform in an emergency. [Administrative] 1.5 Never exceed the safe working load, climb on the rails or use a ladder in the basket. [Administrative] 1.6 In boom-type platforms, wear a harness clipped to the basket anchor point. [PPE] 1.7 Barricade and sign the drop zone under overhead work so nobody walks beneath. [Engineering (guarding)] 1.8 Fit toe boards, kick plates and mesh screens on scaffolds and edges. [Engineering] 1.9 Use catch fans, debris netting or covered walkways where people pass below. [Engineering] 1.10 Tether hand tools when working at height. [Engineering] 1.11 Keep platforms tidy. Do not stack materials near edges or above toe board height. [Administrative] 1.12 Lower materials with a hoist, chute or rope. Never throw or drop anything down. [Administrative] 1.13 Wear a hard hat anywhere objects could fall. [PPE]	**Medium Unlikely / Serious injury**	Site supervisor
2	Drill anchors with dust extraction	Silica dust from concrete, brick, stone and tiles Loud noise Rules: 29 CFR 1926.1153; 29 CFR 1926.52	**Critical Likely / Fatality**	2.1 Order materials cut to size, or use low-dust methods such as score and snap or a block splitter. [Substitution] 2.2 Cut outdoors or in a separate area, with other people well away and upwind. [Engineering (guarding)] 2.3 Use wet cutting or on-tool dust collection with a HEPA vacuum, as set out in Table 1 of 29 CFR 1926.1153.	**Medium Unlikely / Recordable / lost time**	Site supervisor

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
				[Engineering] 2.4 Clean up with a vacuum or wet methods. Never dry sweep or use compressed air. [Administrative] 2.5 Have a written exposure control plan and a competent person for silica (29 CFR 1926.1153). [Administrative] 2.6 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] 2.7 Wear the respirator Table 1 lists for the task: APF 10 (a fit-tested N95 or half mask) for most tasks, APF 25 (such as a loose-fitting PAPR) for tuckpointing with a handheld grinder for more than 4 hours a shift. [PPE] 2.8 Use quieter tools and methods, such as cut-to-size materials, low-noise machines and battery tools. [Substitution] 2.9 Keep noisy plant away from work areas, and use screens or distance between the noise and people. [Engineering (guarding)] 2.10 Keep tools maintained and use mufflers on compressors and generators. [Engineering] 2.11 Limit time on noisy tools and rotate workers. [Administrative] 2.12 If you have to shout to be heard at arm's length, wear hearing protection. [Administrative] 2.13 Wear earplugs or earmuffs rated for the noise. [PPE]		
3	Lift duct sections with two people or a duct lifter	Lifting and carrying heavy loads Repetitive work and awkward postures	**High Likely / Recordable / lost time**	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] 3.3 Use trolleys, pallet jacks, hoists, vacuum lifters or plant 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 Rotate tasks and take breaks on long lifting jobs. [Administrative] 3.7 Wear gloves for grip and safety boots to protect your feet. [PPE] 3.8 Use tools that cut the effort: powered screwdrivers, long-handled tools and extension poles for overhead work. [Substitution] 3.9 Set work up at waist height on benches or trestles where you can. [Engineering] 3.10 Use light tools with good grips, and keep blades and bits sharp. [Engineering] 3.11 Rotate tasks and take short breaks every hour on	**Medium Unlikely / Recordable / lost time**	Site supervisor

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
				repetitive work. [Administrative] 3.12 Warm up before heavy physical work and report aches and pains early. [Administrative] 3.13 Wear knee pads for kneeling work and gloves for grip. [PPE]		
4	Join and seal ducts, handling sharp metal edges with gloves	Cuts from sharp edges Hazardous chemicals 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 Wear cut-resistant gloves and long sleeves. [PPE] 4.7 Choose the least harmful product that does the job, for example water-based instead of solvent-based. [Substitution] 4.8 Use chemicals in well-ventilated areas, or use fans and extraction in closed rooms. [Engineering] 4.9 Read the Safety Data Sheet (SDS) and labels before use, following OSHA Hazard Communication. [Administrative] 4.10 Keep chemicals in labeled containers. Never pour them into drink bottles. [Administrative] 4.11 Store chemicals away from heat, food and drink, and keep products that react with each other apart. [Administrative] 4.12 Have eye wash and a spill kit nearby, and wash hands before eating. [Administrative] 4.13 Wear chemical-resistant gloves and safety glasses or goggles as listed on the SDS. [PPE] 4.14 Use a respirator with the right cartridge if the SDS calls for one. [PPE]	**Medium Unlikely / Recordable / lost time**	Site supervisor
5	Clean up offcuts and screws	Poor housekeeping and waste	**Medium Likely / Minor injury**	5.1 Order materials to size and send packaging back where you can. [Elimination] 5.2 Put dumpsters and waste chutes close to the work. [Engineering] 5.3 Clean as you go, and do a full clean up at the end of each day. [Administrative] 5.4 Keep exits, stairs and walkways clear at all times. [Administrative] 5.5 Stack materials neatly on level ground, away from edges. [Administrative] 5.6 Wear gloves when handling waste. [PPE]	**Low Unlikely / Minor 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) Cut-resistant gloves Safety glasses (ANSI Z87.1) Hard hat (ANSI Z89.1) N95 respirator Personal fall arrest system (harness) High-visibility safety apparel, ANSI/ISEA 107 Class 2 or 3 (Type R near roadways) Half-face respirator (P100 cartridges) Hearing protection (earmuffs or plugs) Work gloves Knee pads Chemical-resistant gloves Safety goggles (ANSI Z87.1) Coveralls	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
Scissor lift	Trained operator: OSHA treats scissor lifts as mobile scaffolds (29 CFR 1926.452(w), 1926.454); ANSI A92.24 training and familiarization	Operator pre-start inspection each shift; frequent and annual inspections to ANSI A92.22 and the manufacturer; as a mobile scaffold, competent person inspection before each shift (29 CFR 1926.451(f)(3))			
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))			
Power drill		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))			
Rotary hammer		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))			
Hand tools					

5. TRAINING REQUIRED FOR THIS WORK

- Aerial lift operator training and familiarization (29 CFR 1926.453 or 1926.454, ANSI A92.24)
- 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)
- 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