



# Engineered stone ban must continue

ACTU Submission to Safe Work Australia Public Consultation  
on the Engineered Stone Ban

ACTU Submission, 02 April 2025  
ACTU D. No 10/2023

## Contents

Introduction .....	1
Recommendations.....	2
Discussion .....	2
Conclusion.....	6

## Introduction

Since its formation in 1927, the ACTU has been the peak trade union body in Australia. There is no other national confederation representing unions. For 90 years, the ACTU has played the leading role in advocating in the Fair Work Commission, and its statutory predecessors, for the improvement of employment conditions of employees. It has consulted with governments in the development of almost every legislative measure concerning employment conditions and trade union regulation over that period.

The ACTU consists of affiliated unions and state and regional trades and labour councils. There are currently 35 ACTU affiliates. They have approximately 1.6 million members who are engaged across a broad spectrum of industries and occupations in the public and private sector.

The ACTU and unions actively campaigned and advocated for the introduction of the engineered stone ban as proposed in the June 2021 National Dust Diseases Taskforce Final Report. The evidence, scientific and at the workplace level, is that the processing of engineered stone is particularly hazardous for a large variety of reasons – volume of work, size of crystalline silica particles produced, presence of resins and pigments and difficulty in implementing risk control measures.<sup>1</sup>

The ACTU and all unions welcomed the decision by WHS Ministers in March 2024 to prohibit the use of engineered stone. The ban, with some transition periods, came into effect in July 2024. The prohibition is a world first and therefore there are many stakeholders, domestic and international, monitoring its effectiveness and any hurdles that may be encountered.<sup>2</sup> This review is required by WHS Ministers, but it must be noted this is less than 9 months old and the long-term benefits to workers health will take time to take effect – and of course, will be measured in a decline in the number of workers suffering debilitating and potential lethal disease.

The ACTU recommends submissions made by unions to this public consultation.

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<sup>1</sup> A review of silicosis and other silica-related diseases in the engineered stone countertop processing industry, Fazio et al. Journal of Occupational Medicine and Toxicology (2025) 20:9 <https://doi.org/10.1186/s12995-025-00455-8>

<sup>2</sup> Australia's ban of engineered stone: a historic turning point, HesaMag 29. Winter 2024, Catherine Cavalin & Alfredo Menéndez Navarro

## Recommendations

1. The ACTU supports the continuation of the ban on engineered stone products containing more than 1% silica.
2. The ACTU supports broadening the scope of the ban on engineered stone products.
3. The ACTU urges WHS Ministers and SWA to examine the potential health effects of some of the alternative products which contain amorphous silica and/or resins and pigments, in particular porcelain, sintered stone and zero silica engineered stone.
4. The ACTU urges governments and their agencies to review and act against misleading advertising and the use of terminology that may be used to circumvent the ban.
5. The ACTU urges governments to undertake both targeted and general information dissemination on the safer alternatives to engineered stone products to encourage uptake of alternatives and contribute to lower risks for workers in construction industries. The health consequences of alternatives also need to be communicated.
6. The ACTU calls on SWA/WHS regulators and other agencies to require clear information safety data sheets that provide detail on constituents and the dusts generated when processing.
7. The ACTU strongly supports strong and effective compliance and enforcement activities for both the importation ban, any work, such as minor modifications, to existing engineered stone products and correct and safe disposal of legacy engineered stone. The ACTU notes that the ban was introduced because PCBUs could not maintain safe and healthy working environments despite education, awareness and visits by regulatory inspectors.
8. The ACTU urges a revision of the health monitoring requirements for engineered stone workers in line with recent Australian research.

## Discussion

### Effectiveness of the ban

1. The ACTU can only rely on anecdotal evidence from construction unions that industry has stopped using the banned products and is utilising alternatives.
2. Construction unions report that isolated attempts to reuse legacy product have been dealt with appropriately.
3. There are many unprohibited alternative materials that are commercially available. These include, but are not limited to, engineered stone (<1% bulk crystalline silica, resin-based),

sintered stones e.g. porcelain, ceramic etc,<sup>3</sup> (typically of <20% crystalline silica and resin-free) and the natural stones, e.g. marble, granite, quartzite (with crystalline silica ranging from <5 - 90%).

4. As far as we are aware there is a general lack of information regarding the health effects of working with many of the more recently introduced manufactured products. The ACTU understands some preliminary research is currently underway which should be published soon.<sup>4</sup>
5. The ACTU recommends that SWA/regulators require importers and PCBUs to provide clear information on the health effects of the constituents in the newer alternative products – the most acceptable mechanism would be through improved safety data sheets which include information on the health effects of dusts generated.
6. It is important that research and testing of these products occurs as some constituents of newer products are like the non-silica constituents of engineered stone – resins and colourants. These constituents may be contributing to the toxicity of the dust produced when processing engineered stone.<sup>5</sup>
7. Additionally, some newer alternatives contain amorphous silica which is less hazardous than crystalline silica but has been shown to cause fibrotic lung changes in animals.
8. Consequently, it is important that governments and industry are aware of the potential dangers of alternatives and that users/consumers are not lured into believing that there are no health risks, just because the product is advertised as “silica free”.

## Exemptions

9. Applicants for an exemption are required to notify and provide a copy of the application to the SWA social partners. The ACTU refers notifications to the CFMEU. As far as we are aware no exemptions have been granted.
10. It is essential to maintain this high level of vigilance and involvement of the social partners, especially those representing the workers who have been so catastrophically affected by industry’s failure to protect them.

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<sup>3</sup> e.g. Lapitec – technical data sheet notes that it is a patented mineral, non-toxic and crystalline-silica-free, obtained with a particular melting process at about 1600 °C, starting from a unique blend of 100% natural mineral powders.

[Assistance Service | Lapitec](#)

<sup>4</sup> Personal communication with researcher

<sup>5</sup> Autoimmune diseases, autoantibody status and silicosis in a cohort of 1238 workers from the artificial stone benchtop industry, Tomic D, et al. *Occup Environ Med* 2024;81:388–394. doi:10.1136/oemed-2024-109526

11. During the prelude to the ban, and since, some companies are marketing products claiming that it can be processed safely because of new minerals and technology. Some of these products contain up to 10% silica. The prohibition must continue apply to these products.<sup>6</sup>

### **Improving the engineered stone ban**

12. It is acknowledged that the processing of kitchen and bathroom benchtops has been the source of an upsurge in cases of silicosis. However, it is important to identify other products that have similar hazard characteristics such as sinks, shower bases etc and that similar risks may arise in relation to their manufacture and installation (processing).

13. The ACTU supports research to identify other products where processing is required (in Australia or offshore) to mitigate against further hazardous exposures.<sup>7</sup>

### **Protecting workers from exposure to respirable crystalline silica and further research**

14. The anecdotal evidence (see above) is that industry has moved away from using engineered stone kitchen and bathroom bench tops.

15. Clearly, these workers are not the only ones exposed to RCS and who contract silica related diseases. The introduction of the Crystalline Silica Regulations late in 2024 is intended to decrease these exposures.

16. There is clearly much work to be done to increase awareness and the use of good risk control measures in these other industries. The 2024 Lung Foundation Survey of 500 participants in at-risk fields including Construction, Mining/Quarrying, Manufacturing, and Tunnelling found reasonable levels of awareness about silicosis but a much lower level of concern about developing a lung condition because of exposure.<sup>8</sup>

17. In 2019 and 2021 the Department of Health undertook research of stonemasons and other tradespeople about silica exposures. In 2021, the number of stonemasons who personally suspect their health has been impacted by silica dust was 42%, which was up from 23% in 2019. Almost a quarter (24%) have sought or intend to seek medical attention, up from 14%.<sup>9</sup>

18. The two waves of research also spoke with other tradespersons. The report noted that “a significantly lower number of other tradespeople say their workplaces are actively taking

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<sup>6</sup> For example: [Cosentino Introduces Silestone@XM, the new generation of mineral surfaces](#)

<sup>7</sup> The importation of prefabricated (pre-processed) ES is not supported as it would encourage offshore processing of ES that is prohibited in Australia and that this is consistent with duties PCBUs have in supply chains and without international obligations not to transfer risks back onto other workers

<sup>8</sup> <https://lungfoundation.com.au/news/new-survey-calls-for-continued-awareness-around-silicosis-despite-engineered-stone-ban/> 78% are aware of silica dust and the risk of silicosis, but only 23% are worried about developing the lung condition

<sup>9</sup> Department of Health Dust Disease Research Update, May 2021 (report to the National Dust Diseases Taskforce)

steps to minimize exposure (from 73% in 2019 to 62% in 2021). This data indicates that it will be important to increase communications to relevant individuals and workplaces outside the stonemason industry around the dangers of silica dust, as their understanding of and engagement with the issues seem to be decreasing".<sup>10</sup>

19. Given the Lung Foundation findings and the continued diagnoses of silica related diseases in construction and tunnelling workers, it would seem timely that research, such as that conducted by the Department of Health in 2019 and 2021, be replicated as soon as possible.
20. Unions have indicated that further research is needed into the viability of continuous real-time air monitoring in high-risk environments as a reasonably practicable measure for employers/PCBU engaged in activities that generate silica dust. Continuous real time air monitoring would be of significant assistance to both workers and PCBUs in identifying high risk work at the time, and consequently allow for timely changes in work practices to lower exposures.

#### **Alternatives to engineered stone**

21. There are a wide range of alternatives to engineered stone bench tops – The Conversation article referenced below is a good summary.<sup>11</sup>
22. The ACTU is concerned that the introduction of zero-silica engineered stone may be engendering a level of complacency from industry. These products contain alternative raw materials such as recycled glass mixed with resins and pigments which when processed produce dusts and volatiles hazardous to human health.
23. Overall, as stated by Carey and Ramkissoon, *“the risks from these alternatives are potentially magnitudes lower than those we’ve seen with engineered stone. In most cases, these risks are also well-known, well-managed and well-controlled, unlike with engineered stone.”*<sup>12</sup>

#### **Unintended consequences of the ban**

24. The ACTU is unaware of any unintended consequences of the ban.

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<sup>10</sup> Ibid

<sup>11</sup> [Engineered stone is now banned. But how safe are the alternatives?](#) Drs Renee Carey & Chandnee Ramkissoon, The Conversation July 2024

<sup>12</sup> Ibid

### Other comments regarding the engineered stone ban

25. As highlighted in the CFMEU submission the lack of good quality safety data sheets or technical guidance on the health effects of the constituents of the newer alternative products is very concerning. The provision of easily understandable and accessible information is a necessary precursor to PCBUs adopting appropriate risk control measures and for workers to understand and appreciate what risk controls are required. An internet search on the engineered products is very unlikely to find clear constituent information or information on the composition of dusts generated – e.g. it might list a general constituent like “minerals”.
26. It is imperative that WHS/OHS regulators maintain a high profile in the stone masonry and benchtop industries. These workplaces can easily “slip back” into poor risk control measures – WHS regulators have reported revisiting sites after compliance notices have been issued and the risk control measures have not been maintained. Compliance and enforcement activities need to be reported publicly along with the release of aggregated data on WES exceedances for RCS.
27. The ACTU draws SWA and WHS regulators attention to recently published Australian research which concluded that “*compared with HRCT chest, CXR and RFTs had limited value in screening this high-risk population.*”<sup>13</sup> Only one jurisdiction has adopted this approach (WA), which is troubling. The evidence is mounting that we are doing a disservice to those in high-risk work by not adopting HRCT wherever possible.

### Conclusion

28. The ACTU strongly supports the continuation of the prohibition of work on engineered stone containing more than 1% crystalline silica.
29. No adverse effects of the ban have been reported to unions or the ACTU.
30. The ACTU makes eight recommendations which are listed at the beginning of this submission.

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<sup>13</sup> Prevalence and risk factors for silicosis among a large cohort of stone benchtop industry workers, Hoy RF, et al. *Occup Environ Med* 2023;80:439–446. doi:10.1136/oemed-2023-108892

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