



TCC MATERIALS® LOW-DUST ADDITIVE

[Click here to see Low-Dust in action!](#)



Regular Mortar
(Without TCC
Low-Dust Additive)



Mortar with TCC
Low-Dust Additive

Why do I need to use Low-Dust Additive with mortar or grout?

The dust created when working with sand and cement blended powders can be harmful to the health of anyone breathing this dust. The longer the exposure, the greater the possibility of health issues such as silicosis. Preventative steps can be taken by using the TCC Low-Dust Additive to significantly reduce the amount of dust created when pouring, blending, or mixing dry powders. Confined spaces are safer with less dust and increased visibility, job sites stay cleaner, and nearby parked vehicles aren't exposed as much cementitious residue. Dust control is especially useful in residential projects, projects with high foot traffic, and other areas where humans, pets, structures, electronics and machinery can be negatively affected by dust accumulation. **Because of these hazards, OSHA has regulations that limit exposure to crystalline silica and are proposing major updates to those rules for all industries.**

What are the health issues associated with silica dust?

Workers who inhale very small crystalline silica particles are at increased risk of developing serious silica-related diseases. These tiny particles (known as "respirable" particles) can penetrate deep into worker's lungs and cause silicosis, an incurable and sometimes fatal lung disease. Exposure to crystalline silica also puts workers at risk for developing kidney disease, lung cancer, and other potentially debilitating respiratory diseases such as chronic obstructive pulmonary disease (COPD).

What is silicosis?

Silicosis is an incurable, sometimes fatal lung disease caused by breathing in very small particles of silica dust. This causes tissue to inflame and scar which can affect your ability to breathe. There are three types of silicosis. *Acute silicosis* develops just weeks or month after exposure to very high levels of crystalline silica and is the most fatal. *Accelerated silicosis* develops five to ten years after exposure to moderately high levels of crystalline silica. *Chronic silicosis* is the most common type of silicosis which develops 10+ years after exposure to low levels of crystalline silica. To learn more about silicosis, visit the American Lung Association's website on silicosis [here](#), or view the YouTube video [Silicosis: A Preventable Disease](#).

How long has silicosis been an issue?

The U.S. Department of Labor has been making efforts to heighten awareness of silicosis since the early 1900s. [Click here](#) to view a 1938 video published by the Department of Labor and featuring former Secretary of Labor, Frances Perkins describing the hazards of working with silica dust.

What are the major provisions of the proposed OSHA crystalline silica exposure rule for construction workers?

OSHA has proposed new standards for exposure to crystalline silica particles for the construction industry, making exposure standards the same for all industries covered by the rule.

Employers would be responsible to:

- Measure the amount of silica that workers are exposed to if it may be at or above an action level of 25 micrograms of silica per cubic meter of air averaged over an eight-hour day
- Protect workers from respirable crystalline silica exposures above the PEL (permissible exposure limit) of 50 micrograms per cubic meter of air averaged over an eight-hour day (current exposure limits are 5-15 milligrams per cubic meter of air)
- Limit worker's access to areas where they could be exposed above the PEL
- Use dust controls to protect workers from silica exposures above the PEL
- Provide respirators to workers when dust controls cannot limit exposures to the PEL
- Offer medical exams—including chest X-rays and lung function tests—every three years for workers exposed above the PEL for 30 or more days per year
- Train workers on work operations that result in silica exposure and ways to limit exposure
- Keep records of worker's silica exposure and medical exams

**How does TCC Low-Dust Additive work?**

The fine cementitious and silica particles attach to the Low-Dust Additive, staying suspended in the dry concrete and mortar mix powder until it is mixed with liquid.

What products can I add Low-Dust Additive to?

Low-Dust Additive is available to be added to most of our commercial products including mortar and corefill grout products. Contact your sales representative for more information.

Does the addition of Low-Dust Additive change the product?

No, Low-Dust Additive can reduce dust by over 80% without compromising the strength, properties, or workability of the specific mix.

Does Low-Dust Additive really work?

Yes! Low-Dust Additive can reduce dust by over 80%. [Click here](#) to watch it in action on a commercial project in Minneapolis, Minnesota.

When is Low-Dust Additive added to the specified mix?

The Low-Dust Additive is added to the specified mix at our plants during the manufacturing process for consistency and convenience.

Does Low Dust Additive qualify for LEED credits?

Yes, Low Dust Additive is a sustainable, natural raw material and thus qualifies for LEED credits. For more information on LEED credits, contact your sales representative.

How can I find out more about OSHA's restrictions on silica dust?

For more information on OSHA's proposed restrictions on silica dust, you can visit this OSHA website at www.osha.gov/silica. Or refer to their fact sheet by clicking [here](#). OSHA also published their proposed restrictions with the Federal Register which can be viewed [here](#).