



Cutting Concrete Safety

Cutting concrete is a dangerous aspect of the concrete industry. Personal protective equipment not only prevents concrete cutting-related injuries, it also can save lives. It is important to note that your employees should receive the training on the proper selection, inspection, use, and limitation of the personal protective equipment that is used when cutting concrete.

Exposure to silica dust can occur during concrete sawing and drilling operations. The first line of defense against exposure to silica dust is to use wet cutting methods.

Respirators: Respirators are a secondary protection to be used only after wet methods of cutting or other engineering controls are considered. They provide protection from airborne particles that cause lung damage or that may be toxic. During concrete cutting operations, respirator protection usually is used to provide protection from dusts and mists. All respirators are not the same. When using a paper dust mask respirator, use only those recognized by the National Institute for Occupational Safety & Health (NIOSH). You should consult the safety supply company your firm uses to ensure you are providing the proper respirators for your employees.

Safety Glasses: When cutting concrete, safety glasses are the most basic form of personal protective equipment. If eye injuries are possible, approved safety glasses are a must. Approved safety glasses have an imprint that reads: Z-87.1. This indicates that the American National Standards Institute (ANSI) approves them. Safety glasses should be a required piece of equipment at all times.

Hard Hat: The shell of the hard hat will provide protection from falling objects and serve as a barrier. The suspension of the hard hat will absorb and distribute the impact force across the crown of the skull. In doing so, the impact force is lessened substantially. When cutting concrete, wearing a hard hat will protect your employees from head injuries resulting from flying concrete debris.

Hearing Protection: Use of hearing protection is a matter of common sense when engaged in concrete sawing and drilling operations. The noise level reduction values may vary between earplugs and earmuffs. When using earplugs, they should be changed often to limit the potential for ear infection from inserting plugs directly into the ear. Earmuffs also can be very effective. However, their effectiveness may be reduced when employees are wearing safety glasses because it may affect the fit over the ear. It is important to note that safety glasses are recommended at all times.



Protective Footwear: Protective footwear may vary based on the operation. Solid over the-ankle, leather work boots should always be worn when cutting concrete. They provide protection from abrasions and twisted ankles. If the removal of concrete sections is required, safety toe or metatarsal protective footwear is needed.

SAFETY REMINDER

Remember, when you are cutting concrete, everyone on the site is at risk for silica exposure. Wet cutting is your first and best line of defense.