How to manage the risks that can cause occupational lung diseases in

ENGINEERED STONE WORKERS

IDENTIFY

MANAGE

MONITOR

Working with engineered stone can release silica dust into the air. Breathing in respirable crystalline silica dust can damage workers' lungs.

As the person conducting a business or undertaking (PCBU), you need to observe your workplace to identify hazards and assess the risks.

Once you have done this, it is important to control the risks and take actions to eliminate or minimise them as much as you reasonably can.

Use this checklist to ensure you have the right combination of control measures in place to control the risks of exposure to silica dust.

Elimination

	Yes	No
The most effective control measure is to eliminate the hazard and associated risk.		
Can you stop silica dust from being generated in your workplace? *The most effective way to manage a risk is to completely remove the hazard from your workplace. This means eliminating the creation of silica dust. Eliminating silica dust may not be practicable if you can't make the end product without generating it. If this is the case, you must work through the hierarchy of control measures below.*	☐	☐

Substitution

	Yes	No
Substitution controls rely on replacing the hazard with something that is safer for your workers.		
Can you replace materials with an option that is less hazardous? *For example, can you use engineered stone, or other products:* ▪ *that contain a lower percentage of crystalline silica?* ▪ *that do not need to be cut, ground or polished?*	☐	☐

Isolation

	Yes	No
Isolation controls rely on physically separating the hazard or source of harm from workers by distance or using barriers.		
Can you isolate work processes that generate silica dust? *For example, in an enclosed room with restricted access and suitable dust extraction and ventilation systems?*	☐	☐
Can you place barriers or distance around tasks that generate dusts? *For example, using power tools and machinery in a restricted area, away from other workers?*	☐	☐

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Isolation (continued)

	Yes	No
Do you have a breakout space for workers to get away from the work area when eating or changing? *For example, can you provide a room in a separate building or area of the building for workers to eat lunch? You should also use administration controls as below to stop workers entering these spaces when they are dusty.*	☐	☐
If modifications need to be made to engineered stone products at the installation site, can the work be done outdoors in a designated area, using engineering controls (see below) and wearing appropriate respiratory protective equipment (RPE)?	☐	☐

Engineering

Engineering controls rely on introducing a physical control measure such as a mechanical device or process to reduce exposure to harm.

	Yes	No
Can you use automated machinery when cutting, grinding or drilling engineered stone? *For example, can you use a computer-controlled cutting machine like a computer numerical control (CNC) router to cut your engineered stone slabs to size?*	☐	☐
Can you change the physical characteristics of tasks to control silica dust? *For example, can you install integrated tool dust extraction and use wet cutting methods to reduce the amount of dust that becomes airborne?*	☐	☐
Can you clean up dusts after they are created with an industrial vacuum cleaner with the appropriate filter? *Using a H-class industrial vacuum cleaner can help you effectively clean up dusts created when cutting engineered stone.*	☐	☐

Administrative

Administrative controls rely on your workers' understanding and following workplace policies. They should only be used in combination with substitution, isolation and engineering controls.

	Yes	No
Are procedures in place to manage risks of exposure to silica dust hazards for all workers, not only those processing engineered stone?	☐	☐
Could you introduce a shift or job rotation policy, so workers aren't exposed to silica for long periods of time?	☐	☐
Can you plan cutting tasks to make the minimum number of cuts?	☐	☐
Can you install signs to alert your workers to the hazards of silica dust?	☐	☐
Could you provide a laundering service for dusty workwear?	☐	☐

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Administrative (continued)

	Yes	No
Are there designated change areas for changing out of personal protective equipment (PPE) and workwear?	☐	☐
Do you keep your workplace clean?	☐	☐
Do you have policies for storage, cleaning and maintenance of equipment and PPE?	☐	☐

Personal protective equipment (PPE)

PPE should be considered last after other control measures. It should not be relied on as the sole control measure for a risk. It is important your workers are trained in how to fit and properly wear PPE.

	Yes	No
Have you supplied the PPE your workers need in addition to your other control measures?	☐	☐
Have you checked the PPE that you are providing is appropriate and fits the worker who will be wearing it including replacing cartridges and filters?	☐	☐
If your workers have other PPE, does all your PPE work effectively in combination? *For example, if your workers need to wear protective eyewear and hearing protection, do these fit and work effectively with respiratory protection?*	☐	☐
Have you ensured workers' respiratory protective equipment (RPE) is fit tested by a competent person to ensure it is effective?	☐	☐
Are you providing ongoing training, information and instructions on how to use, clean, store and maintain PPE and RPE and are cartridges and filters changed regularly?	☐	☐

Monitoring the work environment and the health of workers

	Yes	No
Do you need to carry out air monitoring to ensure you are not exceeding the workplace exposure standard? *The workplace exposure standard for silica dust in most jurisdictions is 0.05 mg/m3 (eight-hour time weighted average). You must keep your workers' exposure to silica dust as low as reasonably practicable.* *You must conduct air monitoring if there is any uncertainty that the exposure standard is being exceeded or to find out if there is a risk to a worker's health.*	☐	☐
Do you need to provide and pay for health monitoring for your workers? *Under the model WHS Regulations, you must provide health monitoring for workers if they carry out ongoing work using, handling, generating or storing crystalline silica and there is a significant risk to the worker's health because of exposure.* *You may also need to include those who do not work directly with engineered stone, such as administration workers.*	☐	☐

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Training	Yes	No
Have you provided appropriate training for all the control measures and monitoring you have implemented? Have you provided information to workers on the risks of being exposed to respirable crystalline silica? *This could include providing workers with training and information in languages other than English.*	☐	☐

Talk with your work health and safety (WHS) regulator	Yes	No
Have you looked for guidance on your WHS regulator's website? *Your WHS regulator is responsible for regulating and enforcing WHS laws in your jurisdiction. If you have any questions specific to your workplace, WHS regulator contact details are available on our website.*	☐	☐

Download and use the 'How to manage the risks that can cause occupational lung diseases in engineered stone workers – information sheet' to help you further at swa.gov.au/clearlungs.

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