

# **Campus Administrative Policy**

**Policy Title:** Electrical Safety Policy and Procedures (OPP: 103-103)

Policy Number: 3079 Functional Area: General Administration

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Supersedes: Electrical Safety (March 2004)

Approved by: David C. Turnquist

Associate Vice Chancellor, Facilities Management

**Duxton Milam** 

Campus Fire Marshal, Facilities Management

Authority Having Jurisdiction for Fire and Life Safety

(February 22, 2018)

Prepared by: Campus Fire Marshal

Reviewing Office: Executive Vice Chancellor for Administration and Finance

CFO, University of Colorado Anschutz Medical Campus Senior Vice Chancellor for Administration and Finance

CFO, University of Colorado Denver

Responsible Officer: Executive Vice Chancellor for Administration and Finance

CFO, University of Colorado Anschutz Medical Campus Senior Vice Chancellor for Administration and Finance

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Applies to: University of Colorado Anschutz Medical Campus

University of Colorado Denver

University of Colorado South Denver Location

#### A. POLICY STATEMENT

University of Colorado Denver | Anschutz Medical Campus, ("the university") and each university department, is responsible for ensuring the facility and special events are safe and that they are compliant with applicable federal, state, and local regulations related to the use of electrical appliances, extension cords, electrical distribution, and installation of electrical systems.

### B. PURPOSE

To establish a policy for electrical safety on campus property.

### C. PROCEDURES

Facilities Management is responsible for inspecting, reviewing plans, and corresponding with each department regarding electrical safety. The guidelines noted below have been prepared for university personnel to facilitate a safe and code-compliant operation.

Whenever potentially unsafe electrical conditions and practices are noted, promptly report the concern to your supervisor and to University Facilities Management Customer Service Desk at (303) 724-1777.

Only authorized, qualified Facilities Management electricians and technicians are allowed to install, service, or repair electrical equipment or wiring. All electrical equipment and lighting must be tested and approved by a recognized testing laboratory (e.g., Underwriters Laboratory—UL, Factory Mutual—FM, etc.).

### 1. GENERAL ELECTRICAL SAFETY

### Receptacles

Receptacles are designed to adequately distribute an electrical power source for the occupant. The following guidelines regard electrical outlets:

Receptacles and cover plates must be serviceable and adequately placed for occupant use. Each unit must be free of cracks/damage and securely mounted.

- a. Receptacles located outdoors, in damp areas, or located within 6 feet of a water source (e.g., sinks, faucets, fountains) must be Ground Fault Circuit Interrupter (GFCI) rated.
- b. Receptacles located outdoors and in damp areas must have an approved weatherproof cap (or similar weather resistant system) installed.
- c. Multi-Plug Adapters

Because of the risk of overloading electrical circuits, multi-plug wall adapters are prohibited.

# Electrical Equipment / Cord Plugs

Electrical equipment including the cord and plug (e.g., computers, copiers, portable power tools, etc.) must be of "closed" construction with no electrical contacts exposed. When in use, fully insert plugs so that no part of the prongs are exposed. Inspect equipment periodically to ensure that no damage or hazard exists with the cord, plug, or the apparatus. Unsafe equipment must be removed from service until repaired or disposed of properly. Out of service equipment must be labeled as such.

**Extension Cords** 

The use of extension cords in lieu of permanent wiring, other than temporary use is prohibited. Flexible and extension cords must be tested and approved by UL or a similar testing agency. Extension cords must be a minimum of 16 gauge wiring and have a ground line (three prong). Personnel should periodically inspect cords for signs of fraying, cracking, wear, tear, or any damage to the cord / prongs, as well as the adapters, outlets, or equipment they are plugged into. Remove defective cords from service immediately. When disconnecting extension cords, pull on the plug rather than on the cord in order to avoid damaging connections.

Extension cords must always be used in accordance with manufacture's guidelines and applicable codes.

# The following uses of extension cords are <u>not</u> allowable:

Use of cords that constitute a safety or fire hazard (such as damaged units and/or cords hung over nails or rafters).

- a. Securing cords in a manner that will prevent visible inspection or that can cause damage to the cords or plug.
- b. Running cords through walls, ceilings, floors doorways, window, or similar openings.
- c. Running electrical cords under rugs, carpets, or other combustible materials. (If cords must be placed in travel lanes, protect them with molded housings or bridges.)
- d. Use of cords in a manner in which they are stretched or bent excessively. (This damages internal wire strands. Using cords in a continuous length will help to prevent damage to internal wire strands and insulation cover.)
- e. Running cords through puddles of standing liquids, such as water or oils. (Cords should always be maintained dry and free from oil, grease, water, or waxes. If extension cords are used within 6 feet or a water source, they must be GFCI rated.)

# **Electrical Panels**

A minimum 36-inch clearance must be maintained in front of electrical controls, panels and disconnects at all times. Do not tape circuit breakers in the "ON" position. Breakers that frequently trip indicate possible electrical problems and must be promptly reported to Facilities Management Customer Service Desk at (303) 724-1777. Electrical panels must have an up-to-date "legend" (also known as a "panel schedule") that identifies the area of control for each breaker switch. No wiring is to be exposed inside the panel.

### Portable Heaters and Home Appliances

Although home appliances (toasters, hot plates, fans, etc.) may be used on campus, each unit must be tested and approved by UL (or other certified testing agency). Devices must be plugged directly into a wall outlet or surge protector with a circuit breaker; maintained in good working condition with no sign of damage, and placed where it will not cause a trip or electrical hazard. When portable heaters are necessary, the manufactures guide to safe use must be followed and they must have the extra safety features, such as automatic shutoff (if tipped over) and temperature control (with automatic shutoff it temperature exceeds a predetermined degree as specified by the manufacturer). Also see the university policy regarding Portable Heaters.

For advice or assistance with fire prevention efforts, contact the Campus Fire Marshal at (303) 724-0293.

#### **Notes**

1. Dates of official enactment and amendments:

March 2004: Adopted/Approved by Associate Vice Chancellor for Facilities

February 22, 2018: Revised

December 18, 2019: Reformatted

2. History:

December 18, 2019: Reformatted to reflect a Campus-wide effort to recast and revitalize Campus policy sites into a standardized and more coherent set of chaptered policy statement organized around the several operational divisions of the university. Links, university branding, and formatting updated by the Provost's office.

- 3. Initial Policy Effective Date: March 2004
- 4. Cross References/Appendix:
  - 2015 ed. International Fire Code
  - National Electric Code (NFPA 70)
  - Campus Policy 3003, Authority Having Jurisdiction for Fire Prevention and Life Safety