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	Concrete grinding and polishing	**Start date**	Nov 9, 2026
Working hours	7:00 am to 3:30 pm	**Trade**	Concreting

2. JOB STEPS, HAZARDS AND CONTROLS

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
1	Close off the area and seal doors to stop dust spreading	Working in an occupied home or building Silica dust from concrete, brick, stone and tiles Rules: 29 CFR 1926.1153	**Critical Likely / Fatality**	1.1 Plan noisy, dusty or risky work for when the building is empty. [Elimination] 1.2 Close off the work area with barriers, plastic sheeting or locked doors, and put up signs. [Engineering (guarding)] 1.3 Keep fire exits and paths clear at all times. [Administrative] 1.4 Tell occupants before you turn off power, water or gas, and before noisy or dusty work. [Administrative] 1.5 Lock away tools, chemicals and materials each day, out of reach of children. [Administrative] 1.6 Clean up dust and debris at the end of each day. [Administrative] 1.7 Order materials cut to size, or use low-dust methods such as score and snap or a block splitter. [Substitution] 1.8 Cut outdoors or in a separate area, with other people well away and upwind. [Engineering (guarding)] 1.9 Silica dust from concrete, brick, stone and tiles: see step 5 for the full controls [Administrative]	**Medium Rare / Fatality**	Site supervisor
2	Connect the grinder to an H-class extractor before starting	Silica dust from concrete, brick, stone and tiles Electric shock from cords and power tools Rules: 29 CFR 1926.1153; 29 CFR 1926 Subpart K	**Critical Likely / Fatality**	2.1 Use wet cutting or on-tool dust collection with a HEPA vacuum, as set out in Table 1 of 29 CFR 1926.1153. [Engineering] 2.2 Clean up with a vacuum or wet methods. Never dry sweep or use compressed air. [Administrative] 2.3 Silica dust from concrete, brick, stone and tiles: see step 5 for the full controls [Administrative] 2.4 Use battery-powered tools where you can. [Substitution] 2.5 Use GFCIs on all 120-volt, 15, 20 and 30 amp temporary receptacles, or a written assured equipment grounding conductor program run by a competent person with recorded tests (29 CFR 1926.404(b)(1)). [Engineering] 2.6 Keep cords off the ground and out of water, using stands or hooks. [Engineering] 2.7 Check cords, plugs and tools before every use. Tag out and remove anything damaged. [Administrative]	**Medium Rare / Fatality**	Site supervisor

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
				2.8 Do not use tools in rain or wet areas unless they are rated for it. [Administrative] 2.9 Wear safety boots and dry gloves. [PPE]		
3	Grind with hearing and breathing protection, rotating operators	Loud noise Hand-arm and whole-body vibration Repetitive work and awkward postures Rules: 29 CFR 1926.52	**High Likely / Recordable / lost time**	3.1 Use quieter tools and methods, such as cut-to-size materials, low-noise machines and battery tools. [Substitution] 3.2 Keep noisy plant away from work areas, and use screens or distance between the noise and people. [Engineering (guarding)] 3.3 Keep tools maintained and use mufflers on compressors and generators. [Engineering] 3.4 Limit time on noisy tools and rotate workers. [Administrative] 3.5 If you have to shout to be heard at arm's length, wear hearing protection. [Administrative] 3.6 Use low-vibration tools and methods, such as a breaker on an excavator instead of a hand jackhammer. [Substitution] 3.7 Keep tools sharp and well maintained, and use anti-vibration handles and seats. [Engineering] 3.8 Limit trigger time on high-vibration tools and rotate workers. [Administrative] 3.9 Keep hands warm and dry, and take regular breaks. [Administrative] 3.10 Report tingling, numbness or white fingers early. [Administrative] 3.11 Use tools that cut the effort: powered screwdrivers, long-handled tools and extension poles for overhead work. [Substitution] 3.12 Set work up at waist height on benches or trestles where you can. [Engineering] 3.13 Use light tools with good grips, and keep blades and bits sharp. [Engineering] 3.14 Rotate tasks and take short breaks every hour on repetitive work. [Administrative] 3.15 Warm up before heavy physical work and report aches and pains early. [Administrative]	**Medium Unlikely / Recordable / lost time**	Site supervisor
4	Apply densifiers or sealers with ventilation	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	**Medium Unlikely / Recordable / lost time**	Site supervisor

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
				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] 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	Vacuum all dust, never sweep dry, then reopen the area	Silica dust from concrete, brick, stone and tiles Poor housekeeping and waste Rules: 29 CFR 1926.1153	**Critical Likely / Fatality**	5.1 Order materials cut to size, or use low-dust methods such as score and snap or a block splitter. [Substitution] 5.2 Cut outdoors or in a separate area, with other people well away and upwind. [Engineering (guarding)] 5.3 Use wet cutting or on-tool dust collection with a HEPA vacuum, as set out in Table 1 of 29 CFR 1926.1153. [Engineering] 5.4 Clean up with a vacuum or wet methods. Never dry sweep or use compressed air. [Administrative] 5.5 Have a written exposure control plan and a competent person for silica (29 CFR 1926.1153). [Administrative] 5.6 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] 5.7 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] 5.8 Order materials to size and send packaging back where you can. [Elimination] 5.9 Put dumpsters and waste chutes close to the work. [Engineering] 5.10 Clean as you go, and do a full clean up at the end of each day. [Administrative] 5.11 Keep exits, stairs and walkways clear at all times. [Administrative] 5.12 Stack materials neatly on level ground, away from	**Medium Rare / Fatality**	Site supervisor

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
				edges. [Administrative] 5.13 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) Hearing protection (earmuffs or plugs) Half-face respirator (P100 cartridges) Knee pads N95 respirator Work gloves Chemical-resistant gloves Safety goggles (ANSI Z87.1) Coveralls	None required

4. PLANT AND EQUIPMENT

Plant / equipment	License or training needed	Inspection needed	Rego / ID	Last inspected	Certificate / report
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))			
HEPA vacuum		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))			
Portable generator					

5. TRAINING REQUIRED FOR THIS WORK

- 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