Preventing the Shocking Experience

Electricity has become a luxury that few Americans can live without. We are accustomed to having lighting when we need it, feeling the heat or a/c kick on at a set temperature, or having that cold beverage from the refrigerator. In the workplace electricity powers our business operations- process equipment, hand tools, lighting, etc. Electricity is so essential that we have grown calloused to the dangers around us at work.

Each year, electrical injuries to workers cause over 300 deaths and more than 4,000 injuries serious enough to miss work. The lots-time injuries average about 13 days per case. Sixty-two percent (62%) of the electrical injuries were from electrical shock and 38% were electrical burns. The non-fatal injuries usually occur from contact with electrical current of wiring, tools, equipment, light fixtures, or electrical boxes. Fortunately, most of these injuries, and deaths, can be prevented by following some simple "do's and don'ts".

To prevent serious injuries, here are some "best practices" near and dear to the lumber, building supplies and construction industry.

DO

- Inspect equipment and extension flex cords before each use; check extension cords carefully to insure the cord and plug are in good condition;

- Extension cords are considered temporary wiring and are intended only for temporary use; use extension cords with labels stating they have been tested and approved by an independent laboratory (e.g., UL);

- Check the label on extension cords to determine length and gauge. The smaller the gauge, the larger the wattage of the equipment that can be used with the cord. The longer the cord, the less current the cord can carry. The gauge and length of an extension cord indicate the maximum wattage of equipment the cord can power;

- Insert the plug fully into the outlet and uncoil the cord to reduce the risk of overheating; check that plugs have a good, tight connection;

- Make sure electrical equipment & tools are turned off before plugging it into an extension cord;

- Plug extension cords into a ground fault circuit interrupter (GFCI) when used in wet or damp areas;

- Unplug extension cords when not in use and store outdoor cords indoors when they are not being used to prevent damage;

- Before digging around buildings or on a jobsite, locate all underground electrical or utility wiring and/or piping; call 811 if in doubt;

- Before using ladders or heavy equipment, check the work area for power lines, electrical service lines, or other service wiring; a 10 feet clearance should always be maintained to prevent shock incidents;

DON'T

- Don't use cords to raise or lower equipment;
- Don't run extension cords across aisles or through doorways where they may be damaged or create tripping hazards;
- Don't run extension cords under rugs, which could cause the cord to overheat and start a fire;
- Don't attach extension cords to floors or walls with nails or staples, which could damage insulation, expose wires, and cause an electrical shock and/or fire;
- The extension cord chosen will depend on whether it's being used indoors or outdoors and the length needed. Don't use indoor cords outside. Don't plug one cord into another to make it longer; use a cord of the right length, which could start a fire;
- Don't leave holes in circuit breaker panels; cover all gaps to prevent contact with live wires;
- Don't touch anything electrical with wet hands or while in a wet area. Wear rubber gloves and rubber boots as protection;
- Don't contact anything electrical with anything metal, and don't wear metal jewelry or a metal hard hat around electricity;
- Don't use metal tools, including ladders, around electricity; use insulated, nonconductive tools and ladders around electrical power sources;
- Don't overload outlets, circuits, or motors;
- Don't let grease or dust, especially wood dust, build up on machinery or in adjacent areas; and,
- Don't reach blindly into a space that may contain energized equipment.

In addition, work on energized electrical equipment **only** if you are trained and qualified. OSHA defines qualified workers as those trained to identify exposed live parts and their voltage **and** know the safety procedures to use with them. Be sure to lock and tag-out electrical equipment before repairing or servicing it. Only qualified workers can perform lockout/tag-out procedures. Obey restrictions on electrical circuit access. Keep out of electrical control panels and circuit breaker/fuse boxes unless you are **authorized**.

Following these do's and don'ts will help prevent loss. When in doubt, seek additional help and professional advice. The life you save or injury you prevent may be your own.