

## APPENDIX 2

### Extension Cord Use Policy

#### Introduction

Extension cords provide a convenient method of bringing temporary AC power to a device that is not located near a power outlet. If not used properly, extension cords can be the cause of electrical shock, equipment damage, and fire hazards.

#### General Policy

Extension cords may not be used in place of permanent facility wiring. Extension cords may be used for temporary applications only. "Temporary" means it is associated with a one-time job or with a transient condition. Install permanent wiring for long-term or repetitive needs. An extension cord may be used while awaiting permanent wiring, as long as all other conditions for proper use are met.

Extension cords must be of sufficient current-carrying capacity to power the device(s) they will be used with and shall not be substantially longer than required for the application.

Extension cords shall be UL® (or equivalent safety standard) listed and clean and properly maintained with no exposed live parts or conductors, splices, substantial abrasion, or other damage that might compromise its safe usage.

In addition to the total electrical load, the conditions of use affect extension cord safety. Rated capacity for an extension cord assumes it will be used in an open-air and straight configuration. In damp or wet areas, extension cords must be protected by a ground-fault circuit interrupter (GFCI). Extension cords shall not be subject to environmental or physical damage or be used in potentially hazardous atmospheres, such as flammable gases, vapors or explosive dusts.

Extension cords shall be plugged directly into an approved receptacle and shall not be daisy-chained (one extension cord plugged into another extension cord). Cords with molded multiple receptacles are acceptable if the total load does not exceed the cord ampacity.

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Extension cords used must be three-conductor (grounded) - even if the device they serve use a two-prong plug. Do not modify plug prongs to fit an existing outlet. Extension cords shall be unplugged when not in use.

Extension cords should not be used for heat-producing appliances such as coffee pots, toasters, microwave ovens and space heaters. The load from these devices often approaches the circuit capacity and the added cord length increases the chance of overheating.

Extension cords shall not be affixed to structures, run under floors, through doors, ceilings, windows, or holes in walls. This is to prevent "pinch" damage to the cord. If it is absolutely necessary to run an extension cord through a doorway or open window for short-term use, the cord must be protected from damage; removed immediately when no longer in use; and must not be a trip hazard.

As electric current passes through a wire, electrical resistance causes some voltage drop and heating of the wire. Coiling or winding excess cord length or tying a knot in the cord can concentrate this heat and cause overheating. Similarly, covering a cord with a rug or rag can trap heat and cause overheating. This trapped heat can damage the cord and lead to a fire.

Ensure that cords are of sufficient length to prevent strain being placed on the cord due to stretching, twisting or bending, especially at the receptacle ends. Connections between extension cords and equipment should not be left dangling unsupported.

#### Power Strips (Multi-outlets)

A power strip is a variation of an extension cord, where the cord terminates in a row or group of receptacles. Power strips are commonly used in offices to provide multiple receptacles to office equipment. This use is permissible so long as the load does not exceed eighty percent (80%) of the current rating for the strip, it is equipped with an integral circuit breaker or fuse, have a cord no longer than 10 feet, and bear the approval marking of UL or equivalent.

### Acceptable Combinations of Extension Cords and Devices

- Receptacle to surge protector (or UPS) to extension cord to device
- Receptacle to power strip to UPS to device (electrical equipment)
- Receptacle to surge protector (or UPS) to device
- Receptacle to surge protector (or UPS) to power strip to device