INNOVA

April 2025

Working Safely

Fibre Cement

Best practice guide

etex inspiring ways of living

Progress comes from change. And change comes from challenging the status quo.

Inspired by Etex, the global leader in fibre cement sheeting, Innova is bringing the change the industry needs. So now architects, builders, and homeowners can make the changes they want.

We'll never stop innovating our stylish cement sheeting range. We'll never stop finding efficiencies and passing on the savings.

Change is what defines us and propels us forward. Change is the foundation we're built on.

Innova. Built on change.

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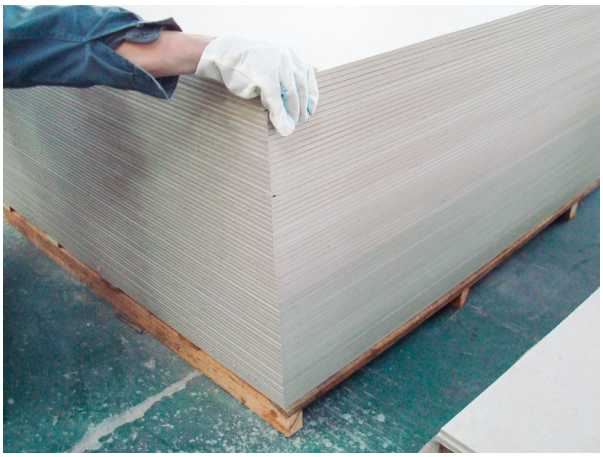
1. Introduction

Innova is committed to educating all users in the safe use of our products and we want everyone to return home healthy to your family and friends. The following is a best practice guide for working with fibre cement that will positively benefit your wellbeing and improve worksite safety for everyone.

Silica, also known as Quartz, is the second most abundant mineral in the Earth's crust which makes it a practical and viable solution for formulating construction materials. Engineered stone, concrete, bricks, grout, mortar, tiles, autoclaved-aerated concrete (AAC) and fibre cement are all materials that are defined as a Crystalline Silica Substance (CSS).

Respirable Crystalline Silica (RCS) is a byproduct of a CSS and deemed Hazardous by the Hazardous Chemical Information Scheme from Safe Work Australia.

Innova products in their manufactured state do not release airborne Respirable Crystalline Silica (RCS). RCS occurs during the installation of fibre cement products with mechanical methods such as cutting, rebating and drilling. This is an occupational hazard that can be safely managed by adopting best practices, which includes awareness, safe work methods, equipment and Respiratory Protective Equipment (RPE). Innova recommends keeping exposures to dust as low as practicable and work in a well-ventilated space.



The information contained in this document is the minimum guidelines when working with Innova fibre cement products but is not exhaustive and does not include additional regulatory requirements in your local State or Territory.

Person Conducting a Business or Undertaking (PCBU) and other stakeholders have obligations under WHS laws relating to products containing silica and activities generating RCS. Further information is available in the Innova fibre cement Safety Data Sheet (SDS) as well as Safe Work Australia and State and Territory WHS websites.

For technical information on the installation of Innova fibre cement products, refer to the relevant Design and Installation Guides, Technical Supplements and Technical Data available at innovafibrecement.com.au and innovafibrecement.co.nz.

If you still have concerns about silica dust exposure levels, you should always consult a qualified occupational hygienist. A directory can be found at www.aioh.org.au and www.nzohs.org.nz.

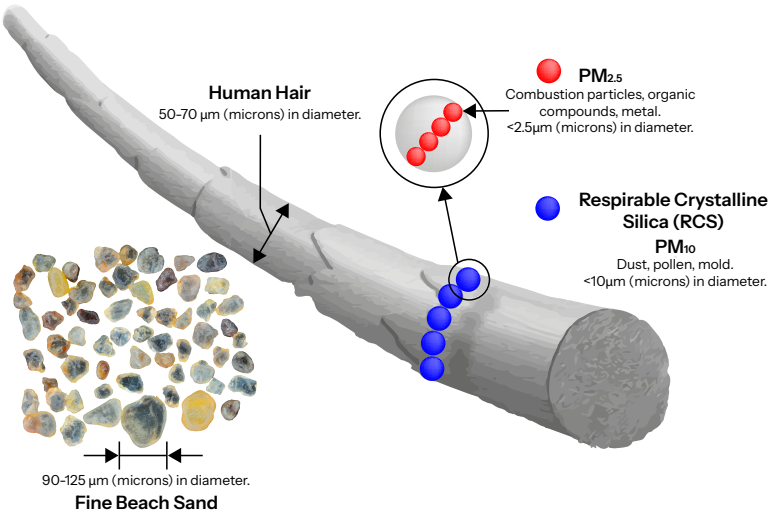
2. Silica Awareness

1. The Hazard (The capability to cause harm)

Innova fibre cement products will not release Respirable Crystalline Silica (RCS) and is not considered a hazard in its manufactured state.

The hazards associated with Respirable Crystalline Silica (RCS) arise during installation activities where mechanical methods are used for cutting, rebating, drilling, routing, crushing, sanding and when cleaning up, disposing of, or relocating dust. This is referred to as 'processing' a Crystalline Silica Substance (CSS).[1]

This dust contains crystalline silica in a range of particle sizes, from very small (less than 10 micrometres [µm] in diameter) to larger particles that can be seen with the naked eye. Crystalline silica particles that are less than 10 µm in diameter are known as Respirable Crystalline Silica (RCS). RCS is invisible under normal lighting or with the naked eye and stays airborne for long periods of time. When breathed in, RCS can travel deep into the lungs and cause damage.



2. The Risk (The likelihood of the hazard causing harm)

The following recommendations in this guide are designed to minimise the risk of harm from Respirable Crystalline Silica (RCS) exposure. Breathing excessive amounts of RCS can cause a potentially fatal lung disease called silicosis, progressive massive fibrosis, chronic obstructive pulmonary disease, chronic bronchitis and lung cancer. RCS has also been linked to increasing the risk of developing chronic kidney disease, autoimmune disorders and other adverse health effects, including an increased risk of activating latent tuberculosis, eye irritation and eye damage.[1]

For further information, see the Innova fibre cement Safety Data Sheet (SDS) available at innovafibrecement.com.au or innovafibrecement.co.nz.

3. Risk Factors

- Exposure concentration
- Duration and frequency of exposure
- External health factors (e.g., lifestyle, genetics, smoking)

Before, during and after installation, it is important to be aware of activities that lead to RCS becoming airborne. Poor housekeeping or performing routine tasks such as dry sweeping, using compressed air, pressure washers and general purpose ungraded and unfiltered vacuum cleaners allows hazardous dusts to become airborne.

IMPORTANT

Respirable Crystalline Silica is an occupational hazard that can be effectively managed by implementing best practices, including the use of suitable tooling, safe work methods and Respiratory Protective Equipment (RPE).

3. Responsibility

Duty holders with a role in managing risks in the workplace include:

- Person Conducting a Business or Undertaking (PCBU)
- Officers
- Designers, manufacturers, importers, suppliers
- Workers
- Other persons in the workplace.

A person can have more than one duty and more than one person can have the same duty at the same time. Innova recommends ensuring all stakeholders are aware of the hazards relating to RCS.

4. Best Practice

1. Cutting, Sanding, Drilling, Rebating or Other Machining

Innova recommends you to always minimise dust when sanding, rebating, cutting, drilling or carrying out other machining of fibre cement products, as well as following our recommended cutting instructions. Wear a P2 or higher-grade respirator that is compliant to AS/NZS 1716:2012 (Respiratory protective devices). Respirators are to be fitted and worn as per manufacturers recommendations. Ensure you warn others in the immediate area before commencing work that has the potential to generate airborne RCS.

2. Activities Table

Activity	Tool	Selection	Location	RCS Control	Respiratory Protective Equipment (RPE)
Cutting	Track Saw	Good	Outdoor	Tools equipped with M or H-class vacuum	P2 or Higher Respirator for all activities, tools and locations.
	Circular Saw	Good			
	Compound Saw	Good			
	Wet Saw	Better		Water Suppression	
	Fibreshears	Best	Indoor	Clean up with M or H-class vacuum.	
	Hand Guillotine	Best			
	Score and Snap Knife	Best			
Drilling & Hole Forming	Drill	Good	Outdoor*	Water Suppression or Clean up with M or H-Class vacuum.	
	Hole Saw	Good			
Shaping & Sanding	Grinder	Good	Outdoor*	Clean up with M or H-Class vacuum.	
	Multi-Tool	Good			
	Sander	Good			

*Indoor only when products have been installed prior to activity.

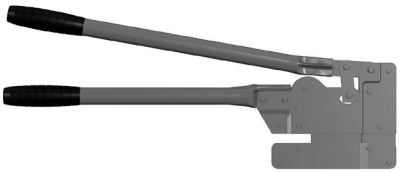
3. Cutting Indoors or Poorly Ventilated Areas

Cut using only the score and snap, hand guillotine or fibre shears (manual, electric or pneumatic). Always clean up directly after use.

Whilst these methods produce minimal amounts of RCS, some State or Territories may require additional controls to be used.

Score and Snap Knife

Hand Guillotine



Fibre Cement Shears

4. Cutting Innova Fibre Cement Products Outdoors

1. Select appropriate area to set up cutting station away from others.
2. Notify others to avoid entering the cutting station area
3. Ensure power tools, vacuum and PPE are clean, in good working condition, well-maintained; free of blockages and damage.
4. Regularly rotate personnel across tasks to further limit exposure.

For products 7.5mm and under, it is recommended to use;

- Score and Snap Knife or
- Hand Guillotine or
- Fibre cement shears.

For products 9mm and above, it is recommended to use;

- Power saw with dust extraction port, fitted with a fibre cement saw blade and a M or H-Class or higher vacuum with a clean HEPA filter.

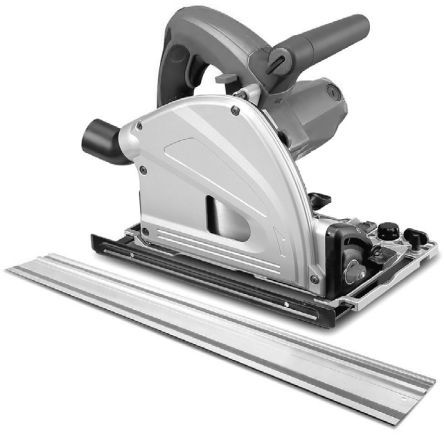
Always clean up directly after use, seal the vacuum bag before disposing into appropriate trade waste bin.

When cutting, drilling, sanding or otherwise abrading Innova Fibre Cement products, the power tool must be fitted with an attachment such as a shroud with a dust extraction port fitted to a M or H Class vacuum to minimise dust exposure.

Where a lower quality of cut is acceptable, hand tools and bladeless powered tools will significantly reduce the amount of RCS from being airborne. These include:

- Score and Snap Knife
- Hand Guillotine
- Fibreshears (manual, electric or pneumatic)

Power Saw



M or H Class Vacuum

WARNING

USERS MUST BE SUITABLY QUALIFIED TO OPERATE POWER TOOLS AND ADHERE TO TOOL MANUFACTURERS GUIDELINES FOR OPERATION AND MAINTENANCE TO AVOID SERIOUS INJURY OR DEATH.

5. Tool Selection and Quality of Cut

Innova recommends using the best cutting method suitable for the required cut finish, site conditions, reducing manual handling, exertion and skill level.

For precision cutting, power tools can provide higher accuracy, efficiency and enhanced cut edge finish but introduces new potential hazards such as electric shocks, cuts, amputations of body parts, impact injuries to eyes, noise, and burns. Innova recommends only suitably qualified and experienced users operate power tools, understanding the risks involved in using these tools and following the tool manufacturer's recommendations for safe operation.

5. Respiratory Protective Equipment (RPE)

The minimum classification of respirator for use with Innova fibre cement products is P2 grade or higher and must be manufactured in accordance with AS/NZS 1716:2012 (Respiratory protective devices).

Both disposal and reusable respirators are readily available at leading retailers. The user must ensure the product conforms to AS/NZS 1716:2012 (Respiratory protective devices) by checking classification, packaging, stamping and/or printing.

RPE products are available with varying features and options to suit the needs of the user and the intended application or risks. It is important users are fit tested and are cleanly shaven to obtain a tight seal of the face to the respirator. When selecting, using and maintaining RPE, the user must comply with AS/NZS 1715:2009 (Selection, use and maintenance of respiratory protective equipment).

A good respiratory protection program will include but is not limited to:

- Correctly selecting appropriate RPE
- Medical screening of RPE users
- Training in the correct use and maintenance of RPE
- Ensuring RPE is correctly used
- Fit testing and fit checking
- Inspection, maintenance and repair of RPE
- Correct storage
- Keeping records

Disposable Respirators

Disposable respirators must be discarded after use, follow the manufacturer's guidelines for time and exposure limits.

Reusable Respirators

Reusable half face and full face respirators frames fitted with disposable cartridges and filters.

The information provided does not provide the full extent of requirements for users of Respiratory Protective Equipment (RPE). Innova recommends consulting your WHS officer, occupational hygienist and/or RPE manufacturer for further guidance regarding a suitable RPE solution.

6. Workplace Exposure Standard

A Workplace Exposure Standard (WES) represents the concentration of an airborne hazardous chemical such as RCS within a worker's breathing zone that should not cause adverse health effects or undue harm.

The WES for RCS is 0.05 mg/m3 (eight-hour time weighted average). The WES must not be exceeded.

If you are a Person Conducting a Business or Undertaking (PCBU) you may need to implement control measures or make changes to your workplace procedures so that the WES for RCS is not exceeded.

Here are five things you can do to help protect your workers from exposure to RCS:

1. Assess the risk of RCS at your workplace.
2. Implement control measures to minimise your workers' exposure to RCS.
3. Arrange for air monitoring if you are unsure how high the airborne RCS levels are at your workplace.
4. Talk to your workers and any Health and Safety Representatives (HSRs) about the risks of RCS, the control measures in place at your workplace to manage risks and ensure workers are not exposed to levels above the WES, and any training your workers might need.
5. Implement a health monitoring program if there is RCS at your workplace, including workers who generate RCS or those who work near it.

It is the responsibility of the user to review and confirm applied controls meet exposure standards. For more information regarding the WES standards for RCS, visit your National, State or Territory WHS website for more information.

7. Management of Risks

A PCBU must ensure that any risks of RCS to the health and safety of workers are eliminated, so far as is reasonably practicable. If elimination is not reasonably practicable, the risks must be minimised so far as is reasonably practicable.

Risk management is a proactive, systematic process that helps a PCBU plan and respond to potential hazards and their associated risks in the workplace. PCBUs must also ensure that they are managing risks to health and safety from exposure to RCS at the workplace in accordance with the WHS Regulations. This requires PCBUs to, among other things, manage risks in accordance with the hierarchy of control measures.

The hierarchy of control measures ranks control measures from the highest level of protection and reliability to the lowest level. The different types of control measures are set out below in order from highest order (i.e., elimination) to lowest (i.e., administrative controls and personal protective equipment).

Other than dust extraction and Respiratory Protection Equipment (RPE), examples of control measures for RCS include but are not limited to:

- Silica Control Plan
- Training
- Safe Work Method Statement
- Monitoring
- Housekeeping

For further regulatory information; refer to the following regulatory bodies:

Location	State or Territory	Regulatory Body
Australia	National	WorkSafe Australia
	ACT	WorkSafe ACT
	NSW	SafeWork NSW
	QLD	Workplace Health and Safety Queensland
	SA	SafeWork SA
	WA	WorkSafe WA
	TAS	WorkSafe Tasmania
	VIC	WorkSafe Victoria
	NT	NT WorkSafe
New Zealand	National	WorkSafe New Zealand

To find an occupational hygienist; refer to the following websites:

Australia: www.aioh.org.au

New Zealand: www.nzohs.org.nz

8. Important Safety Notes

ALWAYS WEAR A PROPERLY FITTED P2 OR HIGHER-GRADE RESPIRATOR (RPE) when performing activities that generate RCS.

ALWAYS alternate cutting activities with others to reduce exposure time.

AVOID using power tools to cut or shape fibre cement products indoors.

NEVER use a saw blade that is not designed to cut fibre cement.

ALWAYS use on-tool dust extraction when using power tools; M or H-Class vacuum fitted with a HEPA filter.

ALWAYS follow the tool manufacturer's guidelines for correct and safe operation.

DO NOT dry sweep. Use wet suppression then sweep or H or M-Class vacuum fitted with a HEPA filter.

DO NOT continue installation activities if you are concerned about exposure levels or cannot comply with the above guidelines. Contact Innova or an occupational hygienist if you require further assistance.

For further product information, refer to the website for the most up to data SDS for all Innova fibre cement Products:

innovafibrecement.com.au | innovafibrecement.co.nz

WARNING

USERS ARE RESPONSIBLE FOR ADHERING TO STATE OR TERRITORY WHS REGULATIONS, MANUFACTURER GUIDELINES, RECOMMENDATIONS, SAFETY DATA SHEETS AND INSTALLATION GUIDES TO AVOID SERIOUS INJURY OR DEATH.

References

1] Safe Work Australia. (2024). Working with crystalline silica substances: Guidance for PCBUs. [online] Available at: https://www.safeworkaustralia.gov.au/doc/working-crystalline-silica-substances-guidance-pcbus.

2] U.S EPA (2024). Particulate Matter (PM) Basics. [online] https://www.epa.gov/. Available at: https://www.epa.gov/pm-pollution/particulate-matter-pm-basics#PM.

3] Safe Work Australia (2024). Hazardous Chemical Information System (HCIS). [online] https://hcis.safeworkaustralia.gov.au/. Available at: https://hcis.safeworkaustralia.gov.au/.

4] Anderson, Robert S.; Anderson, Suzanne P. (2010). Geomorphology: The Mechanics and Chemistry of Landscapes. Cambridge University Press. p. 187. ISBN 978-1-139-78870-0.

5] Workplace Health and Safety Queensland (2019). Respiratory protective equipment (RPE). [online] www.worksafe.qld.gov.au. Available at: https://www.worksafe.qld.gov.au/safety-and-prevention/creating-safe-work/managing-risks/personal-protective-equipment-ppe/respiratory-protective-equipment-rpe.

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