

## ELECTRICAL SAFETY

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Each day, electricity lights the campus, runs the machinery and heat/cool the buildings. It is easy but dangerous to take electricity for granted. To protect your co-workers and yourself, practice electrical safety. Electrocutation is the second leading cause of death on construction jobs.

Electrical wiring, fixtures, equipment and machinery can be hazardous. First, they can cause fires. Wood, paper and some chemicals can catch fire from just an electrical spark. Second, electricity can burn, shock or kill you depending on the strength of the current. Third, when shocked, muscles can contract violently, causing serious falls or other types of accidents. Fourth, when equipment is not turned off after use, the next person to use it may not know the power is on, causing shock or injury.

Understanding electricity facts is very important. Electricity travels over conductors: anything that allows electricity to flow. Electricity always tries to reach the ground. Excellent conductors include people, water, damp floors and metal. An insulator is the opposite of a conductor. Electricity cannot flow easily through conductors such as plastic, rubber boots, dry wood or glass.

Control electrical hazards to protect yourself by following these important rules for electrical safety:

1. Don't use any appliance or machinery while you are touching anything wet
2. Unplug machinery and appliances before cleaning, inspecting, repairing or removing parts
3. Keep electrical equipment, machinery and work areas clean. Oil, dust, waste and water can be fire hazards around electricity
4. Keep access to electrical panels and junction boxes clear
5. Move flammable materials away from electrical heat sources and light fixtures
6. Know the location of fuses and circuit breakers
7. If you are not trained to work in high-voltage areas, do not enter them, even in an emergency
8. Make sure all electrical equipment is properly grounded
9. Check with your local utility before you dig or work near suspended power lines a live line is very dangerous

**Revision Date: 7/17/2009**

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10. If someone has been shocked, separate the victim from the current before administering first aid. If you can't turn off electricity easily, use rope, wood or other insulator to pull the victim away
11. Use C-rated extinguishers for electrical fires; never use water
12. Report unsafe conditions such as the following to your supervisor:
  - ❖ Shocking, sparking, overheating or smoking machinery
  - ❖ Corroded outlets, switches and junction boxes
  - ❖ Extension cords being used as permanent wiring
  - ❖ Exposed wiring, broken plugs or wall outlets missing boxes or faceplates
  - ❖ Outlets in damp areas without Ground Fault Circuit Interrupter (GFCI)

To stay productive and safe, follow these important rules for electrical safety. If you have questions contact your supervisor.