

## Silica and New OSHA Rule for Construction

Crystalline silica is present in natural stone and cement/concrete-based building products, including fiber cement, which utilizes sand among its ingredients. Cutting, drilling, sawing, sanding, or abrading fiber cement creates airborne silica dust, which is hazardous and can pose serious medical risks. To ensure better protection of construction industry workers, OSHA has changed the Rule for respirable crystalline silica (§1926.1153). For the construction industry, the Rule is effective September 23, 2017. Visit [osha.gov/silica](https://www.osha.gov/silica) for all the detailed information. Refer to the appropriate Nichiha installation guide(s) for each product for our safety recommendations and requirements.

**1. The Rule reduces the Permissible Exposure Limit (PEL):**

- 50 micrograms per cubic meter of air, averaged over an 8-hour shift
- Action Level: 25 µg/m<sup>3</sup>

**2. Employers are required to use engineering controls intended to limit worker exposure to the PEL and implement additional standards and practices:**

- Follow Table 1: Specified Exposure Control Methods\*
- Create written control plans
- Limit access to high exposure areas
- Provide medical exams to highly exposed workers
- Provide worker training on risks and protections

**3. Provide respirators, following 29 CFR 1919.134, if engineering controls are inadequate for limiting PEL exposure.**

*This Engineering and Work Practice Control Method is deemed by OSHA as compliant with the Rule and no Respiratory Protection is required.*



**\*Table 1 and Fiber Cement**

Handheld power saws for cutting fiber cement with blade diameter of 8 inches or less:

1. Cut product outdoors.
2. Use saw equipped with commercially available dust collection system.
3. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.
4. Dust collector must provide the air flow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency.

In addition to cutting, drilling controls, the Rule also provides for *Housekeeping* measures:

1. Dry sweeping or brushing of crystalline silica dust is not permitted.
2. Utilize **wet** sweeping of floors or HEPA-filtered vacuuming.
3. Do not allow use of compressed air for cleaning clothes or surfaces.