



Published: December 2024, Training with FLS completed December 2024

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Selection and Appropriate Use of Power Strip/Surge Protectors (Power Taps)

A power tap is a fire code definition given to what is commonly referred to as power strips and surge protectors. The following describes the two different uses.

Power Tap - Power Strips / Multi Outlet Strips

A power strip or multi-outlet strip provides the ability to have several small appliances connected to a single power outlet. These devices provide NO current surge protection for appliances connected to them. The devices should have the following to be used on campus:

1. Be listed by Underwriters Laboratories (UL) or another nationally recognized testing laboratories for electrical equipment and appliances
2. Have an integrated power switch and circuit breaker
3. Be equipped with a 14-gauge cord with ground

Power Tap - Surge Protector

A surge protector is a power strip which can also have several electronics connected to a single power outlet. This device provides surge protection to items connected to it that typically cannot handle a sudden impact of electricity. These devices should have the following to be used on campus:

1. Be listed by Underwriters Laboratories (UL) or another nationally recognized testing laboratories for electrical equipment and appliances. Label will include the wording "Transient Voltage Surge Suppressor"
2. Have an integrated power switch and circuit breaker with a visual indicator to indicate when "protection" is being provided
3. Be equipped with a 14-gauge cord with ground

Appropriate Use

- Always follow the manufacturer's instructions for the power tap (power strip/surge protector) and appliance (both should be listed by Underwriters Laboratories (UL) or another nationally recognized testing laboratories)
- Only 1 Power Tap (power strip or surge protector) shall be connected to a duplex outlet.
- A Power Tap shall be positioned or mounted to a hard surface, in accordance with manufacturer instructions. Power Taps shall not be suspended from any cords. Due to possible lead and asbestos containing building materials, wall mounting must be performed by Facilities Management through the FM@YS portal (yellow button).
- Power strips or multi-outlet strips shall be used for office equipment, small appliances, and similar equipment that will not exceed a capacity of 13 to 15 amps total for all outlets on the strip. The integrated circuit breaker will trip if too many appliances are connected and operated simultaneously
- Surge protectors shall be used with electronics that draw low amperage demands and that are sensitive to power surges. Examples of appliances that are prohibited from use with a surge protector are lamps, large fans, large battery chargers, motor driven appliances, refrigerators, pop-machines, compressors and microwave ovens. The key guidance is that the device being plugged into the surge protector is voltage sensitive and can be permanently damaged by either lightning or an electrical surge.

Prohibited Use

FLS will provide a Notification for awareness of a Compliance/Safety Concern

- Daisy chaining: Connecting two or more power strips or surge protectors together.



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- Connecting a power strip or surge protector to an electrical extension cord.
- Appliance with high loads – power taps should not be overloaded, anything that heats or cools should be plugged into an outlet directly (no power tap)
- The use of grounding adapters; this use can result in a shock or fire due to improper grounding.
- Devices without a UL listing such as homemade extension cords or power boxes.
- Use of damaged power strips or equipment; missing, loose, or damaged prongs, etc.

References:

2015 International Fire Code with state of Iowa amendments – [Surge Protector Policy](#) for non-healthcare

If you have questions, please contact the Campus Fire Safety Coordinator:
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