



### General

- Improper use of electrical equipment may result in injury or property damage
- Use of electrical equipment and installations shall conform to good safety practice and applicable laws and regulations
- For more information on electrical safety requirements, contact EH&S

### Do Not Use

- **2-wire ungrounded electrical devices.** Departments must purchase only 3-wire grounded equipment. (Exceptions: "Double insulated" electrical devices and equipment operated under 50 volts.)
- **Electrical extension cords or cube taps as substitute for permanent wiring.** Never run extension cords under doors, through windows or holes in walls. Never attach cords to walls or ceilings. Every device must be plugged directly into a receptacle. (Exceptions: Heavy duty extension cords may be used for experimental setups, or for portable tools/appliances used on a transient basis and frequently moved.) The use of a "Fused UL Rated" multi-outlet strip is permissible as long as it is plugged directly into a wall outlet.
- **Worn or damaged electrical cords, plugs, switches, receptacles, or cracked plastic casings.** Electrical cords must be free of cracks, splices, frayed areas, loose connections, or other damage.
- **2-pole to 3-pole adapters, cube taps, 2-wire ungrounded extensions cords or similar devices.** Electrical devices fabricated for experimental purposes must meet all construction and grounding requirements of the State of Oregon. Extension cords and similar devices must be UL listed.
- **Connections to campus power sources other than at existing outlets using conventional plug-in connection.** Any hard-wired or special connections must be made or approved by Facilities Service.

### In An Electrical Emergency:

- Dial **911** for emergency aid - Ambulance, Fire Department or Police.

### Electrical Operations - Safety Rules

- Wear **protective safety equipment** (such as gloves, hard hats, respirators) as required by OSU policy and supervisors.
- Use **non-metallic** ladders and measuring tapes near energized circuits and for all electrical work.
- Dispose **broken glass** from burned out lamps of in trash containers.
- Send **used fluorescent tubes** to EH&S for proper disposal.
- Before starting work on an engine, motor, line shaft, or other power transmission equipment, a **padlocked lock-out device** is required to make sure equipment cannot be set in motion; if not reasonably possible to use a lock-out device, a "Do Not Start" tag is to be used .
- Each electrician working on equipment which requires use of a **lock-out device** will use a **personal padlock** for which he/she alone has a key. Duplicate or master keys in the possession of others is prohibited.
- A lock-out **padlock will be removed** only by the electrician who applied it.
- Work being done in **manholes or on overhead equipment** must be **safeguarded** by using proper signs and guards around openings or under work area.
- An **observer** shall be stationed on the surface when any manhole is entered, regardless of the voltage involved.
- **Confined spaces** (manholes and certain tanks, tunnels, manholes, etc) can only be entered under the **confined space program**.
- Specific supervisor review and approval is needed for work on live lines over 277 volts.
- Training is required prior to work with live line tools.
- Supervisor approval of work plans is required for high voltage electrical switching.

Contact EHS:  
safety@oregonstate.edu  
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- Use approved testing equipment when opening primary and secondary switches to be sure that the system is de-energized. To perform this job, use approved electrical gloves and with grounding straps. Wear appropriate eye protection.
- Before starting work on a de-energized high voltage circuit, place warning signs or tags on the control switches where the operation of such switches would create a hazard.
- For work on energized high voltage equipment, at least two employees are required.
- The following protective equipment is mandatory for employees who perform high voltage switching operations in confined areas which could produce sparks:
  1. Approved safety hat for electrical work.
  2. Approved switching helmet and eye protection.
  3. Approved electrical gloves and cover gloves.
  4. Knee length flameproof coat.
- Safety equipment used for work on high voltage equipment will be specifically approved by electricians. No substitutions for approved equipment is permitted.
- Inspect each tool or piece of equipment used as safety devices for high voltage work. Only use equipment in good condition.