Silica Notice - Guidance for Fabricators

Engineered stone products contain high concentrations of crystalline silica, that can be present in respirable form during processing tasks such as cutting, sawing, grinding, breaking, crushing, drilling, sanding, polishing, or sculpting. Inadequate processing of the material or unprotected and uncontrolled exposure to airborne respirable crystalline silica can cause serious illnesses, such as l**ung cancer, silicosis, immune system effects,** and **kidney effects.** Engineered stone (quartz) slabs are not hazardous as shipped and as used by the end customer. The hazard relates to airborne dust that may be created during fabrication tasks, especially during fabrication tasks that do not follow recommended work practices (e.g., dry work).

Avoid dry mechanical processing. Use wet methods where possible. Fabricators must process slabs in locations with adequate ventilation, including general dilution ventilation for the room and local exhaust ventilation proximal to work activities to control exposures to levels below applicable exposure limits. If feasible, process in a demarcated and isolated area (e.g. mark work areas with caution tape, warning signs, and constrain fabrication tasks to dedicated workspaces not shared with persons uninvolved in the fabrication activities).

If feasible, process using remotely controlled equipment to separate workers from cutting and fabrication tasks.

Use appropriately selected and fitted respirators with particulate filters (preferably a positively pressurized Powered Air Purifying Respirator (PAPR) with a HEPA-rated filter). Consult with an industrial hygienist to assist with respirator selection and perform respirator fit testing on each individual required to wear a respirator. Individuals who wear a respirator must be medically cleared to wear a respirator by a physician. Consult with an occupational health clinic for obtaining medical clearance. Proper respirator selection is critical. Do not use commonly available “dust masks” as they do not provide adequate protection.

Follow company procedures regarding exposure monitoring and medical reporting. Companies should have a written Exposure Control Plan (ECP). A fillable template for a model ECP may be downloaded from:
California Division of Occupational Safety & Health – Model Silica Exposure Control Plan

Employees should be comprehensively trained in silica safety, including the proper use of PPE, emergency procedures and the importance of following safe work practices. The Natural Stone Institute offers a 4-hour “Silica and Slab Safety Certificate” curriculum, available in both English and Spanish, that may be accessed here:
Natural Stone Institute – Silica & Slab Safety Certificate

Fabricators should familiarize themselves with applicable health and safety regulations and follow safe work practices. Information resources include, and are not limited to:

- OSHA’s Respirable Crystalline Silica Standard for General Industry and Construction.
- OSHA’s Crystalline Silica in Construction Webpage
- OSHA’s Crystalline Silica in Construction Resources Page
- OSHA’s Hazard Communication Webpage
- OSHA’s Hazard Communication Standard
- OSHA’s Respiratory Protection Webpage
- OSHA’s Respiratory Protection Standard
- Title 8, section 5204, Occupational Exposures to Respirable Crystalline Silica, of the California Code of Regulations
- Natural Stone Institute’s Silica Resources