# **Safety Manual > Guide to Extension Cord Use**

### K. Guidelines for Extension Cord Use

Many questions have arisen regarding the restrictions on extension cords on campus. The following guidelines should be used by students and staff to assure that the extension cords in use do not violate good safety practices or fire codes. The National Electric Code (NEC) is the primary document that provides guidance in the use of extension cords. These guidelines are based on the NEC.

### 1. <u>In Dormitories and Office Settings</u>:

- a. Extension cords which have the UL label are approved, so long as the size and use is appropriate.
- b. Two and three conductor extension cords must have a minimum conductor size of 16 AWG copper.
- c. Extension cords are normally rated in amps, and must be used within the ampere rating. (Compare the amp rating of the appliance with the rating of the cord)
- d. Three pronged (three conductor) extension cords must be used when connecting electrical items that have three pronged plugins.
- e. Extension cords must not be run under rugs, mattresses, through doorways or windows, and must be protected from damage at all times.
- f. Three prong adaptors are not to be used with two conductor extension cords on the female end of the cord. Adaptors used on the wall outlet must be installed with a metal screw installed in the outlet. (Contact Facility Services for these installations)
- g. Splicing and "home repairs" of extension cords are not permitted unless performed by Facility Services. Insulation, strength and conductor size must not be compromised.
- h. Cords used in wet and/or outdoor locations should be protected by ground fault circuit interrupters.

#### 2. On Maintenance and Construction Sites:

- a. Extension cords with an equipment grounding conductor must be used at all times.
- b. Extension cords must be protected from damage, and not run through doorways or windows where the doors or windows may close, causing damage to the cord.
- c. Extension cords must be plugged into a circuit protected by a ground fault circuit interrupter on wet or outdoor construction and maintenance sites, or have the ground circuit checked for continuity in an assured grounding conductor program.
- d. Extension cords should be a minimum of 16 AWG and be rated for the equipment in use. The following is a guide that might be helpful in selecting the cord:

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Extension Cord Ampere Rating		
Wire Size(Copper)	Single Phase Two and Three Conductor Cords	Three Phase Cords
16AWG	13 amps	10 amps
14AWG	18 amps	15 amps
12AWG	25 amps	20 amps
10AWG	30 amps	25 amps
8AWG	40 amps	35 amps
6AWG	55 amps	45 amps
4AWG	70 amps	60 amps
2AWG	95 amps	80 amps

- e. Splicing extension cords must be done in such a way that the insulation and conductivity of the wires are not compromised.
- f. Extension cords should not be run through water or allowed to have connections that may be exposed to puddling water.