

DUST CONTROL FOR CONCRETE WORK SAFE WORK PRACTICES

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Airborne concrete dust can be created by cutting, drilling, grinding, or coring.

To prevent over exposure to concrete dust, control measures must be considered before beginning each phase of construction. Awareness and planning are the keys to the prevention of problems.

If it is not possible to eliminate dust from the workplace, the dust must be controlled to prevent overexposure. Reviewing the Material Safety Data Sheets (MSDS) is an important step in identifying hazards and understanding the manufacturer's recommendations on care and control of the product.

Dust control safe work practices

The three basic options for controlling dust are the following:

- Control the source of the dust
- Control the path of the dust between its source and the worker
- Control the dust at the location of the worker

One or more of the following control measures can be used when work is being done that may result in the creation of airborne concrete dust:

- Redesign to use non-silica material where practicable
- Alter the process to reduce or eliminate dust production (wet saw, wet floor, or floor sweeping compound)
- Install vacuum attachments on tools to capture dust
- Enclose or isolate the process
- Use engineered ventilation fans to induct or exhaust the dust in compliance with regulatory requirements
- Schedule concrete dust generating activities to minimize workforce exposure (off-hours)
- Post warning signs to identify areas where concrete dust exposure could occur
- Wear a disposable suit and dispose of it before breaks and at the end of each shift
- Wear an appropriate respirator if exposed to a procedure that creates concrete dust
- Practice proper housekeeping (slurry clean up, etc.)
- Practice good personal hygiene before eating or smoking

Note: A worker who is required to wear a respirator while performing this type of work must be clean-shaven and be fit-tested for the respirator to be used. More info refer to Work Safe Alberta Bulletin "crystalline silica at the work site".