Managing respirable crystalline silica dust exposure in the stone benchtop industry Code of Practice 2019: Frequently asked questions

Who does the code apply to?
The code applies to ‘persons conducting a business or undertaking’ (PCBUs) in the stone benchtop industry and covers the fabrication, processing, installation, maintenance or removal of both engineered and natural stone benchtops.

Is the code a ‘law’ in Queensland?
Yes—Employers and other duty holders must comply with the code or follow another method, such as a technical or industry standard, if it provides an equivalent or higher standard of work health and safety than what is required in this code.

Does the code cover natural stone, like marble and granite?
Yes—The code applies to engineered stone and any natural stone containing crystalline silica.

What is the difference between controlled and uncontrolled dry cutting?
‘Uncontrolled’ dry cutting or processing means any mechanical processing of stone benchtop materials without effective controls to eliminate or minimise the risk of exposure to respirable crystalline silica. This includes uncontrolled cutting, grinding, trimming, sanding, polishing or drilling of stone benchtop materials without dust extraction or water suppression controls.

‘Controlled’ dry cutting or processing of stone uses an effective control to eliminate or minimise the risk of exposure to respirable crystalline silica (i.e. on-tool extraction connected to H Class vacuum).

What does ‘fabrication and processing onsite’ refer to in the code?
The code specifies that there may be circumstances that result in the need to fabricate stone benchtops oversize and then trim onsite to fit. The code notes that where onsite trimming or alteration cannot be avoided, it should be conducted in a controlled exclusion zone with additional controls.

‘Onsite trimming and alteration’ refers to trimming or making minor alterations (e.g. to align with cabinetry or finish waterfall edges to ensure fit). It also refers to situations where granite is being used and the risk of the slab shattering during transport means final cuts must be done onsite. It does not refer to substantial work to the slab such as the processing of the material to create sink or tap holes—this should be undertaken at the workshop, not onsite.

Do stone benchtop installers have to wear a respirator if they’re just drilling a few holes to fix the slab to the cabinetry?
Yes—The code requires Powered Air Purifying Respirators (PAPR) with P2 filters to be worn during onsite installation if any mechanical processing of the stone is undertaken, including pre-drilling screw holes.

Can compressed air be used to dry slabs for fixing to joinery?
No—The use of compressed air is not permitted.

Why do I need a Safe Work Method Statement during installation (SWMS)?
A safe work method statement (SWMS) is required for high-risk construction work. Any stone benchtop fabrication or installation work undertaken onsite (e.g. on a construction site or kitchen refit/renovation) is considered to be high-risk construction work because the processes involved (i.e. cutting, grinding, polishing, sanding, trimming or drilling) generates airborne concentrations of respirable crystalline silica (resulting in a situation where construction work will be carried out in an area that may have a contaminated atmosphere).
Why must workers only wear a Powered Air Purifier Respirator (PAPR) with P2 filter? Some manufacturer’s labels on stone slabs say I need to use a P3 filter.

The code sets a minimum and enforceable standard which requires fabrication workers to wear a PAPR with a minimum P2 filter. This provides the minimum level of protection required for the significant risk associated with exposure to high levels of respirable crystalline silica in this industry.

However, the PCBU can elect to use PAPR with a P3 filter.

P3 filters in a negative pressure air respirator (e.g. not a PAPR) do not meet the requirements of the code.

Will there be any enforcement action from inspectors if respiratory protective equipment cannot be sourced (e.g. respirators on back order)?

Yes—The code is enforceable under section 26A of the Work Health and Safety Act 2011.

What if workers do not want to wear a PAPR?

A PAPR with a P2 filter is a mandatory requirement for all workers carrying out fabrication or processing work, supervision or labouring work or clean-up in the stone benchtop industry. There are many different styles of PAPR available. Worker comfort and suitability for the tasks carried out by a worker should be considered in choosing a respirator.

Does my PAPR require fit testing?

Some types of PAPR require a tight seal and therefore need to be fit tested. Where this is the case, a worker must be fit tested to the specific PAPR they are going to wear. If you are unsure whether your PAPR requires fit testing, please contact your safety equipment supplier to check.

If the PAPR I use requires fit testing and I have been fit tested for this, can I use my colleague’s PAPR instead?

A worker must be fit tested to the specific PAPR they are going to wear. They can only wear another respirator of the same make, model and size as the one they were fit tested for, but not any other.

What is the difference between fit checking and fit testing?

Fit testing is carried out by a competent person to ensure the respirator (e.g. a PAPR that requires a tight seal) fits the user. Fit checking, or seal checking, is carried out by the person wearing the PAPR that requires a tight seal every time they put the PAPR on to ensure it is effectively sealed.

Who can do the quantitative fit testing of my PAPR where it is required?

Fit testers must be properly trained and proficient in the fit-test method being used.

There is no approved fit-test training or competency standard in Australia at present, however relevant competencies would include:

- knowledge of the respirators used for the fit test
- knowledge of the fit-test method
- ability to set up all applicable equipment and monitor its function
- ability to carry out the test and evaluate the results
- ability to identify likely causes of fit-test failure.

I just bought my workers new masks that are not PAPR—do I need to replace these?

The code requires all workers to wear PAPR with a P2 filter. OIR understands that adaptors are available for some makes and models of negative pressure masks to change these masks into PAPR.
However, these adaptors are not available for all types of negative pressure masks. Your safety equipment supplier may be able to provide more information about this.

Is there a grace period for health monitoring requirements in the code?

No—Health monitoring is an existing requirement under section 368 of the Work Health and Safety Regulation 2011 and PCBU’s are required to meet this obligation under the regulation and the code.

A PCBU who engages an apprentice through a group training organisation or labour hire provider can negotiate with this organisation/provider in relation to the sharing costs for health monitoring. Both of these parties have an obligation to provide health monitoring for workers where required by Queensland’s regulatory framework (including the code).

When should health monitoring occur?

Health monitoring should be provided:

- before a worker starts work, to establish a baseline from which changes can be detected (unless the worker has participated in health monitoring within the previous two years and the results of the tests are available)
- periodically
  - every 12 months—standardised respiratory questionnaire and standardised respiratory function test
  - every three years—a chest X-ray*, the standardised respiratory questionnaire, and standardised respiratory function test
  - more frequently on the advice of a registered medical practitioner with experience in health monitoring
- exiting employment at the workplace—as per baseline if the routine 12-month tests have not been conducted, and it has been more than two years since the previous chest X-ray.

* All full size PA chest X-rays are to be taken and read consistent with ILO guidelines22 (i.e. classified by a B reader or a radiologist who has undertaken Royal Australian and New Zealand College of Radiologists approved training equivalent to the B Reader accreditation).

Who pays for health monitoring?

As the code specifies, a person conducting a stone benchtop business or undertaking must pay all expenses relating to health monitoring, including any lost wages.

Where can I find a health monitoring provider in remote locations?

Health monitoring must be done or supervised by a doctor with experience in health monitoring. As an example, any doctor who is a fellow of the Australasian Faculty of Occupational and Environmental Medicine will have the necessary experience. A list of these practitioners can be found on the Royal Australasian College of Physicians website at https://www.racp.edu.au/.

These lists are not exhaustive and other doctors may have the necessary experience required to conduct health monitoring for respirable crystalline silica. For example, approved medical providers under the Coal Mine Workers’ Health Scheme: https://www.dnrme.qld.gov.au/business/mining/safety/registered-medical-search.

Workers must be consulted when selecting a doctor and their preference considered if they request a particular doctor.

What if a worker refuses health monitoring?

Some workers may be reluctant to participate in health monitoring and this will usually be because they are anxious about the medical results or the impact of the results on their job, or both. PCBU’s
should include information on the purpose of health monitoring in worker training, and should encourage workers to participate, as early diagnosis and treatment can prevent more serious and life-threatening conditions from developing.

Supporting a worker in these circumstances can be achieved by ensuring they know how health monitoring will benefit them, making the process easy for them to follow and, reminding them that their workplace, family and community want them to be as safe and healthy as possible. Health and Safety Representatives (HSRs) at a workplace (where applicable) may also be of assistance in this process and encourage workers to participate in screening for silicosis.

If the conversation with a worker on health monitoring has stalled, it may assist the person conducting a stone benchtop business or undertaking to contact OIR inspectors for assistance or further information. The person conducting the business or undertaking may also consider contacting the relevant union for the workers. Worker representation groups will have experience in communicating with workers about the importance of their health and safety in a supportive and empowering manner.

Why do I need to do air monitoring?

Air monitoring must be carried out by a PCBU to determine whether there is a risk to a worker’s health, or if there is any uncertainty that the workplace exposure standard for respirable crystalline silica (from 1 July 2020 0.05 milligrams per cubic metre) is being exceeded.

Air monitoring is also an important way to verify that controls are working effectively.

Where can I get air monitoring equipment to test the air in my workshop?

A person conducting a stone benchtop business or undertaking must engage an independent certified occupational hygienist to carry out air monitoring at the workplace. Certified occupational hygienists will have the relevant equipment and can be found at https://www.aioh.org.au/resources/find-an-occupational-hygienist.

What is the role of the occupational hygienist?

The certified occupational hygienist carries out air monitoring at the workplace. The actual sampling of the workplace can be undertaken by the certified occupational hygienist, or an occupational hygienist technician.

If the air monitoring reports show no detectable respirable crystalline silica, can we elect not to wear respiratory protective equipment?

No—Due to the significant risks associated with respirable crystalline silica in this industry, the code requires PAPR with P2 filters to be worn by all workers carrying out fabrication or processing tasks or supervision of those tasks, labouring in the vicinity of fabrication or processing, or clean-up of equipment or work areas.

Can I apply for an exemption to particular requirements in the code?

Under section 684 of the Work Health and Safety (WHS) Regulation 2011, the regulator has a general power to grant an exemption from compliance with any of the WHS Regulations.

However, there is no provision to exempt a person from the requirement to follow a code of practice. For this reason, it will be necessary to identify what the requirement is in the code that a person conducting a business or undertaking wishes to be exempt from, and whether it is connected the WHS Regulations. If it is not connected, it must be determined whether the requirement is prescriptive or ‘best practice’.

All exemptions are based on a person conducting a business or undertaking being able to demonstrate that their alternative agreed course of action will provide at least an equivalent level of health and safety to that achieved by complying with the WHS Regulation/code provision. This is
likely to be difficult in the context of the code, given the significant safety risks associated with worker exposure to respirable crystalline silica.


Where can I get help if I have been diagnosed with silicosis or aware of a person who has been diagnosed and needs help?

Affected persons and their support networks are encouraged to access the independent, confidential and free Workers’ Psychological Support Service on 1800 370 732 to access various community services.

Why is it necessary to use a H class vacuum for clean up?

H class vacuum cleaners are suitable for using with very toxic hazardous dusts because they are designed to effectively capture and contain very small particles. Respirable crystalline silica is carcinogenic and H class vacuum cleaners are designed for carcinogenic dusts.

H class vacuums and dust extractors meet the requirements of AS/NZS 60335.2.69:2017 Household and similar electrical appliances - Safety - Particular requirements for wet and dry vacuum cleaners, including power brush, for industrial and commercial use (IEC 60335.2.69 ED 5, MOD).

How should I dispose of my slab offcuts and dust? Can I put the waste down the drain (curbing and channeling)?

Offcuts and dust should be disposed of in a skip bin, or with general waste in a manner that minimises the risk of dust being redispersed over the workplace (e.g. bagged or kept wet). Persons conducting a stone benchtop fabrication business or undertaking should also check with their local council for any waste management requirements specific to their area.

Water recycling—how do I check my water is being adequately filtered of dust?

Persons conducting a stone benchtop fabrication business or undertaking should check the adequacy of filtration with the manufacturers of the filtration system.

What are workers required to do with their dirty/dusty clothes at the end of a shift?

The code recommends workers remove any residual dust by hosing off any wet gear (aprons/boots) or vacuum off other clothing using an H Class vacuum. The code does not require any specific treatment or laundering of work clothes.

Can I use oscillating fans in my fabrication workshop to prevent exposure to silica dust?

No—Oscillating fans will not eliminate exposure to respirable crystalline silica and may blow dust into other areas of a workshop and create risks to other workers.

What is OIR doing about respirable crystalline silica in general construction work?

The development of the Managing respirable crystalline silica in the construction industry Code of Practice will commence in 2020. It is anticipated the code will be developed over the following 12 to 18 month period. Scoping has commenced on a literature review to determine what evidence is currently available on the exposure levels, risks and efficacy of controls for respirable crystalline silica in the construction industry.

Are monumental stonemason businesses bound by the stone benchtop industry code of practice?

The monument industry is not bound by the code, but all hazards and risks must be managed in an appropriate manner and where similar work is being undertaken it is expected the same level of control will be used.