Safe Work with Power Saws

Hazard Alert

Thousands of workers are seriously injured each year by gas or electric power saws. Some are killed — most by electric shock.

The Hazards
You can be badly cut or burned, using a power saw, if you are not careful. You can get sprains and strains and lose your hearing. Grit and dust from using the saws can hurt your eyes. Dust can hurt your lungs. **If you dry-cut masonry or stone that has silica in it, you can get silicosis and it can kill you.** An electric saw can electrocute you. A gas-powered saw can cause carbon monoxide poisoning and kill you.

Protect Yourself
Read the owner’s manual before you first use a saw. Keep blades sharp, clean, and oiled. Inspect blades for cracks.

When you use a saw, wear goggles or safety glasses with side shields, even if you wear a face shield.* Do not wear jewelry, such as chains. Do not wear loose clothes. If you have long hair, tie it inside your hard hat. Wear hearing protection.

Do not cut unless you have a clear work area and solid footing. Do not use a power saw when you are on a scaffold. Keep other people away from the saw when you are using or refueling it.

TRAINING: OSHA says you must be trained in general workplace hazards, electrical hazards, and personal protective equipment (PPE).

Here is how to protect against the main hazards:

**Lung diseases. Do not dry-cut masonry or stone** or you can get lung disease. Cutting brick, cement, concrete, or stone can make a lot of dust — and there can be silica in it. (Silicosis can kill you.) Wet-cutting is the best way to control dust. Local-exhaust ventilation can capture the dust at the blade. As a last resort, your boss may give you a respirator. If you use a respirator, OSHA says you must have a full respirator program. This means proper selection and fitting of respirators, medical screening to be sure you can wear a respirator, and worker training to use respirators.

**Electrocution.** An electric saw needs to be double-insulated or have a 3-prong plug in a grounded outlet. And the outlet needs a ground-fault circuit interrupter. Unplug a saw before you change a blade. Be extra careful when working in wet grass or near a puddle. If you are cutting toward any wires, make sure they have been disconnected.

*OSHA rules for using power tools and saws in construction are in the Code of Federal Regulations, 29 CFR 1926.302 and 304. The respirator standard is 29 CFR 1910.134. Training requirements can be found in 29 CFR 1926.21, 1926.59, 1926.95-102, and 1926.400. The American National Standards Institute, ANSI, approved a standard for portable cutting machines, including power saws, B7.5-1990. ANSI is at 1-888-267-4783.
OSHA says you must not use worn electric cords or cables. OSHA says electrical equipment should not be used in damp, wet, or very hot locations – unless approved for such use.

**Cuts and amputations.** Make sure the saw blade is not touching anything before you turn on a saw. OSHA says a circular saw must have a guard above and below the base plate. Keep the blade guard and other safety devices on the saw. Make sure the blade guard goes back to the fully guarded position after you cut. Do not drop-start a chainsaw. To start a saw with a starter cord, put one foot on the back handle, put one hand on the top handle to keep the blade off the surface, and use the other hand to pull the cord.

    Hold a saw with both hands. Do not use your leg to prop up a saw. **To help prevent kickback,** hold your forward arm straight and do not cut above chest height.

    After you turn off a saw, hold it away from you until the blade stops turning. Do not prop the saw on your leg while the blade slows down. Turn off a saw before you carry it anywhere.

**Burns.** What you cut can catch fire from friction. A spark from a saw can ignite any gasoline leaking from the saw. Make sure there are no fuel leaks and the fuel cap is tight. Turn off the saw and let it cool down before you refuel it.

**Sprains and strains.** When you can, put your work on a solid surface at waist height. Try not to work bent over or in other awkward positions.

**Carbon monoxide.** If you use a gas-powered saw where there is not a lot of fresh air, carbon monoxide can kill you fast. **This can happen even in a crawl space or a big parking garage. You cannot see or smell carbon monoxide gas.** Fans can help keep fresh air coming in, but **fans are not always enough.** If you can, use an electric saw instead of a gas-powered saw. OSHA has special rules for controlling toxic gases in closed spaces and for PPE (personal protective equipment). A trained person should monitor the air with special equipment while the work is done.

**OFF THE JOB**
Lock the saws where children cannot get to them.

For more information, call your local union, the Center to Protect Workers’ Rights (CPWR) (301-578-8500 or www.cpwr.com), the National Institute for Occupational Safety and Health (1-800-35-NIOSH or www.cdc.gov/niosh), or OSHA (1-800-321-OSHA or www.osha.gov). Or check the website www.elcosh.org.