

Silica Dust: Effective Control Measures

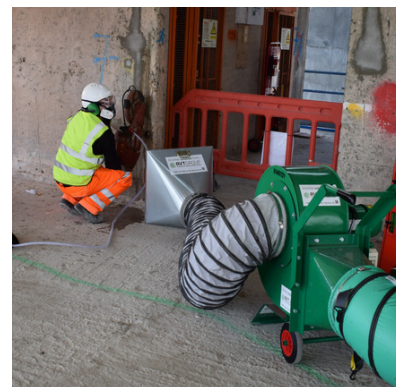
Assess | Implement | Review

1. Assess the Risks

When assessing the risk of exposure to silica dust, it's important to consider these 4 points:

- **Identify:** Ensure you have correctly identified the hazardous substance (Eg. RCS) and you are aware of the Workplace Exposure Limit associated with the substance.
- **Tools:** What tools are being used? Machinery such as sanders, grinders and grit blasters, will generate more dust than handtools.
- **Work Environment:** In small spaces, dust will build up much quicker than when working outside - as such, control methods will vary.
- **Time & Frequency:** If the task is complex, large or repetitive, the duration of the risk increases.

You can then use this information to decide on appropriate control measures.



Speak to a
Consultant
Today!



2. Implement Control Measures

As per the hierarchy of control, you should first look to see if there is away to eliminate, substitute or isolate the risk by considering:

- Alternative materials
- Different methods of work

If the risk cannot be eliminated, substituted or isolated you will need to implement appropriate engineering controls:

Extraction and filtration units: Select an extraction system that has a suitable capture hood, sufficient airflow for the level of dust being generated, and a HEPA filter that will remove 99.97% of particulate. Position the capture hood as close to the activity as possible to ensure the majority of dust is captured at source. You can reduce the risk of dust migration further, by using enclosures or plastic sheeting to contain the work area. High airflow extractors can then be used to create a negative pressure environment, and ensure that any residual dust in the air is extracted and filtered.

Water: Using water to dampen down the work area before, during and after the dust-generating task can be an effective way to reduce harmful dust particles from permeating the air.

Respiratory Protective Equipment (RPE): In addition to the tools, workers need to wear RPE compliant with AS/NZS 1716. When wearing RPE, you must ensure you are clean shaven, that your mask fits snugly around your nose and chin and the straps are not twisted.

3. Review Control Measures

You must review control methods regularly. Here's a checklist of points to cover:

- ✓ Have all team members been given suitable training on how to use and maintain the equipment?
- ✓ Do you have a way of measuring the effectiveness of the controls? Eg. Is there a permanent dust monitor measuring dust levels?
- ✓ Do you have a clear process in place so that your workforce can report any issues with the control measures?
- ✓ Do you have a health surveillance programme in place to ensure your team remain protected & healthy?

