Electricity - On the Job Safety

Each day, electricity lights the office, runs the machinery, and heats the shop. It’s easy but dangerous to take electricity for granted. To protect your coworkers, your family and yourself, practice electrical safety.

**Electrical Hazards**

Electric wiring, fixtures, equipment and machinery can be hazardous. **First**, they can cause fires and explosions. Wood, paper, and some chemicals can catch fire from just a spark. **Second**, electricity can burn, shock or even kill you, depending upon the strength of the shock. **Third**, when you are shocked, your muscles can contract violently, causing serious falls or other accidents. **Fourth**, when electrical equipment is not turned off after use, the next person to use it may not know that the power is on. That person can be shocked or injured.

**Understand Electricity Facts**

Electricity travels over “conductors”, anything that allows electricity to flow. Electricity always tries to reach the ground. Excellent conductors include people, water, damp floors or metal. An “insulator” is the opposite of a conductor. Electricity cannot flow easily through insulators like plastic, rubber boots, dry wood or glass.

**Practice Electric Safety At Work**

Protect yourself by following these important rules for electric safety.

- Don’t use any appliance or machinery while you are touching metal or anything wet.
- Unplug machinery and appliances before cleaning, inspecting, repairing or removing anything from them.
- Keep electrical equipment, machinery and work areas clean. Oil, dust, waste and water can be fire hazards around electricity.
- Keep access to panels and junction boxes clear.
- Move flammable materials away from electric heat sources and lights.
- Know the location of fuses and circuit breakers.
- If you are not trained to work in high voltage areas, do not enter them, even in an emergency.
- Make sure all electrical equipment is properly grounded.
- Plug power tools into grounded outlets installed with Ground Fault Circuit Interrupters (GFCI’s).
- Check with your local utility before you dig or work near suspended power lines. A “live” line is very dangerous.
- If someone has been shocked, separate the victim from the current before doing first aid. If you can’t turn off electricity, use rope, wood, or another insulator to pull the victim away.
- Use “C” rated extinguishers for electrical fires. Never use water.

**Report Unsafe Conditions**

Report unsafe conditions such as the following to your supervisor:

- Shocking, sparking, overheating or smoking machinery;
- Corroded outlets, switches and junction boxes;
- Extension cords in permanent use;
- Exposed wiring, broken plugs, outlets or walls missing box covers or faceplates;
- Outlets in damp areas without GFCI’s.

**Practice Electric Safety at Work**