



Electrical Safety

To protect building occupants and property from the direct (electric shock injury) and indirect hazards (heat, fire and explosion) of electricity, each school and/or unit shall comply with the following electrical safety procedures.

1. **Use** equipment in accordance with the manufacturer's recommendations. **Never bypass** electrical interlocks or disable safety features.
2. **Post** procedures for critical equipment including "on-off procedures" and warning signs on or near the equipment. **Clearly identify** the equipment to be left "ON" when the laboratory is unoccupied (e.g. by posting on the lab door).
3. All **defective/damaged wiring** (e.g., frayed, cut wires, broken/defective plug or switch) or equipment shall be promptly reported to the Department Supervisor/Manager or to the Physical Plant Department.
4. To prevent fires due to electrical overload on fixtures and wiring, **DO NOT USE**:
 - ♦ **extension cords** as a substitute for permanent wiring;
 - ♦ **multiple outlet strips**, other than for computer systems. Use strips with built-in fuse or circuit breaker protection, having a minimum 12/3 (gauge/wires) label, maximum length of 6 feet, and "UL" listed for the use;
 - ♦ **cube taps** for multiple connections from a single outlet. These type of devices are not permitted within the University;
 - ♦ **multiple plugs** in interconnection.
5. **Secure** all wiring, cords, cables, and conduits. Keep them away from general traffic areas to prevent falls/trips.
6. **Allow appropriate clear spaces** between electrical equipment and storage of flammable/combustible materials. A minimum clearance of 36 inches shall be maintained **between electrical service equipment** and any other storage to allow easy access for emergency use (42 inches clearance required for voltage level higher than 120 Volt). **Never drape combustibles** (cloth, paper) over any equipment.
7. Laboratory **electrical motors** shall be of induction type – totally enclosed fan cooled since the sparks emitted from brush type motors can cause fire in a flammable environment. This information can be found on the equipment label.
8. **Dedicated circuits and proper grounding** may be required for equipment such as refrigerators, freezers, dehumidifiers and air conditioners. **Consult** Physical Plant to check for the adequacy of electrical power or circuits prior to the purchase, installation or relocation of such equipment.
9. If electrical work is to be performed by an **outside vendor**, the Physical Plant Department shall be notified for necessary approvals and for assistance in the vendor's compliance with applicable regulations.
10. **Report any unsafe conditions** to the campus Physical Plant or EOHSS office.

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