YOUR SAFETY Department
SAFETY Solutions

ELECTRICAL SAFETY

It's hard to imagine life without electricity. Heating, cooling, lighting, and refrigeration are just a few of its common uses. But electricity can be dangerous. To protect your family and yourself, learn the basic rules for electrical safety.

ELECTRICAL DANGERS

Working with electricity can be dangerous. Engineers, linemen, electricians, and others work with electricity directly, including overhead lines, cable harnesses, and circuit assemblies. Office workers and salespeople work with electricity indirectly and may also be exposed to electrical hazards.

Electricity can burn, shock, or even kill you. When you are shocked, your muscles can contract violently. If you are on a high ladder, you might fall. If you are using equipment such as a chain saw, a shock could make you drop it, injuring yourself or someone else.

When electric equipment is not turned off after use, the next person to use it might not be prepared for the power to be on and could be shocked or injured.

ELECTRIC SHOCK

An electric shock is the tingling sensation or muscular contraction that a person experiences when an electrical current passes through the body. An electric shock can severely burn or kill if the muscle contraction is severe enough to stop the heart. This muscle contraction will, in many cases, cause the victim to remain firmlygripped to the source of electrocution, particularly where power tools or leads are being used.

The human body conducts electricity. Even low currents may cause severe health effects. Spasms, burns, muscle paralysis, or death can result depending on the amount of the current flowing through the body, the route it takes, and the duration of the exposure.

In the event of a worker receiving an electric shock it is vital that fellow workers act swiftly to attempt to limit the damage caused to the victim. Call emergency services immediately so they are on the way prior to trying to release the victim.

RELEASING A VICTIM FROM LIVE ELECTRIC CURRENT

When a person comes into contact with a live electrical circuit of sufficient voltage to cause an electric shock your first priority is to eliminate the flow of current. Do not just turn off the machine, equipment or tool, instead you must break the current at the source by switching off the circuit or by removing the plug from the socket in the case of a power tool.

FOR ENQUIRIES:

YOUR SAFETY DEPARTMENT, LLC

P + 1 888 859 5653
info@yoursafetydept.com
www.yoursafetydept.com

YOUR SAFETY Department
SAFETY Solutions

On some occasions this may not be possible to do quickly enough. At this point your only option is to break the contact between the current and the person. This can be done by either moving the victim or moving the electrical source (wire) so they are no longer in contact. To do this safely without harm to yourself you must not be another conductor for the electric path to ground.

Insulate yourself if you must move a victim away from a live contact – wear electrical or dry gloves or cover your hands with cloth and stand on dry insulating material like cardboard, wood or clothes. Ensure you have good footing and will not slip or fall when trying to move the victim.

Utilize something non-conductive to release the victim or move the source from the victim. The following are some common items:

- Professional non-conductive release hook (best option and relatively inexpensive)
- Long piece of lumber (2x4, etc)
- Broom Handle
- Leather belt (cut off buckle)
- Dry Rope
- Blanket, clothes or other dry nonconductive materials

Once the victim is released from the live current check the victims breathing and heart beat. If breathing has stopped, but the victims pulse is present, commence mouth-to-mouth resuscitation. If heartbeat has stopped, commence cardiopulmonary resuscitation (CPR). If both breathing and heartbeat have stopped, alternate between mouth-to-mouth resuscitation and CPR. Use blankets to keep the victim warm and raise the victim's legs slightly above the level of the head to lessen the effects of shock.

ELECTRICAL SAFETY BASICS

- Don't use any appliance while you are touching metal or anything wet.
- Unplug appliances before cleaning or removing anything from them. Teach children electrical safety rules, don't fly kites near power lines. Use plastic guards on electric outlets.
- Repair any appliance that shocks you, sparks, or smokes.
- Household appliances such as space heaters and televisions give off heat. Do not place them near anything flammable.
- Unplug heaters and irons when you're not using them.
- Plug power tools into grounded outlets installed with Ground Fault Circuit Interrupters (GFCIs), to help prevent shocks.
- Install GFCIs in areas that can get wet. Also install weatherproof covers on outdoor outlets.
- Keep work areas clean. Oily rags, newspapers, and sawdust can burn if an electric spark flies.
- Check with your local utility before you dig or work near suspended power lines.
- If someone has been shocked, never attempt first aid until the current is no longer going through the body.
- Have a qualified electrician inspect all wiring. Know the location of all fuses and circuit breakers, and how to use them.
- Match the light bulb's wattage rating to the lamp. Always opt for a light bulb with wattage that's equal to or less than the maximum wattage listed.
- Make sure you're using the right size circuit breakers and fuses.
- Be kind to you cords. Do not modify cords or use them incorrectly. Take care to treat power cords gently. Never nail or tightly tack them down and regularly check to make sure that they're not pinched between or underneath furniture.
- Use only cords, connection devices, and fittings that are equipped with strain relief.
- Remove cords from receptacles by pulling on the plugs, not the cords.
- Replace missing or broken wall plates. Wall plates protect your fingers from making contact with the electrical wiring behind them.
- DO NOT bring a generator indoors. Be sure it is located outdoors in a location where the exhaust gases cannot enter a home or building. Good ventilation is the key.
- Look for overhead power lines and buried power line indicators. Stay at least 10 feet, or 3 meters, away from overhead power lines and assume they are energized.
- Visually inspect all electrical equipment before use. Remove from service any equipment with frayed cords, missing ground prongs, cracked tool casings, etc.
- Use double-insulated tools and ground all exposed metal parts of equipment.

MINUTES OF MEETING

Date:_____**Person Conducting Meeting:**_____

Topic:_____

Branch: _____**Division:**_____

Attendees:

NAME	INITIAL	DATE

NAME	INITIAL	DATE

Additional Items Discussed:

_____

_____

Problem Areas or Concerns:

_____

_____

Comments:

_____

_____

FOR ENQUIRIES:

YOUR SAFETY DEPARTMENT, LLC

P + 1 888 859 5653
info@yoursafetydept.com
www.yoursafetydept.com